

University of Dundee

DOCTOR OF PHILOSOPHY

Non-financial performance measurement in the Libyan commercial banking sector four grounded theory case studies

El-Shukri, Aisha Salem

Award date:
2007

Awarding institution:
University of Dundee

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Download date: 19. Jun. 2016

DOCTOR OF PHILOSOPHY

Non-financial performance measurement in the Libyan commercial banking sector

four grounded theory case studies

Aisha Salem El-Shukri

2007

University of Dundee

Conditions for Use and Duplication

Copyright of this work belongs to the author unless otherwise identified in the body of the thesis. It is permitted to use and duplicate this work only for personal and non-commercial research, study or criticism/review. You must obtain prior written consent from the author for any other use. Any quotation from this thesis must be acknowledged using the normal academic conventions. It is not permitted to supply the whole or part of this thesis to any other person or to post the same on any website or other online location without the prior written consent of the author. Contact the Discovery team (discovery@dundee.ac.uk) with any queries about the use or acknowledgement of this work.

THESIS

2007

**NON-FINANCIAL PERFORMANCE MEASUREMENT
IN THE LIBYAN COMMERCIAL BANKING SECTOR:
FOUR GROUNDED THEORY CASE STUDIES**

AISHA SALEM EL-SHUKRI

A THESIS SUBMITTED IN FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF THE DOCTOR OF
PHILOSOPHY IN ACCOUNTANCY

SCHOOL OF ACCOUNTING & FINANCE
UNIVERSITY OF DUNDEE
MAY 2007

ABSTRACT

The use of non-financial performance measurements (such as quality, delivery and customer satisfaction) has received a lot of attention from practitioners and academics over the last two decades in developed countries. This research project is an exploratory study in Libya to investigate the use of non-financial performance measurements (NFPMs) in a developing country's commercial banking sector. The Libyan service sector is the second contributor to the Libyan Gross Domestic Product (GDP) after the oil sector. Within the service sector, the commercial banking sector has been playing a significant role in the development of the Libyan economy.

This research project aims to: 1) explore the current use of NFPMs in the Libyan commercial banking sector (LCBS); 2) determine the environmental factors influencing the use of NFPMs in the LCBS; and 3) explore the impact of NFPMs on financial performance measurements (FPMs) in the LCBS.

A grounded theory methodology was adopted and four case studies (two State owned banks and two private banks) were conducted. Each case study was analysed according to a structured set of coding procedures (based on the grounded theory approach of Strauss and Corbin, 1990) and substantive hypotheses emerged for each case study. A cross-case analysis of the four case studies gave rise to the following nineteen formal hypotheses which (together with the model developed from the four case studies) are the main findings of this study:

- H₁** The limitations of FPMs are one of the major motives leading to a bank's use of NFPMs
- H₂** A more competitive environment is one of the main motives for managers in a bank using NFPMs.
- H₃** Management's knowledge of the relationship between NFPMs and FPMs is one of the major motives leading to the use of NFPMs in a bank.

- H₄** Demanding customers are one of the major motives leading to the use of NFPMs in a bank.
- H₅** The nature of the banking industry as a service oriented industry is one of the major motives leading to the use of NFPMs in a bank.
- H₆** Lower level managers in a bank tend to use NFPMs more than middle and higher level managers do.
- H₇** Operational experience of management, competence of management, management with more authority, top management's interference, stability of management, and collective working group positively affect a bank's use of NFPMs.
- H₈** New regulations and strategies of the Central Bank and the uncertainty of the economic environment positively affect a bank's use of NFPMs.
- H₉** Some of the Central Bank's old regulations, over-control and interference of the Central Bank, information shortage, weakness of infrastructure, traditional educational system, State ownership and the general public's lack of banking knowledge negatively affect a bank's use of NFPMs.
- H₁₀** The development of human resource strategies to be more service-oriented is associated with a bank's use of NFPMs.
- H₁₁** The development of the reward system to be linked with non-financial performance and to be more service-oriented is associated with a bank's use of NFPMs.
- H₁₂** The development of the banking system (operating, information and reporting system) is associated with a bank's use of NFPMs.
- H₁₃** The development of a bank's management accounting information is associated with its use of NFPMs.
- H₁₄** The development of a bank's organisational structure is associated with its use of NFPMs.
- H₁₅** The adoption of advanced management practices is associated with a bank's use of NFPMs.
- H₁₆** Use of NFPMs encourages a bank to diversify and improve its range of services.
- H₁₇** Use of NFPMs encourages a bank to adopt advanced technology.
- H₁₈** Use of NFPMs improves a bank's profitability, customers' deposits and other FPMs in the long-term.
- H₁₉** Use of NFPMs leads to an increase in a bank's capital expenditure.

DEDICATION

In the name of Allah, Most Gracious, Most Merciful

This work is dedicated to:

- ♦ My beloved parents, brothers and sisters, uncle and my husband for their patience, support, love and encouragement.
- ♦ All who devote their life seeking knowledge for the wellbeing of humanity.

ACKNOWLEDGEMENTS

I would like to acknowledge my indebtedness to the following people who have helped me during this research project. First, I am forever indebted to my supervisors, **Professor Emeritus John Innes** and **Professor Reza Kouhy** for their encouragement, guidance, invaluable comments and supervision which have helped immensely in the shaping of this research project. I thank them sincerely for their continued help and support. I consider myself to be very fortunate to study under their supervision. My special thanks are also due to Mrs Alison Fox my third supervisor, for her contribution and helpful remarks and comments.

I am also grateful to the academics in the School of Accounting & Finance at the University of Dundee for their helpful comments on my presentations at the School seminars. I would like also to extend my thanks to both the PhD students and the staff in the School of Accounting & Finance and to the staff in the Main Library at this University.

My gratitude is also due to the managers and employees in the four Libyan case studies who gave their time for interviews and who supplied me with the necessary data. Without their invaluable cooperation and participation this research project would not have been possible. My thanks to all persons who helped me to have access to the case studies Banks.

I am indebted to the Accounting Department, Faculty of Economics at the University of Garyounis for the grant they awarded me.

My deepest appreciation and gratitude are to all the members of my family for their love, moral support, patience and 'Dowaa' especially my father and mother whose trust in me was a constant source of encouragement. My special gratitude is to my husband for his patience and encouragement.

DECLARATION

I hereby declare that I am the author of this thesis; that the work of which this thesis is a record has been done by myself, and that it has not previously been accepted for a higher degree.

Signed..... Aisha EL-Shukri

Date..... 25 /05 /2007

Aisha Salem El-Shukri

CERTIFICATE

I certify that Aisha Salem El-Shukri has worked the equivalent of nine terms on this research and the conditions of Ordinance 39 and related regulations have been fulfilled.

Signed..... Reza Kouhy

Date..... 25 May 2007

Professor Reza Kouhy

Signed.....

Date.....

Professor John Innes

CONTENTS

	Page
Abstract	I
Dedication	III
Acknowledgements	IV
Declaration	V
Certificate	V
Contents	VI
List of Tables	XVII
List of Figures	XIX
List of the Thesis's Abbreviations	XXI
List of Interviewees' Abbreviations	XXII
CHAPTER 1: INTRODUCTION	1
1.0 Introduction	1
1.1 Background to Research Problem	2
1.2 Research Aims and Objectives	6
1.3 Importance of Research	7
1.4 Research Methodology	8
1.5 Research Method	10
1.6 Structure of Thesis	12
CHAPTER 2: LITERATURE REVIEW	15
2.0 Introduction	15
2.1 A Brief History of Performance Measurement	16
2.1.1 Performance Measurement from 1850s to 1980s	17
2.1.2 Performance Measurement from Late 1980s	26
2.1.3 The Relationship between NFPMs and FPMs	27
2.2 Non-financial Performance Measurement	29
2.2.1 The Principal Reasons for the Emergence of NFPMs	30
2.2.1.1 Critiques of Traditional FPMs	30
2.2.1.1.1 Measurements are Based on an Outmoded View	31
2.2.1.1.2 Measurements are too Financially Orientated	32
2.2.1.1.3 Measurements are too Inward Looking	33
2.2.1.1.4 Measurements are too Historical	33
2.2.1.1.5 Measurements Lack Predictive Ability	34
2.2.1.1.6 Measurements Reflect Functions not Processes	35
2.2.1.1.7 Measurements Reinforce the Wrong Behaviour	35
2.2.1.1.8 Measurements are Focused on Inputs, not Outputs	35
2.2.1.1.9 Measurements are too Summary in Nature	35
2.2.1.1.10 Measurements Generate too Much Data	36
2.2.1.1.11 Measurements are Structured to Fit the Organisation	36
2.2.1.1.12 Measurements are Short-term Orientated	36
2.2.1.1.13 Measurements are not Relevant to Practice	37
2.2.1.1.14 Measurements are Inflexible	37
2.2.1.2 Competitive Pressure	37
2.2.1.3 Growth of other Initiatives	38
2.2.2 The Definition of Non-financial Information	38
2.2.3 The Importance of Non-financial Performance Measurement	39

2.2.4	The Use of Non-financial Performance Measurements	40
2.2.4.1	The Use of NFPMs in Service Industries	41
2.2.4.2	The Use of NFPMs in the Banking Sector	43
2.3	Non-financial Performance Dimensions	44
2.3.1	Quality	47
2.3.2	Customer Satisfaction	50
2.3.3	Delivery (On time service)	52
2.3.4	Human Resources	53
2.3.5	Flexibility	54
2.3.6	Market Share	55
2.4	Financial and Non-financial Performance Measurement Models	56
2.4.1	The Balanced Scorecard Model (BSC)	57
2.4.2	The Performance Pyramid Model (PP)	61
2.4.3	The Performance Prism Model	63
2.4.4	The Results and Determinants Model (RDM)	64
2.5	Design of Performance Measurement Systems	66
2.6	Recent Developments in NFPM Literature	68
2.6.1	Performance Measurement - Strategy and Control	68
2.6.2	Performance Measurement and Reward Scheme	70
2.6.3	Performance Measurement and Profitability	72
2.6.4	Performance Measurement in an Uncertain Environment	74
2.6.5	Management Information System	75
2.6.6	Management Accounting System	76
2.6.7	Advanced Management Practices	77
2.6.8	Performance Measurement and Organisational Structure and Culture	79
2.6.9	Intellectual Capital	80
2.7	Conclusion	82
CHAPTER 3: LIBYA AND ITS COMMERCIAL BANKING ENVIRONMENT		84
3.0	Introduction	84
3.1	The Libyan Environment	84
3.1.1	Social Framework	84
3.1.1.1	Geographical Background	84
3.1.1.2	Population	85
3.1.1.3	Language	86
3.1.1.4	Religion	86
3.1.1.5	History	87
3.1.2	Political and Regulatory Environment	89
3.1.2.1	Political Framework	89
3.1.2.2	Legal Codes	91
3.1.3	Economic Environment	91
3.1.3.1	Prior to the Discovery of Oil	91
3.1.3.2	After the Discovery of Oil	93
3.1.3.3	Development Plans	95
3.1.3.4	The State's Budget	100
3.2	The Libyan Commercial Banking Environment	101
3.2.1	The Central Bank of Libya	102

3.2.2	The Structure of the Libyan Commercial Banking Sector	103
3.2.2.1	Public Commercial Banks	105
3.2.2.1.1	National Commercial Bank	106
3.2.2.1.2	Al-Jamahiriya Bank	106
3.2.2.1.3	Al-Wahda Bank	106
3.2.2.1.4	Al-Sahari Bank	106
3.2.2.1.5	Al-Ummah Bank	106
3.2.2.2	Private Commercial Banks	107
3.2.3	Historical Background about the Development of the Libyan Commercial Banks	107
3.2.3.1	From the Ottoman Period to the Libyan Revolution	107
3.2.3.2	From the Libyan Revolution	109
3.2.3.2.1	The Period 1969-1992	109
3.2.3.2.1.1	Libyanisation of Banks	109
3.2.3.2.1.2	Nationalisation of Banks	110
3.2.3.2.2	The Period after 1993	111
3.2.4	Financial Indicators for the Libyan Commercial Banks	113
3.3	Conclusion	115
CHAPTER 4: METHODOLOGY AND RESEARCH METHODS		117
4.0	Introduction	117
4.1	Research Paradigm	117
4.1.1	Burrell and Morgan's Social Science and Society Paradigm	120
4.1.1.1	Functionalist Paradigm	121
4.1.1.2	Interpretive Paradigm	121
4.1.1.3	Radical Humanist Paradigm	122
4.1.1.4	Radical Structuralist Paradigm	122
4.1.2	The Factors Influencing the Selection of Interpretive Paradigm	122
4.2	Research Methodology	126
4.2.1	Grounded Theory Approach	126
4.2.1.1	Grounded Theory Definition	128
4.2.1.2	Aspects of Grounded Theory	129
4.2.1.2.1	Discovery	129
4.2.1.2.2	Theoretical Sensitivity	130
4.2.1.3	Approaches to Grounded Theory	131
4.2.2	Strauss and Corbin's Approach	133
4.2.3	Main Procedures and Techniques	133
4.2.3.1	Theoretical Sampling	134
4.2.3.2	Memos and Diagrams	135
4.2.3.3	Coding Procedures	136
4.2.3.3.1	Open Coding	137
4.2.3.3.2	Axial Coding	139
4.2.3.3.3	Selective Coding	141
4.3	Research Methods	143
4.3.1	Case Study Method	144
4.3.2	Validity and Reliability	148
4.3.2.1	Threats to Validity and Reliability	150
4.3.2.2	Countering Threats to Validity and Reliability	151
4.3.3	Multiple Case Studies	152

4.3.4	Multiple Data Collection	153
4.3.5	Research Design	153
4.3.5.1	Case Study Research Design	153
4.3.5.2	Data Collection Methods	154
4.3.5.2.1	Interviews	154
4.3.5.2.2	Document Analysis	156
4.3.5.2.3	Observation	156
4.3.5.3	Site Selection	156
4.3.5.4	Data Analysis	159
4.4	Applications of Ground Theory for All Four Case Studies	160
4.5	Conclusion	163
CHAPTER 5: BANK A		165
5.0	Introduction	165
5.1	Interviewees' and Bank's Background	165
5.1.1	Interviewees	165
5.1.2	Bank	167
5.1.2.1	Bank's Ownership	168
5.1.2.2	Bank's Management	169
5.1.2.3	Bank's Organisational Structure	170
5.1.2.4	Bank's Management Objectives and Strategy	170
5.1.2.5	Employees' Benefits and Incentives	171
5.1.2.6	Bank's Environment	172
5.1.2.7	Bank's Information Technology	173
5.1.2.8	Bank's Performance System	174
5.1.2.8.1	Financial Performance	174
5.1.2.8.2	Non-financial Performance Measurements	175
5.2	Data Analysis	178
5.3	Motives for Using NFPMs	182
5.3.1	Limitations of FPMs	182
5.3.2	Existing and Future Competition	185
5.3.3	Management's Knowledge of Relationship between NFPMs and FPMs	188
5.3.4	Demanding Customers	190
5.3.5	Nature of Banking Industry	192
5.3.6	Offensive Strategy	193
5.4	Internal Environmental Factors that Influence the Use of NFPMs	195
5.4.1	Operational Experience and Competence of Management	196
5.4.2	Level of Management	198
5.4.3	Top Management's Interference	199
5.4.4	Stability of Management	201
5.4.5	Collective Working Group	202
5.4.6	Flexible Organisational Structure	203
5.4.7	Long-term Objectives	205
5.5	External Environmental Factors Influencing the Use of NFPMs	206
5.5.1	Central Bank of Libya's Regulations	207
5.5.2	Information Shortage	209
5.5.3	Weakness of Infrastructure	210

5.5.4	Traditional Educational System	212
5.5.5	General Public's Lack of Banking Knowledge	213
5.5.6	Uncertainty of Economic Environment	214
5.5.7	Financial Mentality of Shareholders	215
5.6	Strategies that Management Adopted in Conjunction with NFPMs	216
5.6.1	Development of Human Resources	217
5.6.2	Performance Reward System	220
5.6.3	Development of Banking System (Bank's Operating, Information and Reporting System)	221
5.6.4	Development of Organisational Structure	223
5.6.5	Adoption of Advanced Management Practices	224
5.6.6	Adoption of Internal Competition	226
5.7	Consequences of Implementation and Use of NFPM	228
5.7.1	Variety and Improvement of Services	229
5.7.2	Introduction of Advanced Technology	230
5.7.3	Positive Effects on FPMs	232
5.7.4	Capital Expenditure	233
5.7.5	Effectiveness of Management Decisions	234
5.8	Researcher's Model for Bank A	235
5.8.1	Causal Conditions	236
5.8.2	Context	236
5.8.3	Intervening Conditions	237
5.8.4	Action/Interaction Strategies	238
5.8.5	Consequences	238
5.9	Hypotheses	240
CHAPTER 6: BANK B		242
6.0	Introduction	242
6.1	Interviewees' and Bank's Background	242
6.1.1	Interviewees	242
6.1.2	Bank	244
6.1.2.1	Bank's Ownership and Management	245
6.1.2.2	Bank's Organisational Structure	245
6.1.2.3	Bank's Management Objectives and Strategy	246
6.1.2.4	Employees' Benefits and Incentives	246
6.1.2.5	Bank's Environment	247
6.1.2.6	Bank's Information Technology	247
6.1.2.7	Bank's Performance System	248
6.1.2.7.1	Financial Performance	248
6.1.2.7.2	Non-financial Performance Measurements	248
6.2	Data Analysis	250
6.3	Motives for Using NFPMs	253
6.3.1	Limitations of FPMs	254
6.3.2	Existing and Future Competition	256
6.3.3	Management's Knowledge of Relationship between NFPMs and FPMs	259
6.3.4	Demanding Customers	260
6.3.5	Nature of Banking Industry	262
6.4	Internal Environmental Factors that Influence the Use of NFPMs	263

6.4.1	Operational Experience and Competence and Authority of Management	264
6.4.2	Level of Management	266
6.4.3	Stability of Management	267
6.5	External Environmental Factors Influencing the Use of NFPMs	269
6.5.1	Central Bank of Libya's Regulations	270
6.5.2	Information Shortage	272
6.5.3	Traditional Educational System	273
6.6	Strategies that Management Adopted in Conjunction with NFPMs	274
6.6.1	Development of Human Resources	275
6.6.2	Development of Reward System	277
6.6.3	Development of Banking System (Bank's Operating, Information and Reporting System)	279
6.6.4	Development of Management Accounting Information	280
6.6.5	Development of Organisational Structure	282
6.7	Consequences of Implementation and Use of NFPMs	283
6.7.1	Variety and Improvement of Services	284
6.7.2	Introduction of Advanced Technology	285
6.7.3	Positive Effects on FPMs	286
6.7.4	Capital Expenditure	287
6.8	Researcher's Model for Bank B	289
6.8.1	Causal Conditions	289
6.8.2	Context	289
6.8.3	Intervening Conditions	290
6.8.4	Action/Interaction Strategies	291
6.8.5	Consequences	291
6.9	Hypotheses	292
CHAPTER 7: BANK C		295
7.0	Introduction	295
7.1	Interviewees' and Bank's Background	295
7.1.1	Interviewees	295
7.1.2	Bank	297
7.1.2.1	Bank's Ownership and Management	298
7.1.2.2	Bank's Organisational Structure	299
7.1.2.3	Bank's Management Objectives and Strategy	299
7.1.2.4	Employees' Benefits and Incentives	301
7.1.2.5	Bank's Environment	302
7.1.2.6	Bank's Information Technology	302
7.1.2.7	Bank's Performance System	303
7.1.2.7.1	Financial Performance	303
7.1.2.7.2	Non-financial Performance Measurements	303
7.2	Data Analysis	305
7.3	Motives for Using NFPMs	308
7.3.1	Limitations of FPMs	309
7.3.2	Existing and Future Competition	311
7.3.3	Management's Knowledge of Relationship between NFPMs and FPMs	314
7.3.4	Demanding Customers	316

7.4	Internal Environmental Factors that Influence the Use of NFPMs	318
7.4.1	Operational Experience and Competence and Authority of Management	319
7.4.2	Level of Management	322
7.4.3	Top Management's Interference	323
7.4.4	Stability of Management	324
7.4.5	Collective Working Group	325
7.5	External Environmental Factors Influencing the Use of NFPMs	326
7.5.1	Central Bank of Libya's Regulations	327
7.5.2	Information Shortage	329
7.5.3	Weakness of Infrastructure	330
7.5.4	Traditional Educational System	331
7.5.5	Uncertainty of Economic Environment	332
7.6	Strategies that Management Adopted in Conjunction with NFPMs	334
7.6.1	Development of Human Resources	335
7.6.2	Development of Reward System	337
7.6.3	Development of Banking System (Bank's Operating, Information and Reporting System)	339
7.6.4	Development of Management Accounting Information	341
7.6.5	Development of Organisational Structure	343
7.6.6	Adoption of Advanced Management Practices	345
7.7	Consequences of Implementation and Use of NFPM	347
7.7.1	Variety and Improvement of Services	348
7.7.2	Introduction of Advanced Technology	350
7.7.3	Positive Effects on FPMs	351
7.7.4	Capital Expenditure	353
7.7.5	Effectiveness of Budget	354
7.8	Researcher's Model for Bank C	355
7.8.1	Causal Conditions	356
7.8.2	Context	356
7.8.3	Intervening Conditions	357
7.8.4	Action/Interaction Strategies	358
7.8.5	Consequences	358
7.9	Hypotheses	359
CHAPTER 8: BANK D		362
8.0	Introduction	362
8.1	Interviewees' and Bank's Background	362
8.1.1	Interviewees	362
8.1.2	Bank	364
8.1.2.1	Bank's Ownership	365
8.1.2.2	Bank's Management	365
8.1.2.3	Bank's Organisational Structure	366
8.1.2.4	Bank's Management Objectives and Strategy	366
8.1.2.5	Employees' Benefits and Incentives	367
8.1.2.6	Bank's Environment	368
8.1.2.7	Bank's Information Technology	368
8.1.2.8	Bank's Performance System	368

8.1.2.8.1	Financial Performance	368
8.1.2.8.2	Non-financial Performance Measurements	369
8.2	Data Analysis	371
8.3	Motives for Using NFPMs	374
8.3.1	Limitations of FPMs	375
8.3.2	Existing and Future Competition	377
8.3.3	Management's Knowledge of Relationship between NFPMs and FPMs	380
8.3.4	Demanding Customers	382
8.4	Internal Environmental Factors that Influence the Use of NFPMs	385
8.4.1	Operational Experience and Competence of Management	385
8.4.2	Level of Management	387
8.4.3	Top Management's Interference	389
8.5	External Environmental Factors Influencing the Use of NFPMs	391
8.5.1	Central Bank of Libya's Regulations	391
8.5.2	Weakness of Infrastructure	393
8.5.3	General Public's Lack of Banking Knowledge	395
8.6	Strategies that Management Adopted in Conjunction with NFPMs	397
8.6.1	Development of Human Resources	397
8.6.2	Development of Reward System	400
8.6.3	Development of Banking System (Bank's Operating, Information and Reporting System)	402
8.6.4	Development of Management Accounting Information	403
8.6.5	Adoption of Advanced Management Practices	405
8.7	Consequences of Implementation and Use of NFPM	406
8.7.1	Variety and Improvement of Services	407
8.7.2	Introduction of Advanced Technology	408
8.7.3	Positive Effects on FPMs	410
8.7.4	Capital Expenditure	412
8.8	Researcher's Model for Bank D	414
8.8.1	Causal Conditions	414
8.8.2	Context	414
8.8.3	Intervening Conditions	415
8.8.4	Action/Interaction Strategies	416
8.8.5	Consequences	416
8.9	Hypotheses	418
8.10	General Conclusion from the Findings of the Four Case Studies	419
CHAPTER 9: CROSS CASE ANALYSIS		420
9.0	Introduction	420
9.1	Case Studies' Background Information	421
9.2	Cross Case Analysis	422
9.3	Formal Hypotheses of The Motives for Using NFPMs	423
9.3.1	Similarities of the Motives for Using NFPMs	423
9.3.1.1	The Limitations of FPMs	424
9.3.1.2	Competitive Environment	425
9.3.1.3	Management's Knowledge of Relationship between	

	NFPMs and FPMs	427
9.3.1.4	Demanding Customers	429
9.3.2	Differences in the Motives for Using NFPMs	431
9.3.2.1	Nature of Banking Industry	431
9.4	Formal Hypotheses of Internal Environmental Factors Affecting the Use of NFPMs	432
9.4.1	Similarities of the Internal Environmental Conditions Affecting the Use of NFPMs	433
9.4.1.1	Level of Management	433
9.4.1.2	Operational Experience of Management	434
9.4.1.3	Competence of Management	436
9.4.2	Differences in the Internal Environmental Conditions Affecting the Use of NFPMs	436
9.4.2.1	Authority of Management	437
9.4.2.2	Top Management's Interference	438
9.4.2.3	Stability of Management	440
9.4.2.4	Collective Working Group	441
9.5	Formal Hypotheses of External Environmental Factors Affecting the Use of NFPMs	443
9.5.1	Similarities of the External Environmental Conditions Concerning the Use of NFPMs	443
9.5.1.1	Some of the Central Bank's Old regulations	444
9.5.1.2	Over-control and Interference of the Central Bank	444
9.5.2	Differences in the Internal Environmental Conditions Concerning the Use of NFPMs	445
9.5.2.1	New Regulations and Strategies of the Central Bank	446
9.5.2.2	Information Shortage	447
9.5.2.3	Weakness of Infrastructure	448
9.5.2.4	Traditional Educational System	449
9.5.2.5	State Ownership	450
9.5.2.6	General Public's Lack of Banking Knowledge	452
9.5.2.7	Uncertainty of Economic Environment	453
9.6	Formal Hypotheses of Strategies that Management Used in Conjunction with NFPMs	454
9.6.1	Similarities of Management Strategies	455
9.6.1.1	Development of Human Resources	455
9.6.1.2	Development of Reward System	456
9.6.1.3	Development of Operating, Information and Reporting System (Banking System)	459
9.6.2	Differences in Management Strategies	461
9.6.2.1	Development of Management Accounting Information	461
9.6.2.2	Development of Organisational Structure	462
9.6.2.3	Adoption of Advanced Management Practices	464
9.7	Formal Hypotheses of the Consequences of Implementation and Use of NFPMs	465
9.7.1	Similarities of the Consequences of Implementation and Use of NFPMs	466
9.7.1.1	Variety and Improvement of Services	466
9.7.1.2	Introduction of Advanced Technology	468
9.7.1.3	Positive Effects on FPMs	469

	9.7.1.4	Capital Expenditure	470
9.8		Researcher's Model for All Four Case Studies	471
	9.8.1	Causal Conditions	472
	9.8.2	Context	472
	9.8.3	Intervening Conditions	473
	9.8.4	Action/Interaction Strategies	473
	9.8.5	Consequences	474
9.9		Conclusion	475
CHAPTER 10: SUMMARY AND CONCLUSIONS			476
10.0		Introduction	476
10.1		Overview of the Research Project	476
10.2		Limitations of the Research Project	480
10.3		Links between the Formal Hypotheses (Main Findings) and the Literature	482
	10.3.1	Motive for Using NFPMs	483
	10.3.1.1	Limitations of FPMs	483
	10.3.1.2	Competitive Environment	485
	10.3.1.3	Management's Knowledge of the Relationship between NFPMs and FPMs	484
	10.3.1.4	Demanding Customers	485
	10.3.1.5	Nature of Banking Industry	486
	10.3.2	Internal Environmental Factors Affecting the Use of NFPMs	487
	10.3.2.1	Level of Management	487
	10.3.2.2	Operational Experience of Management	488
	10.3.2.3	Competence of Management	488
	10.3.2.4	Authority of Management	489
	10.3.2.5	Top Management's Interference	490
	10.3.2.6	Stability of Management	491
	10.3.2.7	Collective Working Group	491
	10.3.3	External Environmental Factors Affecting the Use of NFPMs	492
	10.3.3.1	Some of the Central Bank's Old Regulations	492
	10.3.3.2	Over-control and Interference of the Central Bank	493
	10.3.3.3	New Regulations and Strategies of the Central Bank	493
	10.3.3.4	Information Shortage	494
	10.3.3.5	Weakness of Infrastructure	495
	10.3.3.6	Traditional Educational System	495
	10.3.3.7	State Ownership	496
	10.3.3.8	General Public's Lack of Banking Knowledge	497
	10.3.3.9	Uncertainty of Economic Environment	497
	10.3.4	Strategies that Management Used in Conjunction with NFPMs	498
	10.3.4.1	Development of Human Resources	498
	10.3.4.2	Development of Reward System	499
	10.3.4.3	Development of Operating, Information and Reporting System (Banking System)	501
	10.3.4.4	Development of Management Accounting Information	502
	10.3.4.5	Development of Organisational Structure	503

10.3.4.6	Adoption of Advanced Management Practices	503
10.3.5	Consequences of Implementation and Use of NFPMs	505
10.3.5.1	Variety and Improvement of Services	505
10.3.5.2	Introduction of Advanced Technology	505
10.3.5.3	Positive Effects on FPMs	506
10.3.5.4	Capital Expenditure	508
10.4	Recommendations for Future Research	509
10.5	Summary	511

REFERENCES	516
-------------------	------------

APPENDICES	545
-------------------	------------

Appendix 3-1:	Gross Domestic Product in Libya by Economic Sectors (At Current Factor Income) in the Period 1962-2005	545
Appendix 3-2:	Per Capita Income in Libya in the Period 1962-2005	549
Appendix 3-3:	Five-year Plan 1963-1968 and Additional Year 1969	549
Appendix 3-4:	The Average Exchange Rates between the Libya Dinar (LD) and the UK Pound (£) during the Period 1962-2005	550
Appendix 3-5:	Socio-Economic Development Plan 1973-1975	551
Appendix 3-6:	Socio-Economic Development Plan 1976-1980	551
Appendix 3-7:	Revised Socio-Economic Development Plan 1976-1980	552
Appendix 3-8:	Socio-Economic Development Plan 1981-1985	552
Appendix 3-9:	Three-year Programme 1994-1996	553
Appendix 4-1:	Letter of Introduction/ University of Dundee	554
Appendix 4-2a:	Translated Version of Letter of Introduction/ University of Garyounis	555
Appendix 4-2b:	Letter of Introduction/ University of Garyounis	556

LIST OF TABLES

		Page
CHAPTER 2		
Table 2-1:	The Results and Determinants Model	65
CHAPTER 3		
Table 3-1:	The Development of the Population in Libya during the Period 1970-2006	86
Table 3-2:	Major Financial Indicators for the Libyan Commercial Banks	113
CHAPTER 5		
Table 5-1:	Profile of Interviewees and Number of Interviews Conducted	166
Table 5-2:	Main Points Raised by Interviewees	178
Table 5-3:	Motives for Using NFPMs (Labels of Causal Conditions)	182
Table 5-4:	Internal Environmental Labels	196
Table 5-5:	External Environmental Labels	207
Table 5-6:	Actions/Interaction Strategies Labels	217
Table 5-7:	Labels for Consequences of Implementation and Use of NFPMs	229
CHAPTER 6		
Table 6-1:	Profile of Interviewees and Number of Interviews Conducted	243
Table 6-2:	Main Points Raised by Interviewees	250
Table 6-3:	Motives for Using NFPMs (Labels of Causal Conditions)	253
Table 6-4:	Internal Environmental Labels	263
Table 6-5:	External Environmental Labels	269
Table 6-6:	Actions/Interaction Strategies Labels	275
Table 6-7:	Labels for Consequences of Implementation and Use of NFPMs	284
CHAPTER 7		
Table 7-1:	Profile of Interviewees and Number of Interviews Conducted	296
Table 7-2:	Main Points Raised by Interviewees	306
Table 7-3:	Motives for Using NFPMs (Labels of Causal Conditions)	309
Table 7-4:	Internal Environmental Labels	319
Table 7-5:	External Environmental Labels	327
Table 7-6:	Actions/Interaction Strategies Labels	334
Table 7-7:	Labels for Consequences of Implementation and Use of NFPMs	348
CHAPTER 8		
Table 8-1:	Profile of Interviewees and Number of Interviews Conducted	363
Table 8-2:	Main Points Raised by Interviewees	371
Table 8-3:	Motives for Using NFPMs (Labels of Causal Conditions)	375
Table 8-4:	Internal Environmental Labels	385

Table 8-5:	External Environmental Labels	391
Table 8-6:	Actions/Interaction Strategies Labels	497
Table 8-7:	Labels for Consequences of Implementation and Use of NFPMs	406

CHAPTER 9

Table 9-1:	Detailed Information about Interviews and Interviewees	421
Table 9-2:	Characteristics of the Four Banks	421
Table 9-3:	Internal Aspects of the Four Banks	422
Table 9-4:	Major Causal Conditions Labels	423
Table 9-5:	Major Internal Environmental Conditions	433
Table 9-6:	Major External Environmental Conditions	443
Table 9-7:	Major Management Strategies	454
Table 9-8:	Consequences of Using NFPMs	465

LIST OF FIGURES

		Page
CHAPTER 1		
Figure 1-1:	Overview of Approach	10
Figure 1-2:	Structure of Thesis	14
CHAPTER 2		
Figure 2-1:	The Balanced Scorecard	60
Figure 2-2:	The Performance Pyramid	62
Figure 2-3:	The Performance Prism Model	64
CHAPTER 3		
Figure 3-1:	The Structure of the Libyan Commercial Banks	105
CHAPTER 4		
Figure 4-1:	Burrell and Morgan's Paradigm	120
CHAPTER 5		
Figure 5-1:	Limitations of FPMs and the Use of NFPMs	185
Figure 5-2:	Kind of Environment and Performance Measurements	188
Figure 5-3:	Management's Appreciation of the Relationship between NFPMs and FPMs	190
Figure 5-4:	Customers' Needs and the Use of NFPMs	192
Figure 5-5:	The kind of Market Strategy and the Use of NFPMs	195
Figure 5-6:	Management Levels and the Use of NFPMs	199
Figure 5-7:	Internal Environmental Factors' Impact on the Use of NFPMs	206
Figure 5-8:	External Environmental Factors' Influence on the Use of NFPMs	216
Figure 5-9:	HR Strategies and the Use of NFPMs	219
Figure 5-10:	AMPs and the Use of NFPMs	226
Figure 5-11:	Consequences of Management Strategies Adopted in Conjunction with the Use of NFPMs	235
Figure 5-12:	Researcher's Model for Bank A	239
CHAPTER 6		
Figure 6-1:	Limitations of FPMs and the Use of NFPMs	257
Figure 6-2:	Kind of Environment and Performance Measurements	258
Figure 6-3:	Management's Appreciation of the Relationship between NFPMs and FPMs	260
Figure 6-4:	Customers' Needs and the Use of NFPMs	262
Figure 6-5:	Management Levels and the Use of NFPMs	267
Figure 6-6:	Internal Environmental Factors' Impact on the Use of NFPMs	268
Figure 6-7:	External Environmental Factors' Influence on the Use of NFPMs	274
Figure 6-8:	HR Strategies and the Use of NFPMs	277
Figure 6-9:	Consequences of Management Strategies Adopted in Conjunction with the Use of NFPMs	288
Figure 6-10:	Researcher's Model for Bank B	292

CHAPTER 7

Figure 7-1:	Limitations of FPMs and the Use of NFPMs	311
Figure 7-2:	Kind of Environment and Performance Measurements	314
Figure 7-3:	Management's Appreciation of the Relationship between NFPMs and FPMs	316
Figure 7-4:	Customers' Needs and the Use of NFPMs	318
Figure 7-5:	Management Levels and the Use of NFPMs	323
Figure 7-6:	Internal Environmental Factors' Impact on the Use of NFPMs	326
Figure 7-7:	External Environmental Factors' Influence on the Use of NFPMs	334
Figure 7-8:	HR Strategies and the Use of NFPMs	337
Figure 7-9:	AMPs and the Use of NFPMs	347
Figure 7-10:	Consequences of Management Strategies Adopted in Conjunction with the Use of NFPMs	355
Figure 7-11:	Researcher's Model for Bank C	359

CHAPTER 8

Figure 8-1:	Limitations of FPMs and the Use of NFPMs	377
Figure 8-2:	Kind of Environment and Performance Measurements	380
Figure 8-3:	Management's Appreciation of the Relationship between NFPMs and FPMs	382
Figure 8-4:	Customers' Needs and the Use of NFPMs	384
Figure 8-5:	Management Levels and the Use of NFPMs	389
Figure 8-6:	Internal Environmental Factors' Impact on the Use of NFPMs	390
Figure 8-7:	External Environmental Factors' Influence on the Use of NFPMs	396
Figure 8-8:	HR Strategies and the Use of NFPMs	400
Figure 8-9:	AMPs and the Use of NFPMs	406
Figure 8-10:	Consequences of Management Strategies Adopted in Conjunction with the Use of NFPMs	413
Figure 8-11:	Researcher's Model for Bank D	417

CHAPTER 9

Figure 9-1:	Limitations of FPMs and the Use of NFPMs	425
Figure 9-2:	Market Environment and Performance Measurements	427
Figure 9-3:	Management's Appreciation of the Relationship between NFPMs and FPMs	429
Figure 9-4:	Researcher's Model for All Four Case Studies	475

CHAPTER 10

Figure 10-1:	The Development Process for the Formal Hypotheses	480
--------------	---	-----

LIST OF THE THESIS'S ABBREVIATIONS

AMPs	Advance Management Practices
AT	Advanced Technology
ATs	Advanced Technologies
ATMs	Automatic Teller Machines
BSC	Balanced Scorecard
CBL	Central Bank of Libya
DCF	Discounted Cash Flows
FP	Financial Performance
FPM	Financial Performance Measurement
FPMs	Financial Performance Measurements
FPMSs	Financial Performance Measurement Systems
GDP	Gross Domestic Product
GM	General Motors Company
IC	Intellectual Capital
IRR	Internal Rate of Return
LBS	Libyan Banking Sector
LCBS	Libyan Commercial Banking Sector
LD	Libyan Dinar
MA	Management Accounting
MAI	Management Accounting Information
MAS	Management Accounting System
NFP	Non-Financial Performance
NFPM	Non-Financial Performance Measurement
NFPMs	Non-Financial Performance Measurements
NFPMS	Non-Financial Performance Measurement System
PM	Performance Measurement
PMs	Performance Measurements
PMS	Performance Measurement System
PMSs	Performance Measurement Systems
PP	Performance Pyramid
RCC	Revolutionary Command Council
RDM	Results and Determinants Model
RI	Residual Income
ROA	Return on Assets
ROI	Return on Investment
ROS	Return on Sales
SCBs	State Commercial Banks
TQM	Total Quality Management
WTO	World Trade Organisation

LIST OF INTERVIEWEES' ABBREVIATIONS

Chapter 5 (Bank A)	
1- CGM	Chairman/General Manager
2- VCDGM	Vice Chairman and Deputy General Manager
3- MIA	Manager of Inspection and Audit
4- DMAPD	Deputy Manager of Administration and Personnel Department
5- MCD	Manager of Credit Department
6- DMIT	Deputy Manager of IT
7- HAHA	Head of an Agency
8- HABA	Head of an Agency
9- HAFA	Head of an Agency
10- HATB	Head of Accounts of a Branch
11- EADHO	Employee in Accounts Department Head Office
12- MBMB	Manager of a Branch
13- HAABC	Head of a Business Centre
Chapter 6 (Bank B)	
1- VCDGM	Vice Chairman/Deputy General Manager
2- MPAD	Manager of Planning and Audit Department
3- AMAPD	Assistant Manager of Administration and Personnel Department
4- AMOD	Assistant Manager of Operations Department
5- EAD	Employee in Audit Department
6- MAD	Manager of Audit Division in Audit Department
7- MSD	Manager of Statistics Division in Branches and Credit Department
8- ESBD	Employee in Statistics and Budget Division in Accounting Department
9- EBSD	Employee in Branches Settlements Division in Accounting Department
10- MIBB	Manager of Inspection of Benghazi Branches
11- MBMB	Manager of a Branch
12- AM1	Assistant Manager of a Branch
13- MCAD	Manager of the Current Accounts Division in a Branch
14- DMBMB	Deputy Manager of a Branch
15- MAPD	Manager of Administration and Personnel Division in a Branch
16- AM2	Assistant Manager of a Branch
17- AMTMB	Assistant Manager of a Branch
Chapter 7 (Bank C)	
1- VCDG	Vice Chairman/Deputy General Manager
2- MBMD	Manager of Marketing Department
3- MBD	Manager of Branches Department
4- MAD	Manager of Audit Department
5- MEBS	Manager of Electronic Banking Services Department
6- MID	Manager of Inspection Department
7- DMTC	Deputy Manager of Training Centre
8- MPD	Manager of Personnel Division
9- MAC	Manager of Allocations Committee
10- EBD	Employee in Branches Department, Monitoring Division
11- EAD	Employee in Accounting Department
12- DMTM	Deputy Manager of a Branch
13- AMAA	Assistant Manager for Accounting Affairs of a Branch
14- MAFB	Manager of a Branch
15- DMAB	Deputy Manager of a Branch

16- MBMB	Manager of a Branch
17- DMGB	Deputy Manager of a Branch
Chapter 8 (Bank D)	
1- GMB	General Manager of the Bank
2- MPD	Manager of Personnel Department
3- AUB	Auditor of the Bank
4- HAO	Head of Accounting Office
5- HFAD	Head of the Financial Affairs Division
6- MMB	Manager of a Branch
7- DMMB	Deputy Manager of a Branch
8- HCAB	Head of Current Accounts Division and Foreign Exchange Division in a Branch
9- HPDB	Head of Personnel Division
10- ACMB	Accountant of a Branch
11- DIA	Director of an Agency
12- HCAA	Head of the Current Accounts Division in an Agency
13- ACA	Accountant of an Agency

CHAPTER 1

INTRODUCTION

“When you can measure what you are speaking about and express it in numbers, you know something about it ... (otherwise) your knowledge is a meagre and unsatisfactory kind; it may be the beginning of knowledge but you have scarcely in thought advanced to the stage of science [Lord Kelvin 1842-1907]” (Heim and Compton, 1992, p. 43).

1.0 INTRODUCTION

This thesis is concerned with performance measurement (PM) and, in particular, it attempts to explore the use of non-financial performance measurements (NFPMs) in the commercial banks in a developing country, namely Libya. The measurement of performance is essential and critical for organisations' long-term success in different industries. Since the mid-1980s, there has been a growing interest in exploring, discussing and developing PM practices especially in the area of non-financial performance measurement (NFPM) (such as the quality of products and services, customer satisfaction and employee satisfaction) among researchers and practitioners from different disciplines including Management Accounting (MA) in western countries. The NFPMs are the real drivers of corporate success over the middle to long-term (Peters, 1987, p. 488). The aim of this chapter is to explain the background of the research project and discuss the research objectives, importance and the methodology and method used in this study.

This Chapter consists of six sections. The first section introduces the background of the research problem while the second section discusses the aims and objectives of the research. The third section presents the importance of the research. The fourth and fifth sections give an overview of the methodology and data

collection method employed in this research. Finally, the structure of the thesis is described in the last section.

1.1 BACKGROUND TO RESEARCH PROBLEM

During the last two decades the changing nature of competition in world markets has had a great influence on business. Several international trends, including globalisation, technology and deregulation have accelerated the rate of change in business conditions (Rolsatadas, 1998; Suwignjo et al., 2000).

In the late 1980s, there were many critiques made of traditional management control in general and traditional financial performance measurement (FPM) in particular (such as Kaplan, 1983 and 1984; Hopwood, 1984; Miller and Vollmann, 1985; Johnson and Kaplan, 1987; Hiromoto 1988; Simons, 1990; Bruns and Mckinnon, 1993; Gosse, 1993; MacArthur, 1996; Kald and Nilsson, 2000). Furthermore, the increasing competition, the power of information technology, specific improvement initiatives, changing nature of work, changing organisational role and changing external demands provided other incentives for organisations to change their financial performance measurements (FPMs) (Nanni et al., 1992; Otley, 1994; Brancato, 1995; Fisher, 1995; Neely, 1999). All these helped to create a new approach, which shifted focus to non-financial measurements (Neely, 1998 and 1999).

Organisations have been forced to evaluate their structures and processes in order to become more competitive in the dynamic global economy (Atkinson and Brown, 2001). In order to deal with increasing demands for higher quality products, faster product introductions and better service, many organisations found that standard analytical, organising principles, hierarchic control and coordinating mechanisms were insufficient (Ghalagini and Noble, 1996; Kald and Nilsson, 2000; Snwignjo et al., 2000). Complex and dynamic environments require fast and

innovative responses. Further increases in capital intensity and knowledge-based work require higher levels of employee involvement and ability. On the other hand, the shortcomings of traditional FPMs have led to a PM revolution (Neely, 1999). Eccles referred to a PM revolution as early as 1991, although he stated that, it had already started some years before that. He identified three movements that helped this change: the quality movement in the 1980s, the customer satisfaction trend in the 1990s and the development of information technology that made the revolution possible.

The practitioner literature also suggested that traditional FPMs could not guide management actions and needed to be changed (Geanuracos and MeikleJohn, 1993). Birchard (1994) concluded that financial analysts and investors have also paid increasing attention to NFPMs. Recently, an increasing trend amongst companies is to issue some NFPMs in their financial reports. A number of studies tried to explain this attitude including a study completed by Fornell et al. (1996) which investigated the possible consequences of releasing customer satisfaction indicators on companies' stock market returns; he concluded that the disclosure of such NFPMs provided more effective forward-looking information which was not available under the traditional financial performance measurement system (FPMS).

PM conference proceedings reflect this new approach of people participating from a wide variety of disciplines, including accounting, business strategy, human resources management, marketing and manufacturing, (Neely et al., 2002). Moreover, this concern for using NFPMs led the MA literature to focus on the role of the non-financial performance measurement system (NFPMS) in organisations (Armitage and Atkinson, 1990; Ittner et al., 1997).

Over the past two decades, in an attempt to overcome the problems associated with traditional PM, several "new" frameworks have been put forward for instance:

Performance Measurement Questionnaire (PMQ) (Dixon et al.1990); the Performance Measurement Matrix (PMM) (Keegan et al., 1989); the Balanced Scorecard (BSC) (Kaplan and Norton, 1992); the Integrated Performance Measurement system (IPMS) (Bititic et al., 1997); the Performance Prism (PP) (Neely and Adams, 2001); the Performance Pyramid (PP) (McNair et al., 1990). All of these and other PM models appeared in the 1990s and significantly contributed to the development and increasing awareness of the topic. A number of authors have claimed that PM often focuses on the easily quantifiable aspects of performance such as productivity and cost, to the neglect of other performance criteria such as quality or flexibility, which are equally critical to competitive business success (Lynch and Cross, 1991; Kaplan and Norton 1996 and 2001; Otley, 1999; Hussain and Hoque, 2002). Recognising this, many successful companies now use NFPMs, whether qualitative or quantitative, to supplement traditional FPMs (Brignall et al., 1992).

This research project concentrates on NFPMs for several reasons. First, NFPMs are believed to complement short-term financial figures as indicators of progress toward companies' long-term goals and objectives such as quality, customer satisfaction, delivery, social responsibility, employee satisfaction, quick response, timely service and other critical factors which provide evidence about the health of companies in the long-term (Johnson and Kaplan, 1987; Banker et al., 2000). Several recent studies have provided empirical evidence on the positive impact of NFPMs on companies' financial performance in the long-term (Anderson et al., 1994 and 1997; Huselid, 1995; Banker et al., 2000). NFPMs may be able to better predict future cash flows and the direction of organisational trends (Geanuracos and MeikleJohn, 1993; Banker et al., 2000).

Second, NFPMs have the ability to compensate for some of the traditional FPMs' limitations (Geanuracos and MeikleJohn, 1993; Banker et al., 2000). NFPMs

provide managers, supervisors and operators with on-time information that is necessary for daily decision-making and are flexible and can be changed as needed (Ghalayini and Noble, 1996). The MA literature lists many limitations of traditional FPMs that make them less applicable in today's competitive market and restrict their effectiveness. FPMs are based on traditional cost management systems and are inflexible with a financial orientation, internal concentration, historical focus and functional rather than process emphasis. Such limitations restrict the usefulness of the FPMS (Kaplan, 1984 and 1988; Johnson and Kaplan, 1987; Simons, 1990; Bruns and Mckinnon, 1993; Ghalayini and Noble, 1996; MacArthur, 1996; Kanji, 2002).

Third, FPMs focus on results, which are the final output of the processing steps, while NFPMS concentrate on the causes and drivers of success (Cross and Lynch, 1992; Kaplan and Norton, 1992; Singleton-Green, 1993; Banker et al., 2000).

Fourth, although there is an increase in the number of studies concerning NFPMS, many studies still focus on improving FPMs (Ittner and Larcker, 1998) and try to design integrated evaluation systems (Fitzgerald et al., 1991; Kaplan and Norton, 1992). Moreover, most studies have examined a single element in this type of measurement such as the consequences of NFPMS on profitability (Fornell, 1992; Anderson et al., 1994; Hemmer, 1996; Banker, et al., 2000), customer satisfaction (Perera et al., 1997) and its relation with the reward system (Atkinson, 1997; Ittner et al., 1997; Ittner and Larcker, 1998; Banker et al., 2000; Kald and Nilsson, 2000). Each study has investigated a particular point in the NFPMS without viewing the whole phenomenon within one context.

Finally, the use of NFPMS in the service sector of developing countries has remained largely unexplored. Therefore, this study focuses on NFPMS in the service sector in Libya. In addition, no previous study has been conducted to investigate and explore NFPMS in the Libyan commercial banking sector (LCBS).

Since 1969, the Libyan economy has gone through significant changes. These changes include the change of the Libyan economy from capitalism to socialism. The State nationalised most business enterprises and the whole Libyan economy was centrally planned from the early 1970s up to 1991 and the State had managerial control of all the sectors. Moreover, the Libyan economy is dominated by the oil sector and most of this sector's revenue is invested in the non-oil sectors. The growth in Libya's revenues during the 1970s enabled an increase in the spending budget for development in all sectors. The banking sector played an important role in the development of Libya.

In the early 1980s, Libya's economy was severely affected by falls in the oil price engendering serious cash-flow problems which hindered the development plans (Khader, 1987; Burgat, 1987). It was found that it was difficult to continue protecting the public sector. Therefore, since 1992, the State has adopted the privatisation process as a policy to improve economic development (African Development Bank, 1995). The change in the international economic environment has also obliged the State to revise its policy concerning public sector protection.

This new policy, which aims to increase Libya's economic growth rate, has driven national economic organisations to improve their performance in order to achieve competitive advantage. The commercial banking sector is one, which has an essential role in developing the country's economy. Therefore, the researcher decided to conduct her study in this sector.

1.2 RESEARCH AIMS AND OBJECTIVES

The principal aim of this research project is to investigate the use of NFPMs in the Libyan commercial banking sector (LCBS). To achieve this aim the following objectives were set for the study:

- 1) Explore the current use and the specific development of NFPMs in the LCBS.

- 2) Determine the role of MA in the design, communication and monitoring of NFPMs in the LCBS.
- 3) Determine the environmental factors, which influence the use of NFPMs in the LCBS.
- 4) Explore the impact of NFPMs on FPMs in the LCBS.

The above objectives were formulated into questions for semi-structured interviews (see Chapter 4) based on the literature review of NFPMs (Chapter 2).

1.3 IMPORTANCE OF RESEARCH

The importance of this study derives from the role of PM (financial and non-financial) in the designing, implementation and monitoring of strategies and addresses managers' abilities to increase the effectiveness of their organisational operations by controlling and assessing the progress of the organisation towards achieving the long term goals and objectives of their organisation. Most studies into NFPM have been conducted in developed countries (such as the UK and USA). The design and implementation of NFPMs in Libya, particularly in the commercial banking sector, were unexplored before this study was conducted. Therefore, the study represents the first comprehensive attempt to look at the use of NFPMs in the LCBS by using the proposed methodology and data collection method. This study:

- a) Contributes to the MA and PM literature in Libya and similar countries.
- b) Provides empirical evidence about the use of NFPMs in a developing country's commercial banking sector.
- c) Contributes to current knowledge by identifying important environmental factors that affected the NFPM practices in the Libyan commercial banks and the organisational context in the development of NFPMs in the LCBS.
- d) Provides empirical evidence that the use of NFPMs contributes to the success of the organisation.
- e) Provides insights to researchers, practitioners and State officials who are dealing with the issue of NFPMs.

- f) Attempts to extend and increase the body of research on performance measurement systems (PMSs) and MA, especially in developing countries.

1.4 RESEARCH METHODOLOGY

This study attempts to investigate and explore the use of NFPMs in the commercial banking sector in Libya from the perspective of the organisational actors. The study adopts the inductive approach. The main objective of this study is to investigate and explore the phenomenon under study without any purpose of creating changes in the phenomenon being studied, thus placing the researcher on the interpretive side of Burrell and Morgan's paradigm (1979). The exploratory nature of this study means that a qualitative research perspective is adopted (Creswell, 1994). A qualitative research approach is used when researchers need to understand a phenomenon in terms of how and why it occurs (Cassel and Symon, 1994). A qualitative research approach enables researchers to gain adequate and effective understanding of the phenomenon under study (Tomkins and Groves, 1983; Creswell, 1994). Strauss and Corbin (1998) suggest that foreign students who decide to collect data in their own countries should use qualitative methods in order to reflect their societies' cultures. They stated (1998, p.287):

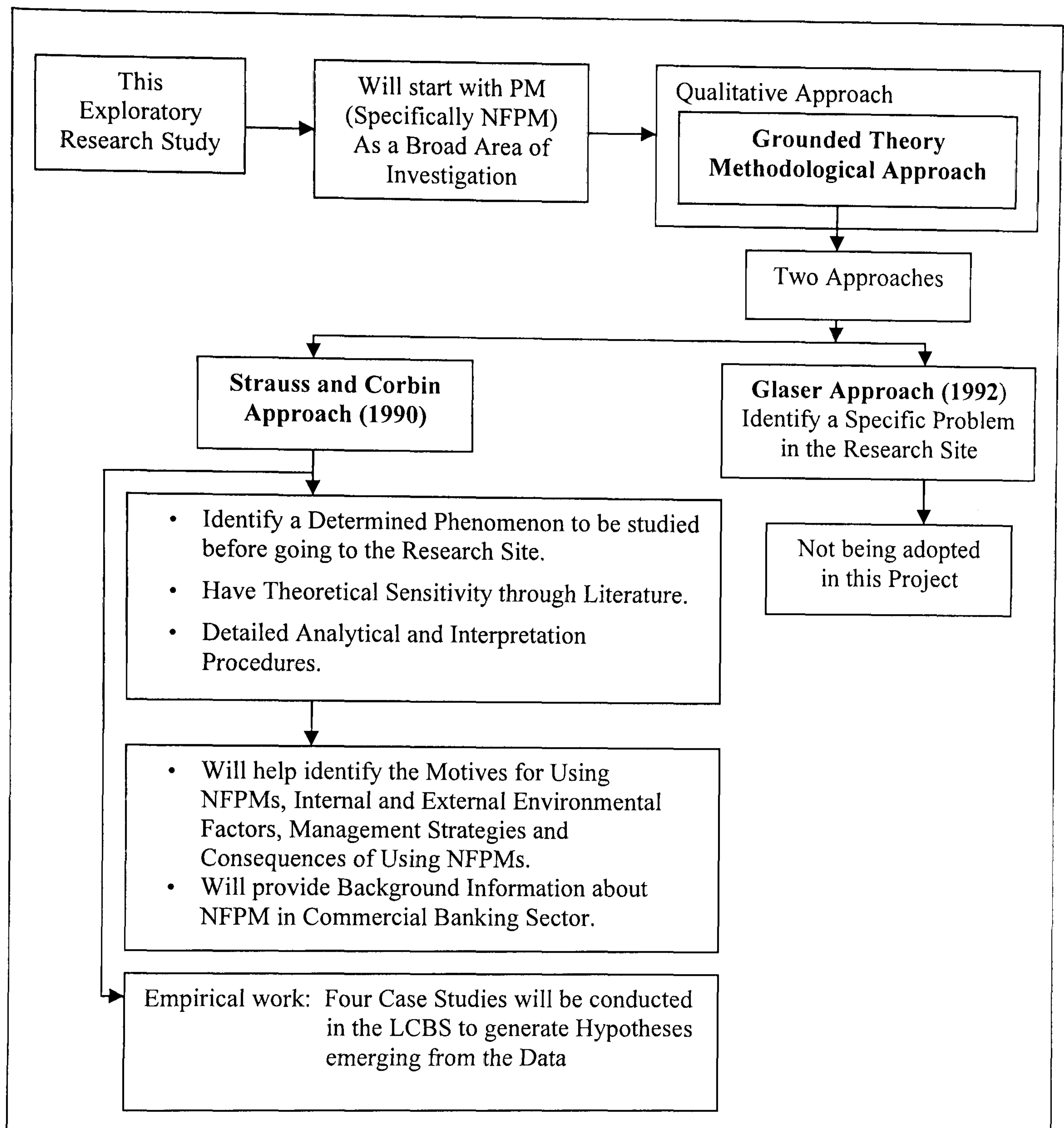
“If a foreign student is studying here but wishes to collect data in his or her own country, then most certainly he or she can use this method or other qualitative methods. It is important that other countries not borrow theories but instead develop their own, ones that reflect their societies' or citizens' cultures and behaviours.”

A broad range of qualitative methods has been used in business research. This study is conducted using a grounded theory approach. Grounded theory was developed by Glaser and Strauss (1967) and more commonly is used in sociological and anthropological studies. A grounded theory approach enables the researcher to start with a broad area of study and it permits the researcher to go to the study site

without having any hypotheses in mind and it helps the researcher to uncover what occurs beyond a specific phenomenon. It also offers the researcher more flexibility to understand the phenomenon under study and to explain why particular practices happen (Lye et al., 1997; Strauss and Corbin, 1998). Grounded theory's attribute of sensitivity to behavioural aspects is another reason for choosing such a methodology (Strauss and Corbin, 1998).

The researcher has decided to adopt Strauss and Corbin's (1990 and 1998) grounded theory approach for several reasons. Strauss and Corbin suggest that the phenomenon to be investigated has to be previously predetermined. Conversely, Glaser's grounded theory approach advises researchers to go to the study site without having a problem to investigate and it will appear while the researcher is at the study site (Glaser, 1992).

Strauss and Corbin introduce a structured set of analytical steps, which provide the researcher with systematic methods to analyse raw data and interpretive methods for developing concepts to build a theory (Strauss and Corbin, 1998). Conversely, Glaser prefers more general analytical methods (Lye et al., 1977). Strauss and Corbin (1998) suggest that the researchers should first have theoretical sensitivity about the subject under study and then identify a determined phenomenon of research before going to the study site. They defined theoretical sensitivity as researchers' capability to give meaning to the data and their capability to specify what important issues are to be investigated. Therefore, researchers should have background information, which makes them sensitive to explore and explain the phenomenon under study. By having the specified phenomenon before going to the study site the researcher is able to focus on the main phenomenon and specify the appropriate type of data to be collected. Figure 1-1 provides an overview of the approach to the study.

Figure 1-1: Overview of Approach

1.5 RESEARCH METHOD

In this research project four case studies are conducted to investigate, explore and obtain an in-depth understanding of the phenomenon that the researcher has identified. There is no perfect number of case studies to be conducted. Nevertheless, Eisenhardt (1989, p. 545) stated that:

“A number between 4 and 10 case studies usually works well. With fewer than 4 cases, it is often difficult to generate theory with much complexity, and its empirical grounding is likely to be unconvincing,

unless the case has several mini-cases within it... with more than 10 cases, it quickly becomes difficult to cope with the complexity and volume of the data.”

The case study method is used because, firstly, the relationship between the qualitative methodology and the case study method is well identified. The case study method is used frequently when the researcher wants to generate hypotheses rather than to test them (Kaplan, 1986). Yin (1994, p. 23) develops a definition of a case study: “A case study is an empirical inquiry that: investigates a contemporary phenomenon within its real life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used”. There is little prior research in NFPM for the banking industry in well-developed countries in general and in developing countries in particular, which makes it difficult to formulate hypotheses. Therefore, this researcher decided to adopt the grounded theory approach to study this phenomenon and in view of that the researcher used the case study method.

Secondly, the case study is a good method that enables a researcher to understand the main phenomenon. In this regard Scapens (1990, p. 264) stated that:

“Case studies offer us the possibility of understanding the nature of management accounting in practice: both in terms of the techniques, procedures, systems, etc, which are used and the way in which they are used... case studies which examine only formal accounting systems run the risk of failing to understand how these systems are embodied within the day-to-day practices of accountants and managers.”

Thirdly, the case study method provides an opportunity to a researcher to manage concentrated observation of one or more individual units instead of the total of the population or a sample of it (Yin, 1994).

Fourthly, the case study provides a researcher with an opportunity to compare and contrast the findings of the case studies. Four in-depth case studies using the

grounded theory approach will enable the researcher to obtain an understanding of the nature of the NFPMS and the related environmental factors in the LCBS. Each case study started with an open question such as “What is the nature of NFPMS in the Libyan commercial banks?” this helped the researcher to investigate and explore the phenomenon. The research project objectives are used as the main questions during the interviews. The researcher employed Strauss and Corbin’s procedures to analyse the data collected during the case studies to build a theory. Substantive hypotheses are developed from each case study and form the basis of the formal hypotheses. The formal hypotheses that emerged from the cross-case analysis are the main findings of this study.

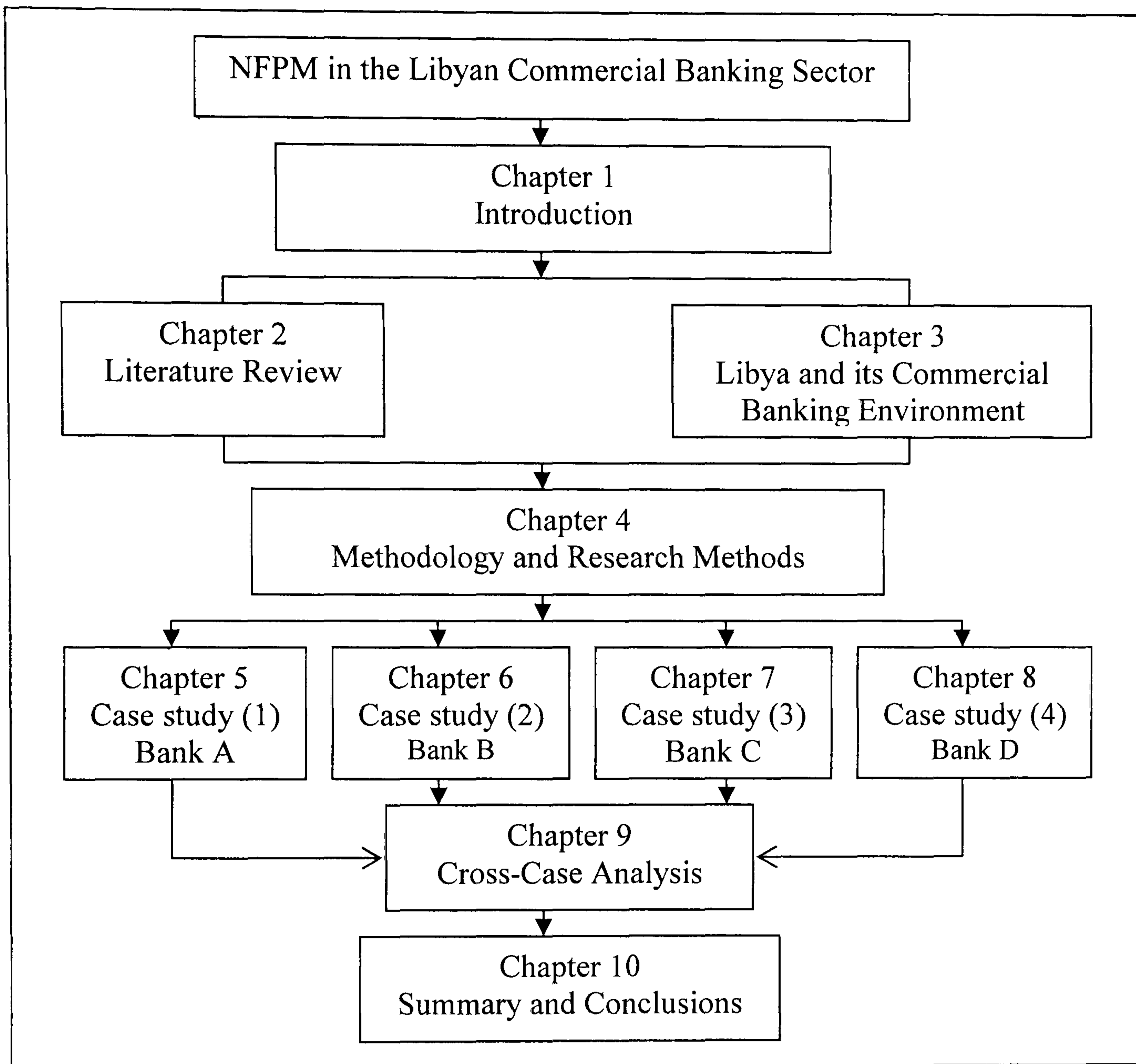
The researcher conducted the interviews with managers and accountants from different management levels of each bank. The researcher studied some of each bank’s documents such as final annual reports, internal management reports and other reports to obtain more specific information with regard to the LCBS and NFPMS.

1.6 STRUCTURE OF THESIS

The study is organised into ten Chapters. The first four Chapters provide a background about Libya (including the LCBS) and the theoretical background to the study’s main issue – the use of NFPMS – as well as the research methodology and method. Chapter two reviews the literature on PM. This Chapter discusses briefly the history of PM, critiques of traditional FPMs, non-financial performance measurements’ dimensions, non-financial performance measurement models and the relationship between FPMs and NFPMS. The main objective of Chapter two is to provide an overview of the field of study without focusing on a specific area within the investigated phenomenon.

Chapter three provides a general background to the Libyan environment. The Libyan commercial banking environment is also introduced in Chapter three. Chapter four presents the methodology employed in this study and reviews the literature on the grounded theory approach. The research method is discussed as well in this Chapter. Four Banks were chosen to be the four case studies. The Chapter explains how data from these four case studies was collected. Interviews, documentary analysis and observations are the main data collection instruments. The data collected from the four case studies are the focus of Chapters five to eight. These four Chapters describe the data collected for each case study and cover detailed aspects of the Banks and the phenomenon under investigation. Details of Banks' backgrounds, interviews, data analysis, motives for using NFPMs, internal and external environmental conditions, management strategies adopted in conjunction with the use of NFPMs and the consequences are discussed. The emerging substantive hypotheses for each of the four case studies are given at the end of each of these Chapters. Chapter nine provides an overview of the similarities and differences between the four case studies and presents the cross-case analysis of the four case studies to formulate the formal hypotheses from the substantive hypotheses for each case study. Chapter ten contains the conclusions, which give an overview of the study, the main findings of this study, limitations of the study and suggestions for future research. Figure 1-2 presents an overview of the thesis structure.

The next Chapter focuses on the literature review of PM with an emphasis on NFPM.

Figure 1-2: Structure of Thesis

CHAPTER 2

LITERATURE REVIEW

2.0 INTRODUCTION

The development of MA in general and PM in particular has produced many techniques to help accountants to measure and provide information-based intelligence for managers to take relevant decisions regarding their organisations to create competitive advantage. One of the most significant developments is NFPMs.

The main objective of this Chapter is to explore the current literature on Western NFPMs. The context of Libya is very different from that of the United States and the United Kingdom. Therefore, the Western PM literature is explored as mentioned above to give a general background to this research project. Such background information reinforces the researcher's theoretical sensitivity¹ which helped the researcher during the empirical study.

This Chapter has seven sections. The first section provides a brief history of PM. The second section introduces the definition, the importance and the use of NFPMs, as well as the principal reasons for the development of NFPMs. The third section focuses on an overview of non-financial performance dimensions and is followed by a discussion on some well-known performance measurement models in the fourth section. The fifth section discusses briefly the design of PMSs. Some recent developments in the literature relevant to NFPMs are highlighted in the sixth section. Finally, the conclusion gives a summary of the whole Chapter presented in the last section.

¹ It is suggested by Strauss and Corbin's (1990) grounded theory methodological approach, which is adopted as a methodology for this research project and is discussed in detail in Chapter four.

2.1 A BRIEF HISTORY OF PERFORMANCE MEASUREMENT

Lebas and Euske (2002, p. 8) defined business performance as the ability “to act today in such a way that tomorrow it will be able to be measurable”. According to Kaydos (1999), the aim of measurement should not be to supply precise, unequivocal numbers telling us everything we want to know but rather to provide reliable, significant information that allows us to improve the efficacy of the decisions taken. For Simons (2000) it is necessary to assess business behaviour by means of a performance measurement system (PMS), which will help the elimination of organisational barriers and unveil the organisation’s true potential.

A PMS is a set of metrics used to quantify the efficiency and/or effectiveness of past actions through the acquisition, collation, sorting, analysis, interpretation and dissemination of appropriate data (Neely, 1998). Otley (1999) considers that a PMS is an essential mechanism that may be used by organisations to clarify and make explicit any organisational interdependencies and is a means to deploy and implement major strategies. For Neely and his colleagues (2002), PM is the process of quantifying the efficiency and effectiveness of past actions (Bocci, 2004, p.20); more recently, Moullin (2005, p.17) defined PM as “evaluating how well organisations are managed and the value they deliver for customers and other stakeholders”. According to Pratt (2005, p. 19) PM is “evaluating how well organisations perform their internal processes and produce the results expected by their stakeholders”.

This section summarises how PM has evolved since 1850 and the relationships between FPMs and NFPMs are summarised. According to the literature, PM history can be split into two parts: the first part started in the late 1850s and went through to the 1980s and primarily emphasised FPMs such as profit, return on investment and productivity. The second part started in the late 1980s as a result of changes in world

markets. This second part was characterised by the appearance of what is known as “balanced/multi-dimensional” frameworks which included a range of FPMs and NFPMs.

2.1.1 Performance Measurement from 1850s to 1980s

In order for companies to achieve their goals and objectives, performance measurements (PMs) are used to evaluate, control and improve production processes. PMs are also used to compare the performance of different organisations, plants, departments, teams and individuals and to assess employees.

The economist Adam Smith (Chandler and Daems, 1979) mentioned the importance of PM in his writings. He stressed the specialisation of economic activity with the allocation, coordination and monitoring by the new famous invisible hand of the market. Allocation is the process of providing resources to activity units, the process of structuring and facilitating the flows and transactions between these units called coordination and monitoring is the process of checking on the performance, functioning and rewarding of these units (Chandler and Daems, 1979).

Before the 1850s, many enterprises were relatively small with management style family enterprises. There was a general director (who was the owner or one of the family members), a treasurer (who performed many important tasks such as accounting, purchasing, selling and financing) and owners (who carried out the functional activities). The administrative and organisational assignments were very well defined in this form of enterprise because the operations were performed by the owners or the agents of the owners (Chandler, 1966; Johnson and Kaplan, 1987). At that time, profits were the major PM used by merchants and businessmen to evaluate their business activity. The rate of return was established in the 16th century in Europe (Mephram, 1988). It was the main effective performance measure used by the owners of businesses, such as agricultural and mining enterprises, to evaluate their

business activities. Agricultural enterprises were the first to develop the determinations of the rate of return, because of the system they used to compute the income and expenses for capital invested (Mephram, 1988).

A major development in accounting concepts and procedures occurred between the 1850s and 1870s for American managers of transportation and communication enterprises in order to assist them in their extensive planning and control procedures (Chandler and Daems, 1979). These procedures spawned summary financial reports on the operations of the separate units of an enterprise. In addition to the financial summaries, the railroads devised a system of reporting operating statistics for controlling and appraising the performance of their separate units routinely such as cost per ton-mile and the operating ratio (operating income divided by sales) (Chandler, 1966, 1977; Kaplan, 1984).

In the 1880s, newly formed enterprises (involved in mass production and mass distribution areas such as the manufacture of tobacco products and milling) adopted the railroads' internal accounting reporting systems for their own organisations to produce highly detailed data to check the quality and mix of raw materials and generated reports to monitor the performance of revenue centres and evaluate the performance of department managers, foremen and other employees. In addition they used such data to evaluate improvements in processes, in products and to make decisions on developing products (Chandler and Daems, 1979; Kaplan, 1984; Johnson and Kaplan, 1987).

In the 19th century, there were some notable systems such as in Andrew Carnegie's Steel Company, John Jacob Astor's American Fur Company, Nicholas Biddle's Second Bank of the United States and the State Boards that built the first railroads (Chandler, 1966, 1977; Kaplan, 1984).

One of the achievements of Andrew Carnegie's Steel Company was the development of the voucher system which helped to generate statistical data needed for coordination and to evaluate the performance of department managers. It evaluated performance in terms of the operating ratio (the cost of operations as a percentage of sales) and profits as a percentage of book issued share capital (Kaplan, 1984).

Biddle's Second Bank was one of the biggest financial enterprises in the United States (US). It was the first enterprise in the US that had separate units and headquarters because of its financial capability and its spread within the US. Controlling and performance appraisal of its units were done through elaborate and regular reporting systems supported by inspection from the head office. The headquarter officers spent their time in supervising units' transactions, appraising, coordinating and planning the activities of their units (Chandler, 1966).

The Astor American Fur Company expanded its activities throughout the US. One of its major achievements was that senior managers delegated management tasks to other staff. This delegation entailed the need for management control and accountability (Chandler, 1966).

The Erie Canal was one of the largest transportation enterprises in the United States. During the construction stages of the railways it divided the railways into separate units. Its appraisal system to evaluate performance used both traditional statistics as well as inspections and complex reports (Chandler, 1977; Chandler and Daems, 1979). The appraisal of the operating performance of the managers of its units depended on the ratio of income to operating expenses. However, this ratio did not enable them to assess the efficiency of administrative coordination and monitoring because the profits were related to the whole railway and not to its operating units.

When the enterprise of the railway went into full operations, the headquarters relied on the stockturn concept to appraise the performance of its operational managers such as purchasing, selling and other functions, as well as the performance of the enterprise as whole. The stockturn is “the number of times the stock of a particular line or department turned over in a specific period of time” (Chandler and Daems, 1979, p. 8). The stockturn was computed by dividing period sales by the average amount of stock for each operating unit. This ratio defined the degree of the efficiency of each unit and the related managers.

In the early twentieth century, a new form of enterprise emerged namely a vertically integrated (multi-activity) organisation where separate, specialised companies merged in to one company with separate departments such as production, marketing, purchasing, selling and finance because of their need for permanent suppliers and distribution channels. The managers of each department had to run the operations effectively in their departments and focus on coordination as well as developing the long-term strategies. They followed mass production and distribution and encountered problems of how to manage these enterprises effectively (Chandler, 1966; Williamson, 1981). Therefore, the need for a new PMS for these decentralised, functional organisations was necessary to motivate and evaluate departmental performance and to guide overall organisation strategy (Johnson, 1983).

A new management accounting information system was needed to manage the activities of organisations. One example of such a system was in the Du Pont de Nemours Powder Company, the famous American explosives firm. The Du Pont Company was the innovator in developing a modern managerial control system.

In 1903 three Du Pont cousins merged their small single-unit family firms and installed an organisation structure in the new enterprise. The Du Pont company devised an accounting measurement system, which was Return on Investment (ROI)

to serve both as an indicator of the efficiency among its diverse operating departments and as a measurement of financial performance (FP) of the company as whole (Kaplan, 1984). Du Pont's financial officers extended the ROI approach in about 1912, when Donaldso Brown decomposed the ROI computation into the product of the sales turnover ratio, sales to capital employed and the operating ratio of earnings to sales (Chandler and Daems, 1979; Kaplan, 1984). The pyramid of financial ratios and the ROI helped Du Pont managers to better control their growing business empire.

Nevertheless, during the 1920s owners of large vertically integrated organisations realised that there were still problems in organising their companies (i.e. the allocation of responsibility between top managers and middle managers in the operating departments was not clearly planned and senior managers intervened excessively in day-to-day operations and neglected their responsibilities for long-term planning). The recession that followed the end of World War I dramatically revealed the shortcomings of the planning and control systems of their organisations. General Motors (GM) and Du Pont were linked and they developed a new form of organisational structure, the multi-divisional firm. Such an organisational form and the reporting and evaluation system helped owners to overcome their financial problems in 1923 (Chandler, 1977; Kaplan, 1984). Johnson (1978, pp. 493-494) wrote that:

“GM's management accounting system did three things to help management accomplish 'centralised control with decentralised responsibility'. First, it provided an annual operating forecast that compared each division's *ex ante* operating goals with top management's financial goals. This forecast made it possible for top management to coordinate each division's expected performance with company-wide financial policy. Second, the management accounting system provided sales reports and flexible budgets that indicated promptly if actual results were deviating from planned results. They specified, furthermore, the adjustments to current operations that division managers should make to achieve their expected performance

goals. The sales reports and the advanced flexible budget system provided, then, for control of each division's actual performance. Third, the management accounting system allowed top management to allocate both resources and managerial compensation among divisions on the basis of uniform performance criteria. This simultaneously encouraged a high degree of automatic compliance with company-wide financial goals and greatly increased the division manager's decentralised autonomy."

The GM Company devised many of the managerial techniques such as capital appropriation procedures, budgeting and planning cycles, flexible budgets, target ROI, pricing based on standard volume, incentive and profit-sharing plans and a market-based transfer price policy which are still used in today's organisations.

These previous developments in the form of enterprises, the management systems and MA had several effects. First, mergers affected PMSs giving impetus to improve these measurements. Second, the separation between the ownership and the management required effective systems to assess management performance. Third, the organisations' circumstances influenced the PM methods and the degree of their effectiveness. Moreover, PM was affected by the development of cost accounting practices such as standard costs that were used to evaluate the functional managers and enhance the organisation's overall performance (Chandler, 1977; Kaplan, 1984; Johnson, 1978).

By the mid-1950s, a new PM was invented, the discounting of the stream of earnings, which is discounted cash flows (DCF) in accounting terms. This approach generated a lot of controversial discussion and faced much criticism by researchers and operational managers. However, by the 1960s the publication of the first edition of Bierman and Smidt provides additional support for the acceptance of DCF analysis and numerous surveys have indicated the widespread adoption of this analytic technique by US firms (Kaplan, 1984).

Residual Income (RI) came out after World War II as an approach to overcome some of the ROI shortcomings. It is ascribed to the General Electric Corporation, although its antecedents can be traced to the early years of the 20th century (Kaplan, 1984) and some studies even place it in the 18th century (Mephram, 1988) under a different name “Method with allowance of interest” for operating performance (Chandler and Daems, 1979).

The transfer pricing approach was first devised by GM Company where it was used between its operating divisions despite its problem with vertically integrated organisations. By the mid-1950s some articles were published on this approach describing the available models to use a transfer price approach such as full cost, standard cost, market price and negotiated price. Moreover, in 1956-1957, Hirschleifer devised the microeconomic foundation of the transfer price problem. He proposed the opportunity cost of the selling division as the suitable transfer price. However, the transfer price problem has remained a problem area with incompatible standpoints (Kaplan, 1983, 1984).

From 1960, the literature of MA suggested the use of quantitative models to solve many problems associated with planning, evaluation and control such as regression analysis, linear and non-linear programming, probability theory and hypothesis testing and decision theory for some organisations (Kaplan, 1984). These techniques and others are still used by organisations and many researchers in the analysis of their empirical studies.

Since the 1950s, some managers started to use a number of operational measurements (non-financial) either to substitute or complement the financial ones (Chandler, 1966), in order to help them to achieve their long-term objectives. GM and Du Pont started using market share and customer satisfaction indicators to evaluate the performance of their enterprises. Moreover, Du Pont used other

indicators such as competitor information to evaluate the performance of each division (Chandler and Daems, 1979). GM staff relied on some advanced information such as state of the business cycle, the divisions' market share and activities of competitors which encouraged the managers to achieve certain goals, defining the position of GM in comparison with other competitors, linking production to changes in demand, planning and allocating existing resources efficiently and monitoring and evaluating a division's performance (Chandler, 1977).

Technological complexity, changing customers' demands, mass production, production variety and diversification were the characteristics of the new industrial era. Moreover, the international market and competition as well as the shift in emphasis toward customers' focus affected profitability as the major performance evaluation measurement. These aspects encouraged managers to improve and develop other PMs that they used to manage and control their businesses. Managers encouraged research departments to improve products, operational processes and develop new products to satisfy market demand. In fact, Headquarter executives appraised the success or failure of those new products by the grade of acceptance among customers or by their market shares (Chandler, 1977).

Throughout the 1970s and 1980s, numerous authors became dissatisfied with conventional backward looking, narrow and late accounting based PMSs and argued for change (Neely, 1998; Bourne et al., 2000). During that time, the field of PM saw a movement away from purely FPMs to include NFPMs. Therefore, many researchers mentioned the benefits of NFPMs to organisations' long-term objectives and asked academics, organisation owners and relevant bodies for more studies that could help to develop and improve the PMSs and place more emphasis on NFPMs (AAA, 1971; Kaplan, 1983, 1984; Johnson and Kaplan, 1987).

In the late 1970s, French companies applied an integrated PMS. The Tableau de Bord is a wide-ranging set of measuring instruments to show the degree to which the organisation is achieving its goals. It introduced success factors such as customer satisfaction, quality and many others as a guide for its employees. In fact, it is similar to the BSC (Kaplan and Norton, 1992; Tayles et al., 2002).

Benchmarking was used at Rank Xerox in 1979 and became a company-wide policy in 1981 as a performance appraisal system for measuring and improving products, services and practices against the best organisations in the class (Voss et al., 1997; Hoque, 2001). It provides a means of determining how well a business unit or organisation is performing compared with a similar unit in the organisation or externally. It has been applied to many World-class companies such as AT & T, Du Pont, American Express, General Electric, GM, Honda Motors, Proctor and Gamble, Apple Computers, IBM and Motorola (Hoque, 2001).

The Six sigma approach was introduced at Motorola in 1986 as a quality PM, to drive out variability and reduce waste in processes using powerful statistical tools and techniques (Banuelas and Antony, 2002). Six sigma's purpose is to maximise performance improvement (Gupta, 2005). Six sigma is defined by Antony and Banuelas as: "... a business improvement strategy used to improve business profitability, to drive out waste, to reduce costs of quality and to improve the effectiveness and efficiency of all operations so as to meet or even exceed customers' needs and expectations" (Coronado and Antony, 2002, p. 92). It has become a corporate strategy to drive profitability and growth (Gupta, 2005). Many organisations have used it. General Electric is one of the most successful organisations in implementing this concept (Coronado and Antony, 2002; Martins et al., 2006).

2.1.2 Performance Measurement from Late 1980s

Organisations continued to use the above concepts in a largely unchanged format until the mid-1980s, when it was recognised that traditional accounting measurements that focused on a narrow range of financial measurements, were no longer relevant for a business environment that had changed significantly. At that time, there were many critics of traditional PMs (Richardson and Gordon, 1980; Hopwood, 1984; Miller and Vollmann, 1985; Goldratt and Cox, 1986; Johnson and Kaplan, 1987; Berliner and Brimson, 1988; Hiromoto, 1988; Schmenner, 1988; Turney and Anderson, 1989; Otley, 1999; Neely and Bourne, 2000; Malmi, 2001) and some discussion of the problems involved with these PM methods are still used by organisations today (Neely, 1999). Once the debate had begun, the first books and articles soon appeared on how PM should really be designed and used (Dixon et al., 1990). They emphasised that traditional FPMs have many limitations and led to the development of new PMSs. These “balanced/multi-dimensional” frameworks (Bourne et al., 2000) included a range of FPMs and NFPMs used by different stakeholders to assess performance. Furthermore, Neely (1999) mentioned that a revolution in PM had started. He argued that the revolution was not because of the limitations of traditional FPMs which have been known for some time. He suggested seven reasons which he thought helped the revolution to start: the changing nature of work, increasing competition, specific improvement initiatives, national and international awards, changing organisational roles, changing external demands and the power of information technology (Neely, 1999). This has led to the recognition that traditional FPMs do not present a complete profile of organisational performance (Neely and Bourne, 2000). Hinton et al. (2000) suggested that more intangible and qualitative measurements should be used and organisations may require the measurement of knowledge creation.

Many measurements have been developed to suit the nature and environment of organisations, whether they are FPMs such as ROI, RI, return on assets (ROA), return on sales (ROS) and internal rate of return (IRR) or NFPMs such as Quality, Customer Satisfaction, Delivery and Flexibility (De Meyer et al., 1989). At the present time, NFPMs have many applications in business and are considered to be important performance evaluation measurements for long-term objectives and goals (Johnson, 1983; Ghalayini and Noble, 1996; Neely, 1999). Many studies have tried to link FPMs and NFPMs in one model such as the Results and Determinants Framework (Fitzgerald et al., 1991), the Performance Pyramid (Lynch and Cross, 1991), the Balanced Scorecard (Kaplan and Norton, 1992, 1996), a Stakeholder Approach to Strategic Performance Measurement (Atkinson et al., 1997) and the Performance Prism Perspective (Neely and Adams, 2000 and 2001).

The developments of PMs were devised by engineers and industrialists working in organisations and have been rapidly adopted by other organisations. Conversely, many interesting developments have been suggested by academics and have had relatively little impact in practice.

2.1.3 The Relationship between NFPMs and FPMs

It has long been recognised that PM has a significant impact on the efficient and effective management of organisations. However, while the issue of development of contemporary PMs and measurement frameworks have received considerable attention from both academics and practitioners, the critical question is whether the NFPMs actually improve an organisation's profitability.

In the relevant literature, the relationship between NFPMs and FPMs is that NFPMs, which generally rely on customer satisfaction and total quality management (TQM), complement the FPMs to help to improve the future economic performance of an organisation. Intermediate outcomes like quality and customer satisfaction are

better reflected in NFPMs (Barua et al., 1995) and these outcomes lead to FP (Hauser et al., 1994). This cause-and-effect model implies that NFPMs provide more direct and immediate measurements of managerial efforts than FPMs. Therefore, NFPMs are better indications of managerial efforts and are invaluable in appraising managerial performance (Srinivasan, 1997).

Kaplan and Norton (2004) mentioned that the underlying assumption is that organisations accomplish better performance when they place a greater weight on measurements of a different nature. Furthermore, the FPMs do not reflect long-term aspects of managerial actions, while NFPMs are used to assist managers in refocusing on the long-term aspects of their actions and may be good predictors of subsequent FP (AAA, 1971; Johnson and Kaplan, 1987; Rees and Sutcliffe, 1994; Hemmer, 1996).

Understanding the relationship between NFPMs and future FP is important for organisations seeking to design better PM and control systems. NFPMs could provide more penetrating control, going beyond the limitations of aggregated financial measurements (Hayes and Abernathy, 1980; Merchant, 1990; Vaivio 1999) and could connect managers regularly to operational issues which take on strategic significance (Vaivio, 1999).

The improvement in customer loyalty, employee retention, new product introductions, or other common NFPMs may led to higher profits and shareholder value. Ittner and Larcker (2003) mentioned that one organisation chose employee turnover as a key performance indicator, believing that high employee retention indicated a high level of satisfaction and motivation, which would improve customer service and ultimately increase profits. In an earlier study, Eccles (1991) suggested that including NFPMs in bonuses and other rewards may improve an organisation's performance. Ittner and Larcker (1995) suggested that in organisations which applied

relatively few TQM practices and adopted information and reward systems that emphasise non-financial information were associated with higher accounting returns.

Srinivasan (1997) studied the relationship between NFPMs and FPMs. He found that customer satisfaction measurements are significantly associated with future FP as measured by revenues and profit. Anderson et al. (1997) similarly stated that accounting performance is positively associated with customer satisfaction. Ittner and Larcker (1998a) provided evidence that customer satisfaction measurements are also associated with organisations' current and future market value but not with contemporary accounting measurements. Said et al. (2003) reported that the adoption of NFPMs improves organisations' future accounting and market returns while Ittner and Larcker (2003) found that organisations that adopted NFPMs produced significantly higher returns on assets and return on equity over a five-year period.

Ittner and Larcker (1997 and 2003) and Hoque and James (2000), in their studies to investigate the relationship between business success and the use of NFPMs, found that organisations which use NFPMs in their PMS share the following features: significant assets and capital productivity and a strong market position or attempts to improve it (Pärl et al., 2006). Overall, there is evidence of a positive relationship between the use of NFPMs and organisational future economic performance.

2.2 NON-FINANCIAL PERFORMANCE MEASUREMENT

Managerial accounting is progressing to include a more strategic approach that emphasises the identification, measurement and management of key financial and non-financial drivers of organisational performance, strategy success and stakeholders' wealth creation (Siegel and Sorensen, 1999; Abdel-Maksoud et al.,

2006). The reasons for the emergence, definition, importance and the use of NFPMs will be debated in the next four subsections.

2.2.1 The Principal Reasons for the Emergence of NFPMs

ROI and RI are important accounting-based measurements of conventional responsibility reporting and performance evaluation. In today's competitive environment, one that encompasses fierce global competition, advancing technology and innovation, changing markets, increased customer awareness, government regulation as well as policies and industrial relations, FPMs can be inadequate to measure organisational performance (Kaplan, 1984; Neely, 1999; Devinney et al., 2005; Markovic and Vukovic, 2006). Kaplan and Norton (1996) believed that measurement by FPMs can damage the organisation's capacities for being flexible and creating economic value for the future; they suggested that NFPMs are better suited for measuring performance under the effects of various sources of uncertainty. They will assist managers when measuring performance under uncertainty and encourage them to take the appropriate course of action (Hoque, 2001). These NFPMs are used to augment FPMs because they deal with causes not effects and they are the drivers of future FP (Cross and Lynch, 1992; Kaplan and Norton, 1992; Singleton-Green, 1993).

From the late 1980s to today, numerous authors have expressed discontent with traditional measurements of organisational performance, which mainly focus on financial indicators (Cross and Lynch, 1992; Kaplan and Norton, 1996). Fisher (1992) and Brancato (1995) reported that there are three reasons for the emergence of NFPMs which are the critiques of limitations in traditional FPMs, competitive pressures and the outgrowth of other initiatives (Itter and Larcker, 1998b).

2.2.1.1 Critiques of Traditional FPMs

Managers are recognising that FPMs alone are incomplete, imprecise and do not have the ability to express the reality of the business and its environment. Moreover, textbooks in MA often criticise sole reliance on accounting numbers that are used as PMs (Feltham and Xie, 1994). Worse, many managers believe that their company's systems both reward the wrong accomplishments and encourage the tracking of the wrong objectives (Geanuracos and Meiklejohn, 1993). The major critiques that have been noted in the PM literature are discussed below.

2.2.1.1.1 Measurements are Based on an Outmoded View

The most significant limitation of FPMs is that they are based on traditional accounting measurement systems which give an outdated view of the way companies work (Bourne et al., 2000). They are tools of how the nineteenth century companies (textile mills, railroads, steel mills) produced and distributed goods and how they generated profit. Moreover, they show the demands of a manufacturing rather than a service perspective. Reichheld and Markey stated (Geanuracos and Meiklejohn, 1993, p. 7):

“Most business people, without knowing it, see the service world through the lenses of manufacturing goggles. They are influenced by historical traditions in business training, strategy techniques and organizational theory, all rooted in manufacturing. Today's accounting systems – the measurement framework which defines corporate reality and focuses organizational energy – have changed little since they were developed to meet the learning requirement of nineteenth century steel and textile manufacturing.”

Many critiques have been made of the philosophy underpinning the manufacturing age, which discourages an inclusive view of key success factors. Many developments such as advanced management practices (AMPs), sophisticated technology and competition force organizations to expand their views to factors outside the old manufacturing era philosophy (Geanuracos and Meiklejohn, 1993).

Reichheld and Markey (1992) proposed that the key to productivity growth in the service world is employee and customer retention and the most important assets of a company are its experienced customers and employees. When companies have applied the power of customer and employee retention, these elements affect all other key success factors such as flexibility, quality and delivery and they have achieved improved results. USAA insurance, for instance, had striven for 20 years to reduce employee and customer turnover. Some 5 years after adopting a customer retention strategy, USAA has managed to decrease employee turnover by 40 percent. In the same period productivity has also grown by 23 percent (Reichheld and Markey, 1992; Geanuracos and Meiklejohn, 1993).

2.2.1.1.2 Measurements are too Financially Orientated

Traditional PMSs have seen a build up of financial reporting requirements enforced by governments, accounting associations and other regulatory authorities. In many societies financial reporting requirements have been amplified in order to protect either shareholder rights or authorities' interests. Companies use financial reporting systems developed to meet these regulatory requirements as the basis for their management reporting systems. Therefore, the FPMs can lead to the overlooking of NFPMs, such as quality, customer satisfaction, delivery and flexibility, which are increasingly seen as the drivers of success over the long-term (Geanuracos and Meiklejohn, 1993, Hoque, 2001). Most traditional PMSs are overly financial and focus mostly on the financial returns - which companies were generating - rather than the underlying factors - which were the drivers of these returns (Hayes and Abernathy, 1980; Kaplan, 1984; Geanuracos and Meiklejohn, 1993). Ken Coppock, a director of corporate management accounting reported (Geanuracos and Meiklejohn, 1993, p. 9):

“We are not satisfied with performance indicators – particularly the level of information we have on the business units. They are too financially oriented and do not tell you much about management performance or quality performance.

The big problem is that if you look at the group from the financial perspective we are performing right on target. But then there is a whole raft of other issues around on which we have no view at all, like product development or customer satisfaction. We have numbers on these things but no idea of our effectiveness.”

2.2.1.1.3 Measurements are too Inward Looking

Many organisations found that their PMSs may introduce little of value in detailing internal factors. They are inadequate for providing information on either competitors or external operating conditions (Hayes and Abernathy, 1980). Business Intelligence organised research to identify the degree of consideration of external critical factors. They found that most organisations did not use benchmarking against their competitors and did not try to develop their marketplace (Geanuracos and Meiklejohn, 1993). The inadequacy of information in these areas affects organisations in their endeavours to formulate strategies for enlarging their market share and for defending themselves against competitors’ strategies (AAA, 1971; Skinner, 1974; Johnson and Kaplan, 1987; Peters, 1987; Geanuracos and Meiklejohn, 1993; Bourne et al., 2000).

2.2.1.1.4 Measurements are too Historical

Most FPMs rely on historical financial information which is captured from an organisation’s financial reporting system to track what is going on in the organisation. The major aim of financial reporting is to report on management’s stewardship of the resources which had been consigned to their interest. Historical cost accounting has the ability to show the value added of capital employed over a period of time. However, it fails to define the extent of an organisation’s competitive advantage and what are the key success factors for it (Hayes and Abernathy, 1980;

Kaplan and Norton, 1992). A successful organisation's financial indicators in the past do not mean that this organisation will be the same today or tomorrow, because organisations work in a complicated and uncertain environment which may affect the effectiveness of FPMs (Kaplan, 1983 and 1984; Geanuracos and Meiklejohn, 1993; Neely, 1999).

2.2.1.1.5 Measurements Lack Predictive Ability

FPMs do not have the ability to help organisations predict what their performance is likely to be in the future (Geanuracos and Meiklejohn, 1993; Anderson et al., 1994 and 1997; Huselid, 1995; Srinivasan, 1997; Banker et al., 2000, Bourne et al., 2000; Kanji, 2002). PIMS Associates collected data on business unit performance for 20 years from organisations around the world. The key aim of this study was to define which indicators are able to consistently predict future performance. The result was that there is little correlation between organisations' profit at any time and what their performance is likely to be in the future (Geanuracos and Meiklejohn, 1993). Moreover, they do not capture key business changes until it is too late (Ittner and Larcker, 1998b; Larcker, 2004). However, there is a strong correlation between the organisations' structure as measured by NFPMs and their future performance. In addition, Ittner and Larcker (1998a) found that NFPMs have a predictive power for companies' profitability and success. Bob Luchs, a director of PIMS, reported (Geanuracos and Meiklejohn, 1993, p. 10):

“Those businessmen who have been managing their business strictly by the numbers have a problem. If you go and look at the performance of business over the last four or five years, based on their starting position in financial terms five years ago, there is no correlation between what performance was five years ago and what kinds of returns those businesses obtained on their incremental investment.”

2.2.1.1.6 Measurements Reflect Functions not Processes

The functional view of the organisation has dominated management theory since the 1920s. It has worked noticeably well for several generations and it still works in some of today's successful organisations (Kaplan, 1983; Geanuracos and Meiklejohn, 1993). The processes of these functions are rarely captured in today's PMSs but they are the essential determinants of competitiveness and other key success factors. Improving organisations' future performance will derive from improving processes not functions. The way to tell if processes are improving is to have some way of measuring them which traditional performance systems do not provide (Geanuracos and Meiklejohn, 1993; Neely, 1999; Kanji, 2002).

2.2.1.1.7 Measurements Reinforce the Wrong Behaviour

Financial management information can encourage the wrong behaviour, when an organisation focuses on a particular performance and measures it. What gets measured gets managed. So FPMs can guide the organisation's behaviour into financial results with no focus on creating value in the longer-term (Geanuracos and Meiklejohn, 1993; Kanji, 2002).

2.2.1.1.8 Measurements are Focused on Inputs, not Outputs

Organisations can trace the level of their expenditure on any given item quite easily, but they cannot easily measure to the same level of detail what they get from that expenditure. Measuring organisation's outputs is one of the major factors that provides an image of all the organisation's efforts which FPMs lack (Geanuracos and Meiklejohn, 1993).

2.2.1.1.9 Measurements are too Summary in Nature

Organisations' managers find that traditional FPMs introduce information, which indicates excellent or poor results, but there is no real way to know which factors are

behind these results (Kanji, 2002; Larcker, 2004). The usefulness of this information is limited and provides little basis for taking corrective action. Essentially, the action taken will be directed toward functions and the final financial results and not toward the determinants of these results. Conversely, it is argued that NFPMs are directed to the right key success factors (Kaplan, 1983, 1984; Geanuracos and Meiklejohn, 1993).

2.2.1.1.10 Measurements Generate too Much Data

By using computing systems, organisations can generate many reports on anything that management wants. In the business world today, it is not generating data, but getting the right information to the right level of management which can be used to ensure an organisation's long-term success (Geanuracos and Meiklejohn, 1993).

2.2.1.1.11 Measurements are Structured to Fit the Organisation

Organisations' functional structures generate information on their performance. That is, organisations know how any functions are performing against strategy on a regular basis. However, by using accounting-based measurements they may have no idea if products fit customers' needs or if employees are getting the right training (Geanuracos and Meiklejohn, 1993).

2.2.1.1.12 Measurements are Short-term Orientated

The FPMs such as ROI, ROA, RI, cash flow and others are generated by using historical and short-term orientated information obtained from the financial statements of previous years (Banks and Wheelwright, 1979; Hayes and Garvin, 1982; Bourne et al., 2000; Kanji, 2002; Markovic and Vukovic, 2006). Therefore, they do not reflect the long-term results of managerial actions. Moreover, sometimes managers are encouraged to improve short-term performance ratios by manipulating some financial transactions such as selling fixed assets which will affect

organisations' long-term performance. Conversely, NFPMs are not dependent on managerial judgment about allocations and short-term evaluations. NFPMs can be used to refocus managers' efforts on the long-term results of their actions (Hemmer, 1996).

2.2.1.1.13 Measurements are not Relevant to Practice

The traditional FPMs quantify performance and other improvement efforts in monetary units. Conversely, most improvements efforts are difficult to quantify in monetary units like lead time reduction, customer satisfaction and product quality. FPMs also give inadequate consideration to quantifying intangible assets like intellectual capital. Moreover, FPMs do not have the ability to allow managers, operators and supervisors to understand really what is happening and this leads to frustration and dissatisfaction (Ghalayini and Noble, 1996; Ittner and Larcker, 1998a; Larcker, 2004). By incorporating NFPMs into organisations' measurement systems, many organisations have sought to create a wider set of measurements that capture not only organisational value, but also the factors leading to the creation of value in the business (Ittner and Larcker, 1998a).

2.2.1.1.14 Measurements are Inflexible

The traditional FPMs have a predetermined format which is used across the company's departments even though these departments have their own characteristics and priorities. Indeed, PMs which are suitable for one department may not be relevant to others (Ghalayini and Noble, 1996).

2.2.1.2 Competitive Pressure

The substantial change in the nature and intensity of competition has forced management of organisations to find new ways of managing, measuring and controlling details about operations. By incorporating NFPMs, organisations can

better determine and measure their key success factors (Ittner and Larcker, 1998b; Kanji, 2002).

2.2.1.3 Growth of other Initiatives

The implementation of new technologies and philosophies of production management such as computer integrated manufacturing, flexible manufacturing systems, just in time, optimised production technology and TQM, require timely detailed process information that is not available from aggregate accounting data (Johnson, 1992; Kaplan, 1983; Ghalayini and Noble, 1996). The quality management literature has maintained that TQM requires greater emphasis on customer requirements and customers' satisfaction with the organisation's products or services, leading to greater emphasis on NFPMs such as complaints, customer satisfaction and customer retention (Ittner and Larcker, 1998b)

2.2.2 The Definition of Non-financial Information

Traditionally, accounting has been viewed as measuring assets, liabilities, revenues, expenses and income in monetary units (AAA, 1971). When accountants, managers and others refer to financial information, they mean quantitative financial or monetary information shown in accounting records and books, accounting reports and financial statements (Hussain, 2000).

Qualitative non-financial information to be used in comparisons of performance, has to be in the form of units, to make the comparisons easy and meaningful. However, the literature of MA suffers from not having clear differentiation between the expressions financial and non-financial information (Bruns and McKinnon, 1993; Gul and Chia, 1994; Hussain, 2000).

The American Accounting Association (AAA, 1971) defines financial information as a quantitative measure, expressed in the monetary metric, resulting from the measurement of past, present and future economic events, or that has a

financial character. That means financial information is: 1) a piece of information expressed as a monetary unit, 2) a ratio resulting from the mathematical manipulation of information expressed in a monetary unit, 3) a piece of information resulting from a ratio that includes a piece of information expressed in a monetary unit. Therefore, financial information includes profits, cash flows, return on investment and others. Non-financial information, from this definition and as used in the accounting literature, can be defined as measurements not expressed in monetary units (i.e. non-financial or non-monetary numerical expressions), such as the number of new products, the number of new customers, the number of complaints, the defect ratio, the employee turnover ratio and market share by product line.

2.2.3 The Importance of Non-financial Performance Measurement

The goals of a PMS include assisting the allocation of resources, assessing and communicating progress toward strategic objectives and evaluating managerial performance (Ittner and Larcker, 2003). However, traditional FPMs (such as return on investment) do not consistently support the intended strategy because of their shortcomings as mentioned earlier in this section. The argument in the relevant literature is that the appropriate PMs depend on the business strategy (Simons, 1995; Kaplan and Norton, 1996; Ittner et al., 1997). These measurements are non-financial which enable managers to understand the factors (such as customer satisfaction) that are most critical to the organisation's long-term success (Lynch and Cross, 1991; Thorne, 1995). The importance of NFPMs to the performance appraisal system has been recognised in the MA literature (Hussain, 2003). In today's competitive environment, NFPMs are drivers of the long-term economic performance. The National Association of Accountants (NAA) in its study "Measuring Entity Performance" (1986) stated that (Lothian, 1987, p. 6):

“Non-financial performance measurements provide a rich opportunity for managers to improve entity evaluations and operations. Such measures direct management’s attention to the entity’s operations and, in the long term, may better reflect the financial returns generated by an entity than do the short-term historical financial measures.”

In addition, by using these measurements, managers can see the organisation’s progress well before financial statements are produced and help them to manage their resources; employees can collect good information about any specific work necessary to accomplish strategic objectives; and investors can get a better overview of the organisation’s overall performance (Itter and Larcker, 2003). Neely et al. (1994) suggested that PM assists managers to: identify good performance, modify timely strategic targets, make precise trade-offs between profit and investment and make intervene usefully when the organisational performance is deteriorating. Itter and Larcker (1998b) reported that managers tended to place greater emphasis on the FPMs for appraising the performance of business unit and on NFPMs for appraising managerial performance.

2.2.4 The Use of Non-financial Performance Measurements

Most managerial PM is based on FPMs (Business International Corporation, 1990; Eccles, 1991). More recently however, there has been an increased emphasis placed on NFPMs such as customer satisfaction, employee satisfaction, productivity, product quality and market share in a wide range of organisations. These measurements are more timely, compatible with organisational goals and strategies, flexible and dynamic and able to change when a market needs change. However, there are many NFPMs and a major problem for managers is to decide upon which measurements to use (Stivers et al., 1998; Medori and Steeple, 2000).

Itter and Larcker (2003) suggested five steps that organisations should follow to make sure that they use NFPMs in a productive way: develop a causal model (based

on the hypotheses in the strategic plan); pull together the data (the inventory of databases should not be limited to PMSs but should extend to any information system like manufacturing control and customer service); turn data into information (use appropriate statistical methods for testing the causal model); continually refine the model (which allows organisations to refine their PMs and deepen their understanding of the underlying drivers of economic performance); base actions on findings (organisations should act on the findings that appear to achieve the greatest financial results); and assess outcomes (to determine whether the action plans and investments produce the desired results).

Abdel-Maksoud et al. (2006) focus on the use of NFPMs in Italian manufacturing companies from six aspects of competition including quality, on-time delivery, customer satisfaction and employee morale. They found that the most used NFPMs are related to efficiency, utilisation and product quality.

The New York Times (1998) reported that the Ford Motor Company had declared that it was going to recompense its executives on the NFPMs of customer satisfaction and operational measurements. Many academic studies have documented the use of NFPMs in different kinds of organisations and different countries such as the UK, the US, Japan, Germany, Canada and some Arabic countries.

2.2.4.1 The Use of NFPMs in Service Industries

The importance of the service sector has been increasing and making a growing contribution to Gross Domestic Product (GDP) and employment in most economies (Fitzgerald et al., 1991). The service sector is becoming increasingly important in such economies and therefore, there is a need for NFPMs. However, the literature shows that most studies of NFPMs are related to manufacturing with some studies including both manufacturing and services. Kald and Nilsson (1997) studied PM in Nordic organisations (industrial sector and service sector). They indicated that PMSs

are relatively well-developed, combining both FPMs and NFPMs. They mentioned that there is a strong association between measurements used and different planning routines, such as strategic planning and budget. Anderson et al. (1997) conducted a study on customer satisfaction, productivity and profitability and found positive connections between customer satisfaction and return on investment in Swedish manufacturing organisations, but weaker or negative connections in service organisations.

Fitzgerald et al. (1991) demonstrated that service organisations need a balanced range of PMs linked to the type of service, their competitive environment and their chosen strategy. They classified three different types of service: professional services, service shops and mass services. They also developed the six dimensions performance framework (financial and competitive performance, service quality and innovation, flexibility and resource utilisation).

Fitzgerald and Moon (1996) examined the PMSs in four successful UK service organisations. They developed a framework of analysis to use as a tool for comparing organisations. They concluded that there is no single set of PMs, no single basis for setting standards for those measurements and no universal reward mechanism that constitutes a perfect PMS. Evans et al. (1997) suggested different methods could be used to reduce costs in hospitals. They asserted the need to adopt multiple measurements such as the BSC approach in order to provide high quality services.

Srinivasan (1997) studied the relationship between FPMs and NFPMs in hotels. He found that customer satisfaction measurements are significantly associated with future FP as measured by revenues and profit. He suggested that NFPMs reflect future information not shown in the past financial measurements. Ballantine et al. (1998) presented two cases in the health services. They use the results and

determinants of Fitzgerald et al. (1991) for PM in service areas for improving the management of health services. Wright (1998) studied the important issues involved in identifying and setting appropriate measurements of operational performance in the service sector. Brown et al. (1999) described the importance of NFPMs for generating improvements in PM in a telephone call centre. The CIMA Handbook of MA contains some chapters on PM in the service sector (ed. Innes, 1998). All of these authors (such as Fitzgerald et al., 1991; Lynch and Cross, 1991; Brignall and Ballantine, 1996; and Kaplan and Norton, 1997) have emphasised the need to use multidimensional PM in the service sector in general.

2.2.4.2 The Use of NFPMs in the Banking Sector

A few studies are concerned with NFPMs in the banking sector. For example, Berry et al. (1993) discussed performance evaluation in UK bank lending decisions. They reported that although industrialists tend to emphasise the importance of NFPMs, bankers concentrate on the more traditional FPMs.

Ostinelly and Toscano (1994) studied the perceived empowerment of customer satisfaction improvement in quality management as an operational tool of control in three Italian banks. They found that the management control system was able to integrate FPMs and NFPMs concerning bank service quality. Hussain (2000) studied the role of MA in NFPMs and overall PM in Finnish, Swedish and Japanese Banks/Financial Institutions. He developed a comprehensive model including economic, normative, coercive and mimetic influences/pressures on NFPMs in the financial industry.

Alenizi (2001) examined the use of NFPMs in the Gulf Cooperation Council (GCC) in four service companies (one of them was a bank). He introduced evidence that there is an interaction between use of NFPMs, organisational conditions (management characteristics, organisational structure and accountants' attitude and

background) and environmental conditions which influences the company's use of NFPMs. He also suggested that NFPMs can have a positive impact on long-term profitability.

Hussain and Hoque (2002) examined what factors affected the design and use of NFPMS in four Japanese banks. They found that several institutional forces were influential in the banks' implementation of a particular PMS. Of these forces, economic constraints appeared to be the most forceful factor, followed by the central bank's regulatory control, accounting standards/financial legislation, management's strategic focus, bank size, competition and an organisational tendency to copy the best practices from others.

Hussain and Gunasekaran (2002) studied the role of MA in non-financial performance (NFP) among Japanese financial institutions. They reported that MA has played a role in measuring performance in different banks in Japan, but its role in measuring NFP has been less significant than its role in FP.

2.3 NON-FINANCIAL PERFORMANCE DIMENSIONS

Considerable attention has been paid by many MA researchers to the importance of MA in driving the performance of organisations towards their strategic goals and objectives (Kaplan and Norton 1996 and 2001; Hussain and Gunasekaran, 2002). Organisations need a PMS to meet these objectives. Once an organisation has the ability to assess its performance and measure it precisely it has the ability to guide and enhance its improvement (Geanuracos and Meiklejohn, 1993). PM is a fundamental factor in ensuring the successful implementation of a company's strategy and attainment of its objectives (Fitzgerald et al., 1991).

Many recent MA researchers have found traditional FPMs such as return on investment or net earnings to be insufficient in the uncertain, complex and competitive economic environment of today (Kaplan, 1983, 1984; Bromwich and Bhimani, 1989;

Nanni et al., 1990; Govindarajan and Shank, 1992). Several researchers have suggested various types of multidimensional PMs which are combined in complementary ways with FPMs to be used as a guide for managing and assessing an organisation's activities inside the new dynamic environment to create a thriving organisation (Johnson and Kaplan, 1987; Fitzgerald et al., 1991; Lynch and Cross, 1991; Eccles and Pyburn, 1992; Govindarajan and Shank, 1992; Kaplan and Norton 1992, 1996 and 2001; CIMA, 1993; Euske et al., 1993; Gregory, 1993; Otley, 1999; Hussain and Gunasekaran, 2002).

The BSC focuses on specific NFPMs: internal business perspective, innovation and learning perspective, customer perspective and financial perspective (Kaplan and Norton 1992). Kaplan and Norton (1996) stated that "the Scorecard was not a replacement for financial measures, it was their complement." Dixon et al. (1990) in their Performance Measurement Questionnaire suggested that measurements of performance should directly support corporate strategic goals (which typically are non-financial). Although they suggest that NFPMs are the more important measurements of performance required for attaining company goals, they do not completely abandon FPMs. The determinants category of the Results and Determinants framework focuses on quality, flexibility, resource utilisation and innovation as critical dimensions which are required to be measured (Fitzgerald et al., 1991). The Performance Pyramid Model presents quality, delivery, process time, cost, customer satisfaction, flexibility and productivity as dimensions which need to be measured (Lynch and Cross, 1991). Manufacturers in Japan, Europe and the USA have reported five broad categories of PMs namely quality, delivery, process time, flexibility and cost for use by line managers (Maskell, 1989b; CIMA, 1993).

The Netherlands Association for Logistics Management (NEVEM, 1989) has suggested a set of NFPMs to be reported to the Board of Directors such as delivery

time, reliability and lead times. CIMA (1993) has identified various dimensions of NFPMs of manufacturing activities which should be evaluated including flexibility, quality issues, value to the customer and delivery standards. It suggests that each company must determine the most useful measurements to suit its needs. Smith (1990) mentioned a number of NFPMs in relation to quality, customer satisfaction, human resource satisfaction, delivery and others. She also mentioned some related measurements that have been used in companies such as defect rates, unscheduled machine breaks, set-up time, lead and throughput time, productivity, stock turnover, customer complaints, warranty claims, staff turnover, market share and supplier reliability. Merchant and Riccaboni (1990) found that the Fiat Group used many types of NFPMs in their operating entities, such as sales increases in specific market segments; completion of an acquisition; divestment or reorganisation; improvements in quality, asset management, or customer service and the introduction of a new product or process. Hussain and Gunasekaran (2002) found that Japanese banks used NFPMs such as quality, customer satisfaction and social responsibility but did not put the same degree of emphasis on NFPMs as FPMs. Richman et al. (2006) mentioned that, in a new PMS for commercial Airlines, performance is viewed from the financial perspective, however, there are other dimensions of performance affecting the long-term health and functioning of an organisation and impact on the financial results. They suggest three dimensions of performance which are FP, customer satisfaction and operational efficiency.

The PM literature identifies the common measurements of NFP in the following categories (Hoque, 2001):

- a) Efficiency Measurements are used for tracking intra-organisational indicators to determine whether the business units are effectively using internal processes and resources with measurements such as direct materials

efficiency variances, effect yields, manufacturing lead times, head counts and inventory levels.

- b) Innovation Measurements are used to assess an organisation's innovative capacity to measure such things as the number of new patents, the number of new product launches, the process time to market and the time taken to develop 'next generation' products.
- c) Learning and Growth Measurements are used to assess organisational learning capacity to enhance organisational long-term growth with measures of employee intellectual capacity, employee training and development and employee turnover.
- d) Customer Measurements are used to trace performance leading to relationships with customers that encompass such measures as market share, customer response time, on time performance, number of customer complaints, number of warranty claims, survey of customer satisfaction, product reliability, share of key accounts purchases, ranking of key accounts and number of cooperative engineering efforts.

Some of these dimensions will be discussed in detail in the following subsections.

2.3.1 Quality

In recent years, the concept of quality has received considerable attention as business organisations around the world have sought to remain competitive in both local and international markets. Quality has been defined in many ways: "Quality is simply meeting the customer requirements"(Oakland, 1995, p. 3); "Fitness for purpose or use" (Juran, 1988, p. 3.6); "Quality should be aimed at the needs of the customer, present and future" (Deming, 1982, p. 5); "The total composite product and service characteristics of marketing, engineering, manufacture and maintenance through which the product and service in use will meet the expectation by the customer" (Feigenbaum, 1991, p. 7); "Conformance to requirements" (Crosby, 1979, p. 9); "Quality is the customer's judgement about a product's overall excellence or superiority" (Ziethaml, 1988, p. 3); "Quality is a global judgement of a supplier's

current offering” (Anderson et al., 1994, p. 54). From these definitions, quality is the degree to which a product or a service satisfies customer wants or the degree to which a product conforms to design specifications and engineering requirements. Quality is a determinant of customer satisfaction.

Quality of product or service should have two primary attributes: 1) Fitness for use, that is whether a product or service has the ability to do what it is supposed to do and it has features that meet customers’ needs and expectations. 2) Reliability which is related to whether the product or service is free from deficiencies (Anderson et al., 1994). The benefits of increased quality of the service process are the improvement of the organisations’ ability to attract new customers and increasing the retention rate among current customers (Bearden et al., 1998; Marr and Neely, 2004). Fitzgerald et al. (1991) reported that quality can be measured over a range of twelve factors or characteristics of service quality and service quality measurements such as reliability, responsiveness, appearance, availability, comfort, friendliness, competence and courtesy. Panessi (1989) suggested a list of measurements of quality which are suitable for a company competing on quality, such as rejection rates, the sequence of production and number of engineering changes. Smith (1990) also mentioned a number of NFPMs that relate to quality such as productivity, stock turnover, defect rates and warranty claims.

One important approach to quality is TQM which is considered to be one of the most important elements of AMPs. TQM is defined by Ittner and Larcker (1995, p 3)

as:

“Total Quality Management is an organisation-wide philosophy and problem-solving methodology that focuses on systematically and continuously improving the quality of products, processes, and services. Key elements of TQM include a strong customer focus, extensive employee participation and development, a well-defined and well-executed approach to process management, and a strong emphasis on design quality.”

TQM has been used in markets that are distinguished by improved quality and service characteristics. It focuses on cost of quality which is defined as “costs incurred to ensure that quality standards are met or because quality standards are not met” (Albright and Roth, 1992, p. 18). The cost of quality is one of the key success factors for enterprises. The cost of quality has four categories. Firstly, the internal failure costs occur when products, components and materials fail to meet quality requirements such as the cost of scrap, rework and material review. Secondly, the external failure costs occur when a product does not perform satisfactorily after the transfer of ownership to the customer including repairs, complaints, rejected and returned items and warranty claims. Thirdly, the appraisal costs arise from exercising control such as inspection and testing of incoming material. Finally, the prevention costs are associated with the design, implementation and maintenance of the quality system including quality engineering, design and development of equipment, quality training and quality planning (Oakland, 1995; Hoque, 2001).

Chenhall (1997) found that the connection between TQM and performance was stronger where manufacturing PMs were used as part of managerial evaluation. He also reported that lack of attention to developing manufacturing PMs may be one cause of failure for some TQM initiatives. In addition, some authors suggested that traditional FPMs are not suitable for TQM settings which require more precise measurement to ensure that quality of process is in control and can be continuously improved (Kaplan, 1983; Drucker, 1990; Hall, 1990; Chenhall, 1997). Some authors reported that the improvement initiatives, such as TQM had stimulated the PMS to incorporate NFPMs (Fisher, 1992; Brancato, 1995; Itter and Larcker, 1998b; Neely, 1999; Vaivio, 1999). Many studies have mentioned the relationship between TQM and NFPMs (Johnson, 1992; Chenhall, 1993; Perera et al., 1997; Brignall et al., 1999).

2.3.2 Customer Satisfaction

Customers are the main players in a business. Keeping customers satisfied is one of the difficult tasks facing the organisation and it is the best defence against competition. Customers rely on their experience of a product and/or a service to make their judgements on satisfaction using an integrated system of quality and price. Some scholars define customer satisfaction as an evaluation of product or service in terms of whether that product or service has met customer needs and expectations (Marr and Neely, 2004, p.7). Others confirm this view by defining satisfaction as the result of a customer's assessment of a service based on a comparison of their perception of service delivery with their prior expectations (Marr and Neely, 2004, p.7). Customer satisfaction is also defined from each transaction "Viewed as a post-choice evaluative judgment of a specific occasion" (Anderson, 1994, p. 54). Customer satisfaction can also be defined from a cumulative perspective as "An overall evaluation based on total purchase and consumption experience with a good or service over time" (Anderson, 1994, p. 54). Fornell (1992) and Anderson et al. (1994, 1997) mentioned some benefits of high customer satisfaction for the organisation including greater loyalty from current customers, secure future revenues, reduced price elasticity, insulation of current customers from competitive efforts, lower costs of attracting new customers and an enhanced reputation for the organisation.

The growing literature on quality and customer satisfaction has pointed out that quality has a positive impact on customer satisfaction and, in turn, profitability (Fornell, 1992; Rust and Anthony, 1993; Anderson, 1994). That is, customer satisfaction has a close relationship with quality. McDougall and Levesque (2000), Johnson et al. (2001) and Eskidsen et al. (2004) concluded in their studies that the overall effects of the drivers of customer satisfaction and loyalty are different across

industries. They also reported that the overall effect of service quality on customer satisfaction and loyalty is dependent on the type of industry. In situations where there is a large element of personal interaction between customer and provider, service quality is likely to be more important than in situations where there is almost no element of personal interaction between customer and provider. However, there are some differences between customer satisfaction and quality. First, customer satisfaction relies on past, current and future expected experience but, on the other hand, quality relies solely on the current perception of a product and/or a service. Second, customers require experience with a product to decide how satisfied they are with it. Quality on the other hand, can be perceived without actual consumption experience. Third, customer satisfaction is dependent on value relative to costs incurred. Hence customer satisfaction is dependent on price, while quality is not generally dependent on price (Anderson et al., 1994).

The strong Japanese focus on quality as a competitive factor has led the whole world to focus on customer satisfaction (Rolstadas, 1998). Neely et al. (1995, p. 85) stated that “with the advent of total quality management the emphasis has shifted away from ‘conformance to specification’ and towards customer satisfaction”. The quality management literature maintains that TQM requires greater emphasis on customers’ requirements and customers’ satisfaction with the organisation’s products or services, leading to greater emphasis on NFPMs, such as complaints and satisfaction retention (Ittner and Larcker, 1998a). Anderson et al. (1994) found a number of organisations actively using some form of customer satisfaction measurements in developing, monitoring and evaluating product and service offering, as well as for evaluating, motivating and compensating employees.

Some authors have claimed that FPMs which provide short-term indications cannot provide an appropriate measurement for assessing and evaluating quality as

well as customer satisfaction. In contrast NFPMs can assess and evaluate customer satisfaction (Anderson et al., 1994). Many empirical studies used customer satisfaction as one indicator of the NFPMs with other organisational aspects, such as Ittner and Larcker's (1998a). They studied whether NFPMs are leading indicators of companies' FP using customer satisfaction. Banker et al. (2000) provided empirical evidence on the behaviour of NFPMs and their impact on company performance using customer satisfaction. They found that NFPMs (such as customer satisfaction) are significantly associated with future FP. Moreover, both NFP and FP improves following the implementation of incentive plans. Lynch and Cross (1991) in their framework report that high quality products or services and regular on-time delivery lead to customer satisfaction. Hussain and Gunasekaran (2002) found that the most important objective of NFPMs in Japanese banks was customer satisfaction. Many other empirical studies used customer satisfaction measurements as the only indicator of NFPMs (Ittner et al., 1997; Srinivasan, 1997).

2.3.3 Delivery (On Time Service)

On-time delivery is seen as extremely important especially in competitive environments where time is vital (Geanuracos and Merklejohn, 1993; Neely, 1999). Mather (1989) suggested a measurement of delivery as the time a company needs to process its work, compared to the time that elapses between a customer placing an order and receiving the goods. It has the advantage of reflecting the responsiveness of the organisation compared to what the market required from it. Fitzgerald and Moon (1996) indicated that delivery is a one of the key success factors for organisations.

Lynch and Cross (1991) and Cross and Lynch (1992) used delivery as an external measurement and cycle time as an internal measurement of performance at the department and work-centre level in their framework. Womack et al. (1990) used

some measures of delivery when they compared Japanese, American and European companies' ability to introduce new automobile models. They discovered that Japanese companies were presenting new models every four years on average, while American and European companies were offering new models between eight to ten years on average. The time to market or the average period for a new model or product is an important NFPM in assessing and evaluating a company's success. Clark and Fujimoto (1989) also used time to market as a major measurement of performance when comparing Japanese, American and European companies' ability to introduce new products. They also used other related measurements, such as number of products on offer at any one time, the average product life and the ratio of lead time to market to product life. Delivery measurements are considered to be important NFPMs in assessing and evaluating an organisation's success, such as time to market, the average period for getting a new product or new model to the market and the period for delivering sales or presenting services to customers (CIMA, 1993). Hussain and Gunasekaran (2002) found that service on time was the third most important objective of NFPMs in Japanese banks.

2.3.4 Human Resources

Human resources are considered to be one of the most important success factors in PM determinants. Guzzo et al. (1985) and Bartel (1994) reported that training programmes and goal setting had a positive effect on human resource productivity (which is a non-financial measurement). They suggested that a company should let human resources contribute to developing any new management strategy because they thought that this would encourage implementation to be successful. Similarly, Barden's study (2003/04) found that successful PM lets front-line staff identify the measures because they know the best ways to improve processes and the most important things to be measured.

Kaplan and Norton (1997) discovered a series of cause and effect relationships across the four BSC perspectives. Training and improving employees' skills -the learning and growth perspective- would affect the internal and business processes perspective to achieve short cycle time and high-quality which could lead to a high degree of customer loyalty and on-time delivery -the customer perspective- which would, in turn, affect FP such as return-on-capital employed. Nilsson and Rapp (1999) discovered that company employees changed their behaviour from comparing and analysing consequences to asking about measurements and strategies they should be following. Neely et al. (2002) paid particular attention to human resources as a dimension of performance by suggesting in their Performance Prism that an organisation should assess its human resource capabilities as a way to control the results related to its stakeholders.

2.3.5 Flexibility

Flexibility is a concept which has been much explored in the manufacturing literature, particularly with the advent of flexible manufacturing systems and Just-In-Time, which are designed to enrich types of operational flexibility. Flexibility is the ability to change the product mix quickly, reduce production lead times and introduce products more rapidly and cheaply (Macbeth and Neil, 1991). Flexibility is an important element of NFPMs which enhance service within the current competitive environment (Neely, 1999). Fitzgerald et al. (1991) included flexibility as one of the determinants in their Results and Determinants Model. They divided the flexibility determinant in their framework into volume flexibility, delivery speed flexibility and specification flexibility measurements. Lynch and Cross (1991) and Cross and Lynch (1992) also put flexibility at the heart of their framework at the level of the business operating system equivalent to customer satisfaction and productivity, as it defines how responsive the operating system is. Many Japanese

manufacturers have considered flexibility as their number one priority (Cross and Lynch, 1992).

2.3.6 Market Share

Market share refers to an organisation's proportion of sales in relation to its competitors in a particular market. The relevant literature suggested that maximisation of an organisation's market share leads to profitability (Buzzell et al., 1975; Buzzell and Gale, 1987). Henderson (1979) stated that maximisation of an organisation's market share leads to improving a country's economy in terms of productive efficiency. The belief in the maximisation of market share encouraged the majority of leading US organisations to employ some form of market share strategy in order to generate greater profitability (Haspeslagh, 1982). MacArthur (1996) reported that to be world-class competitors, organisations need PMs that count. He mentioned that managers must use meaningful PMs about each process and its output to support decision making. Hoque and James (2000) reported that organisations which put greater weight on using the BSC model, have a stronger market share. Conversely, they found some support for the view that organisations with a weak market share put greater weight on traditional FPMs. The effect of market share on organisations' use of the BSC may be because today's competitive environment demands greater communication across all organisational areas with the purpose of maintaining awareness of market developments (Kaplan and Norton, 1996; Libby and Waterhouse, 1996). Merchant (1984) proposed that there is a greater need for increased communication in organisations with a strong market share.

2.4 FINANCIAL AND NON-FINANCIAL PERFORMANCE MEASUREMENT MODELS

Traditional FPMs have been criticised for encouraging short-termism (Banks and Wheelwright, 1979; Hayes and Garvin, 1982; Kanji, 2002), lacking strategic focus (Skinner, 1974; Kanji, 2002) and failing to provide data on quality, responsiveness and flexibility (Skinner, 1974; Kagioglou et al., 2001; Kanji, 2002), encouraging local optimisation (Hall, 1983; Fry and Cox, 1989), encouraging minimisation of variance rather than continuous improvement (Johnson and Kaplan, 1987; Lynch and Cross, 1991; Bourne et al., 2000) and not being externally focused (Kaplan and Norton, 1992). It was suggested that, many PMSs in the UK and USA were being inappropriately used to manage business enterprises (Hayes and Abernathy, 1980; Bourne et al., 2000).

In an endeavour to surmount these problems and difficulties associated with traditional FPMs, many PM models and techniques have been developed to encourage a more balanced view and to improve the overall performance of a company. For example, Keegan et al. (1989) suggested a balance between internal and external measurements and between FPMs and NFPMs. Judso (1990) and Lynch and Cross (1991) depicted a pyramid of measurements which integrated performance through the hierarchy of the organisation; Fitzgerald et al. (1991) discriminated between the results and determinants and Kaplan and Norton (1992) discriminated between the four perspectives of their BSC. Dixon et al. (1990), Bititci et al. (1997) and Nanni et al. (1992) proposed the use of integrated PMSs. Ballantine et al. (1998) focused on the importance of providing a balanced performance evaluation system that avoided the dominance of a specific stakeholder over others, by realising a balance between various performance dimensions. Bititci et al. (2000) designed the Dynamic Performance Measurement model and Neely and Adams (2000, 2001)

introduced the Performance Prism which is based on interconnected perspectives of measurement, illustrated by the facets of a prism.

All these models and other contributions by Maskell (1989a), Brown (1996) and Ghalayini et al. (1997), are multi-dimensional, focusing on both financial and non-financial information, in an endeavour to remedy the need for balance. They are designed to provide a balance by including measurements of external as well as internal performance and with measurements which are designed to give indications of the future performance as well as what has been achieved in the past (Bourne et al., 2000). For example, Kald and Nilsson (2000, p. 114), stated:

“In our opinion there is considerable evidence that companies need some form of overall and integrated solution. Such a model should permit evaluation and analysis of both present and future strategies. It should also have both a vertical and horizontal dimension and in addition consider the interests of all stakeholders in the company-both providers of capital and operating personnel.”

A lot of models exist in the domain of strategic performance measurement systems as mentioned above. Some of these well-known models are discussed in more detail in the next subsections namely: the Balanced Scorecard Model (BSC), the Performance Pyramid Model (PP), the Performance Prism Model (PPM) and the Results and Determinants Model (RDM).

2.4.1 The Balanced Scorecard Model (BSC)

The BSC Model was developed at Harvard Business School by Kaplan and Norton in 1992. Since then, it has become a model for many of the reporting systems that include NFPMs. It supplemented traditional FPMs with criteria that measured performance from three different additional perspectives (Kaplan and Norton, 1992, 1993 and 1996; Kagioglou et al., 2001), each of which reflected an important dimension of the company's business and evaluated whether a business was moving towards its strategic goals by a causal relationship between results and determinants.

The four perspectives used in the BSC model are: the financial perspective which shows whether strategy implementation leads to financial success. The customer perspective reflects the strategic goals in relation to the customers and market segment in which a company competes. The internal business process perspective identifies and defines the processes within a company that are most important for achieving its financial targets and the goals set for customer objectives. Finally, the learning and innovation and growth perspective depicts the infrastructure required to achieve the objectives defined in the financial, customer and internal business perspectives.

This balance was recognised between inputs and outputs, quantitative and qualitative measurements and operational and strategic dimensions. The BSC provides managers with a comprehensive model which helps them to translate their company's strategies and missions into a coherent set of PMs and specific goals for each of the perspectives (Kaplan and Norton, 1993, 2000, 2001 and 2004).

The BSC recognises that the FPMs are lagging indicators, and therefore, are the result of the other three leading indicators. In other words the leading indicators treat issues that will eventually impact on the FP, but significantly provide the information before the issues have had time to have any effect (Kagioglou et al., 2001). Moreover, while traditional FPMs reveal what happened over the last period without indicating how managers can improve performance in the next, the BSC functions as the cornerstone of a company's current and future success (Kaplan and Norton, 1993). Figure 2-1 shows the BSC as presented by Kaplan and Norton (1992, 1993 and 1996).

Advocates of the BSC have stated that it presents a useful means for translating an organisation's vision and strategy into a tool which communicates strategic intent and motivates performance to achieve established goals (Ittner and Larcker, 1998b).

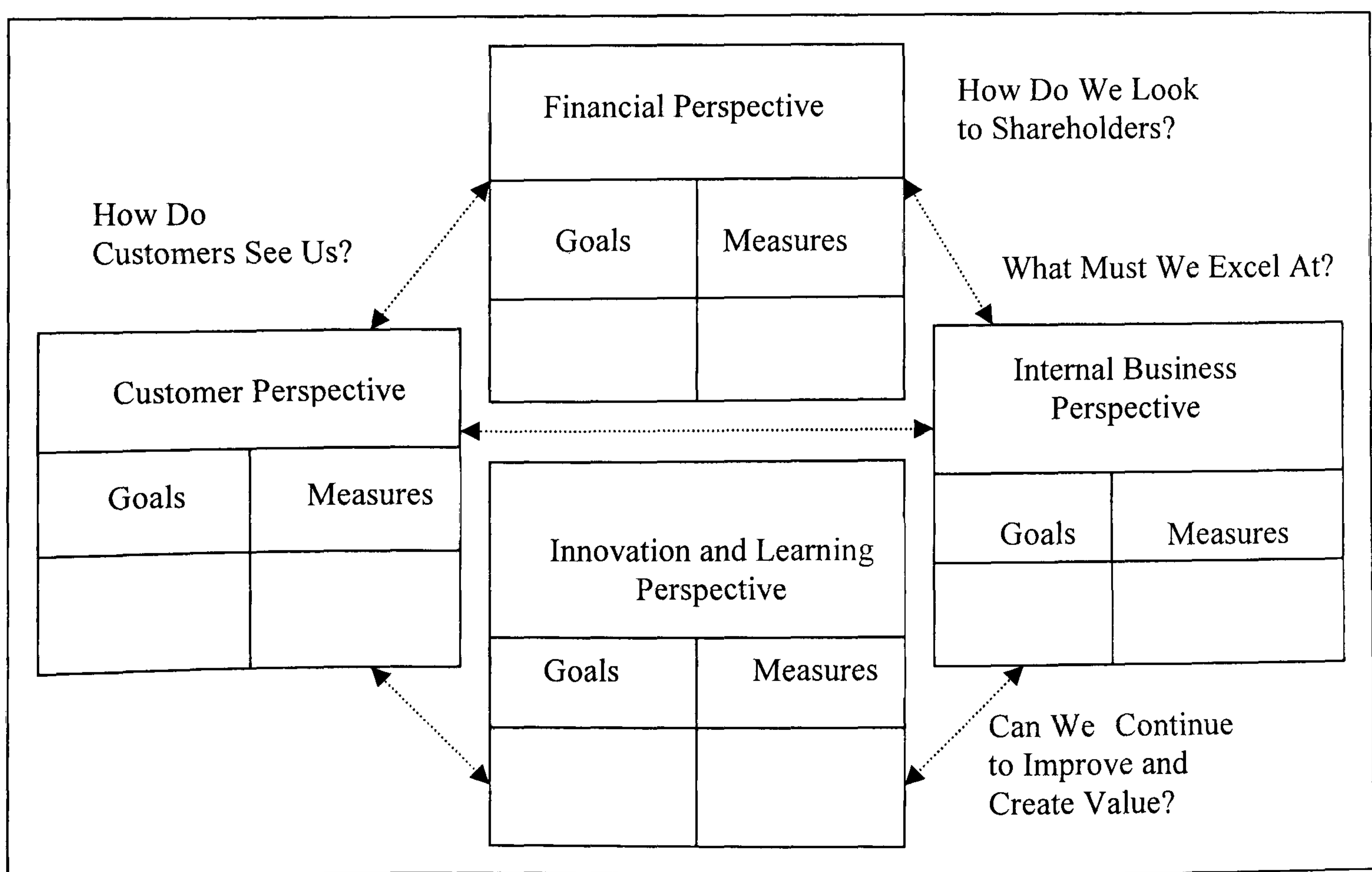
However, empirical findings reveal that the identified goals may not correspond to a company's mission and values (Dinesh and Palmer, 1998; Lipe and Salterio, 2000). In 2001, a survey suggested that the BSC has a utilisation rate of 44% worldwide: 57% in the UK, 46% in the US and 26% in Germany and Austria (Martinez, 2007). Despite implementation of the BSC approach, a survey (by consulting firm Towers Perrin) stated that, the adopters put the majority of weight on FPMs (56%), followed by customer measurements (19%), internal process measurements (12%), innovation and learning measurements (5%). Also, Speckbacher et al. (2003) and Marr et al. (2004) investigated the use of the BSC in Europe and the U.S.A.; they found that many companies that implemented the BSC used only a limited or incomplete version of it and about half of them used the cause-and-effect chains. Moreover, Norreklit (2000) argues that the relationships in the BSC are logical rather than causal.

Although Kaplan and Norton (1996) state that the BSC is not for use in defining compensation, 70% of respondents based compensation on the BSC and only 17% did not use it for compensation. Kaplan and Norton (1996) report that the BSC has a number of mechanisms for linking long-term strategic objectives with short-term objectives which request managers to communicate the organisation's strategy throughout the organisation to ensure employees understand long-term strategy, the relations between various strategic objectives and the association between the employees' actions and the chosen strategic goals. Moreover, the BSC can help organisations to allocate resources, set priorities and provide strategic feedback as well as promote learning through the monitoring of short-term results. However, Ittner et al.(1997) studied a BSC compensation system in retail bank branch. They reported that there was no evidence that the BSC enhanced managers' understanding

of business goals, plans or relations between the managers' job and objectives of their business.

Some EVA proponents have contended that a BSC deters performance because there is no single measurement of performance on which managers can concentrate their exertions to make improvements (Journal of Applied Corporate Finance, 1997). Its implementation could also be fairly costly (Ittner and Larcker, 1998b). It is designed primarily for senior managers to provide them with an overall view of performance and it is not intended for application at the factory level. The BSC attempts to integrate four important performance perspectives into one simple and easy to use management report (Ghalayini and Noble, 1996). It has also been criticised for not being comprehensive enough; it does not consider the interests of other key stakeholders such as suppliers, community and regulators (Neely et al., 1995) and its cause and effect relationships are not clear for its users (Malmi, 2001; Nørreklit, 2000 and 2003; Johanson, 2005).

Figure 2-1: The Balanced Scorecard



Source: Kaplan and Norton (1992, p.72)

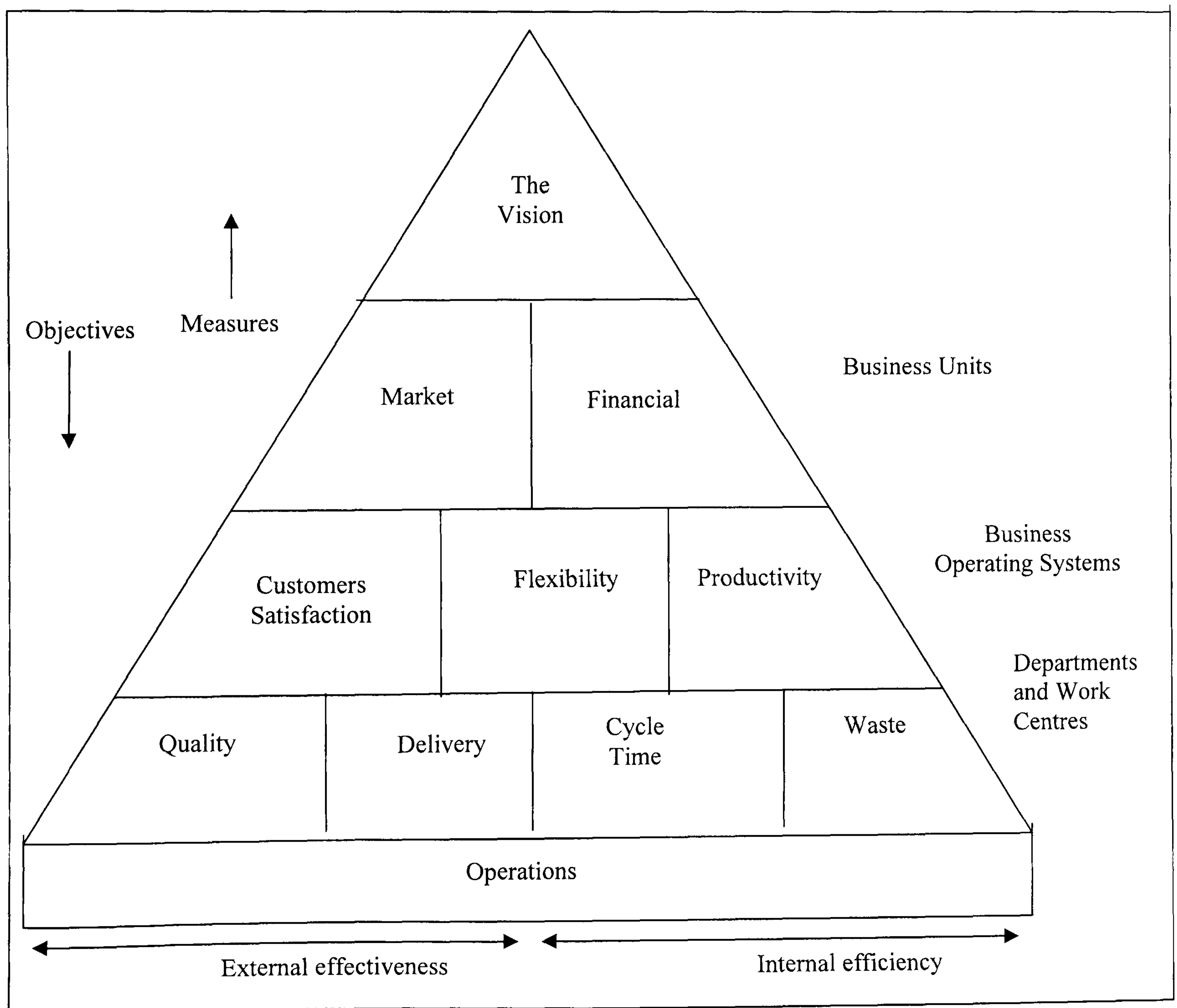
2.4.2 The Performance Pyramid Model (PP)

Judson (1990) developed the Performance Pyramid and then it was improved by Lynch and Cross (1991). The PP connects an organisation's strategy with its day-to-day operations by translating objectives to operational levels in a top-down direction and measuring the organisational performance in the opposite bottom-up direction. The model is illustrated in Figure 2-2 and consists of a four level pyramid of objectives and measurements addressing both external effectiveness and internal efficiency within an organisation. At the top of the pyramid is the organisational vision. At this level management designates a corporate portfolio role to each business unit and allocates resources to support them. At the second level, objectives for each business unit are defined in market and financial terms. At the third level, more tangible operating objectives and priorities can be defined for each business operating system in terms of customer satisfaction, flexibility and productivity. The operating system links department performance with organisation strategy and performance by measuring the efficiency of single departments and the effectiveness of the whole operating system. At the fourth level, the department level, customer satisfaction, flexibility and productivity are represented by specific operational criteria: quality, delivery, cycle time and waste.

The PP has the ability to describe how objectives are communicated down to the operational levels and how measurements can be formed and can communicate the degree of efficiency back to the upper levels in an organisation. These operational measurements are the keys to achieving better results and ensuring successful implementation of an organisation's strategy (Lynch and Cross, 1991; Ghalayini and Noble, 1996). The notion of the PP was mentioned in other studies. Nanni et al. (1990) suggested that a PMS must embody congruence between the organisation strategies and PMs, NFPMs and every management level should have different PMs.

The main strength of the (PP) model is its attempt to integrate corporate objectives with operational performance indicators. However, it does not provide any mechanism to identify key performance indicators for quality, cycle time, waste and delivery and does not explicitly integrate the concept of continuous improvement (Ghalayini and Noble, 1996). Figure 2-2 shows the Performance Pyramid as presented by Lynch and Cross (1991).

Figure 2-2: The Performance Pyramid



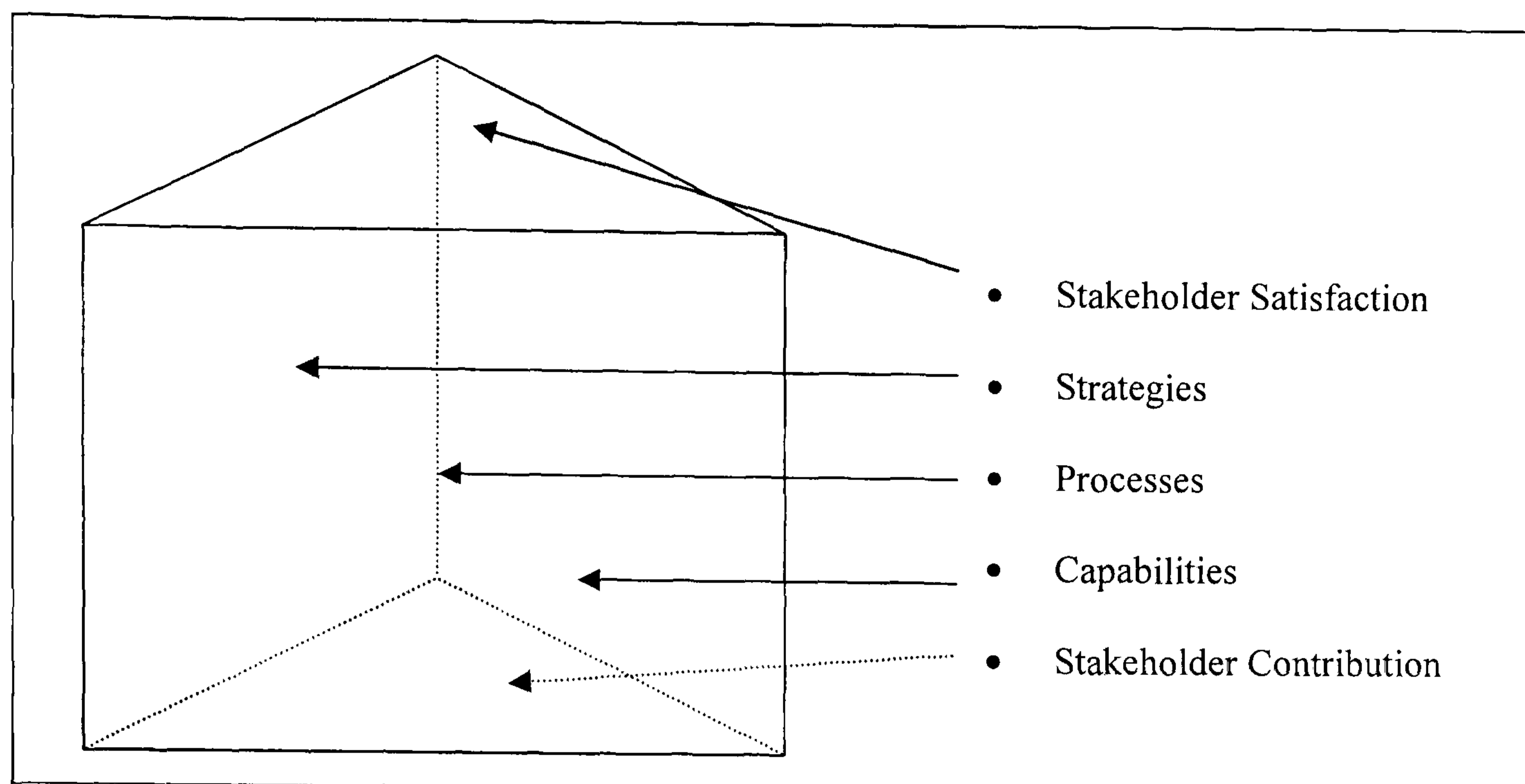
Source: Lynch and Cross (1991)

2.4.3 The Performance Prism Model

The Performance Prism was developed by Neely and Adams (2000), as a PM framework that addresses the demands for business PM within the new competitive environment of the 21st century and to overcome the shortcomings of other frameworks especially the BSC model. Figure 2-3 shows that it is a three-dimensional model which is based on the interconnected perspectives of measurement, illustrated by the five facets of a prism. The top of the Prism is stakeholder satisfaction, the bottom is stakeholder contribution and the three sides are strategies, processes and capabilities. Neely and Adams (2000) suggested that organisations have to start with stakeholders' requirements and then organisations should formulate the strategies to help them to achieve these requirements and to deliver value to their multiple stakeholders. After that, organisations have to define the processes to allow the strategies to be executed and the required capabilities to operate these processes both now and in the future.

The final perspective is stakeholder contribution, as organisations address what stakeholders want, what stakeholders can provide to their organisation and what the organisation needs from its stakeholders to develop its capabilities. However, it emphasises that the PM should be derived not only from customer and shareholder perspectives but also from other stakeholders such as employees, suppliers, regulators and communities. That is, identifying stakeholders' requirements leads to strategic direction, which in turn leads to the development of solutions that satisfy stakeholders. Delivering satisfaction depends on capabilities, which in turn depend on stakeholders' contributions. One advantage of this model is that it links external performance expected by stakeholders and internal performance of the organisation. Figure 2-3 shows the Performance Prism as presented by Neely and Adams (2001).

Figure 2-3: The Performance Prism Model



Source: Neely and Adams (2001, P. 8)

2.4.4 The Results and Determinants Model (RDM)

The Results and Determinants model was developed by Fitzgerald et al. (1991), following their study of PM in the service sector. They built it based on the interaction of three contingent variables which are the competitive environment that an organisation faces, organisation strategy and the type of service organisation. They classified service organisations into three service archetypes: professional services, service shops and mass services. Professional services deal with relatively low numbers of customers per day, while mass services have many customers with service shops falling between the two (Fitzgerald et al., 1991). They also defined five characteristics that services have in common and which distinguish them from goods. These are, in most services, the customer is present during the delivery of the service, the intangible aspects of the service which are difficult to measure, services are not homogeneous, the production and consumption of the service may be simultaneous and the service cannot be stored (perishability) (Fitzgerald et al., 1991).

Taking these characteristics into consideration, the model includes six dimensions of PM in any organisation, financial and non-financial, internal and

external which are divided into two basic categories: results and determinants. The results category includes two dimensions (competitiveness measurements, such as market share or sales growth rate and financial measurements, such as cost, profit and rate of return) which reflect the success of the chosen strategy. The determinants category consists of the other four non-financial dimensions which are the determinants of that competitive success (quality, flexibility, resource utilisation and innovation). Table 2-1 shows the Results and Determinants Model as presented by Fitzgerald et al. (1991).

Table 2-1: The Results and Determinants Model

	Dimensions of Performance	Types of Measures
R E S U L T S	Competitiveness	Relative Market and Position Sales growth Measures of the Customer Base
	Financial Performance	Profitability Liquidity Capital Structure Market Ratios
D E T E R M I N A N T S	Quality of Service	Reliability Responsiveness Aesthetics/ Appearance Cleanliness/ Tidiness Comfort Friendliness Communication Courtesy Competence Access Availability Security
	Flexibility	Volume Flexibility Delivery Speed Flexibility Specification Flexibility
	Resource Utilisation	Productivity Efficiency
	Innovation	Performance of the Innovation Process Performance of Individual Innovations

Source: Fitzgerald et al. (1991, p. 8).

2.5 DESIGN OF PERFORMANCE MEASUREMENT SYSTEMS

Managers depend on an effective PMS to help them improve results. The first condition to improve and ultimately achieve competitive advantage is to develop and implement a well-designed system for PM.

The role of PM is not only to monitor individuals' performance and the organisation's progress toward accomplishing desired goals (accountability purposes), but also to aid managers in the monitoring of the organisation's strategic position (Neely et al., 1997; Hoque, 2001; Kanji, 2002). Through PMs, which are intended to drive future resource allocation decisions, the organisation communicates how it wishes individuals to behave and how this behaviour will be appraised (Neely et al. 1997; Hoque, 2001). It is important to design a PMS where measurements are used as a management and motivational tool. With the purpose of achieving this role, a PMS should be presented in a way that makes clear to each individual how he or she can contribute to the overall strategy. PM can make individuals aware of what is significant to the organisation's success and the areas where the organisation needs to improve.

Barden (2004) found that a key factor in determining the success of an organisation is the design of the PMS which should be by a group comprising of both senior managers and front-line staff. Additionally, PM can motivate success by encouraging and rewarding the correct attitudes and behaviours and by making the degree of progress important. Nanni et al. (1992) proposed that organisations should increase the level of their PMSs. The degree of competency would depend upon the fit between the design of the PMS and the organisation's strategy.

Traditionally, a PMS based on FPMs does not match totally with the competencies and skills that organisations need for today's business environment. As mentioned earlier in section two, FPMs do not improve customer satisfaction,

quality, cycle time, responsiveness and employee motivation. Consequently, organisations need a (multi-dimensional) PMS that aligns the presentation of FPMs and NFPMs and provides the drivers of future performance (Neely et al., 1995, 1997; Bourne et al., 2000; Kanji, 2002). Inadequately designed PMs can result in dysfunctional behaviour. Therefore, designing a PMS involves a method of calculating performance - the formula, the purpose of the measurement, the frequency of measurement and the source of data which have to be considered. In addition, once the PMS has been designed it has to be implemented and be able to interact with a wider environment. The environment has two dimensions: one is the internal environment which is the organisation (organisational culture) and another is the external environment including the market where the organisation competes (Neely et al., 1997). This environment is dynamic and, therefore, the PMS should help to specify such changes and encourage the redesign of effective and efficient improvement strategies (Kanji, 2002; Bititic et al., 2004).

Various authors have suggested that a PMS should: provide performance from a multi-and interrelated perspective; be derived from strategy; be embedded in critical success factors; be clearly defined, valid, reliable and visible to all; enable comparisons to be made and progress to be monitored; link to the reward system and encourage appropriate behaviour and focus on improvement (Lynch and Cross, 1991; Dixon et al., 1990; Kaplan and Norton, 1992 and 1996). Neely et al. (1995) developed “the performance measure record sheet” model which can be used to design and audit PMs as well as to explore what constitutes a well-designed PMS. The model was designed upon recommendations made from the suggestions of some studies in the literature.

2.6 RECENT DEVELOPMENTS IN NFPM LITERATURE

The performance literature includes contributions from research disciplines such as MA, marketing research, operational research and strategic management. In the MA literature, from the 1990s, there are many studies on PM which focus on different angles of NFPMs such as the relationships with the management strategy and control, with the reward system and with profitability; in an uncertain environment; management information system; MAS; AMPs; organisational structure and culture; and intellectual capital. These different directions of the NFPM literature will be discussed in the following subsections.

2.6.1 Performance Measurement - Strategy and Control

Organisational strategy focuses on two interrelated aspects: its mission or goals and the way the organisation chooses to compete in its environment in order to accomplish its goals. According to Miles and Snow (1978 and 1994) there are four types of strategies: prospector, defender, analyser and reactor. Three of them, if successfully implemented, can lead to effective performance. These are: the prospector strategy which achieves competitive advantage through being first into new markets with new trends and innovations; the defender strategy, which achieves competitive advantage by becoming more efficient and remaining in traditional markets with existing products or services; and the analyser (or mixed) strategy which merges elements of the prospector and defender strategies.

Strategy researchers have proposed that control systems are used in different ways depending on the strategy of the organisation (Miles and Snow, 1978; Miller and Friesen, 1978; Porter, 1980; Simons, 1987). Control system also guide managers on the formulation and implementation of their objectives (Anthony, 1965; Simons, 1987). Management control systems need to be able to adapt to different strategies and cope with different degrees of uncertainty (Hoque, 2001). Brignall (1997) stated

that a PMS is influenced by the changes in the business mission and strategy. Although there is widespread recognition that PMSs can be used to focus activity (Erban, 1989; Fowler, 1990), the link between control and strategy is less explicit. Therefore, Otley (1980) and Simons (1987) proposed that accounting control systems should be designed specifically to suit the strategies of the organisation. Moreover, Ferreira and Otley (2004) introduced an extended model “the performance Management and Control framework” which included 12 areas (such as key success factors, key PMs, strategy and plans) to be taken into account in the analysis of a control system.

It has been recognised that effective PMSs provide instruments which can be used to influence behaviour and, thus affect the implementation of an organisation’s strategy successfully (Skinner, 1971; Kaplan, 1990; Hall et al., 1991; Neely et al., 1994; McAdam and Bailie, 2002). Indeed, in the business strategy field, PM is seen as an integral part of the strategic control cycle. Strategies, objectives and functions through the administrative hierarchy aim to ensure improvement in the performance of an organisation. Gosselin (2006) found an association between strategy and the types of measurements that are used by organisations and the adoption of innovative PM approaches.

Kaplan and Norton (1992), Neely et al. (1994) and others have argued that an organisation needs a balanced set of measurements covering the internal/ external and the financial/non-financial dimensions of performance. They placed much more importance on NFPMs and linked all relevant PMs to strategy, especially as non-financial measurements were considered as part of long-term strategies. Lynch and Cross (1991) proposed an integrated system (PP) in order to achieve strategic goals. They divided the organisation into levels, strategic and operational functions. They included in their model FPMs and NFPMs in terms of measuring performance of

these levels. Maskell (1989a), Bhimani (1993), Bromwich and Bhimani (1994) and Otley (1997) all suggested that NFPMs are the best way for organisations to achieve operational control (Abdel-Maksoud et al., 2005). Dixon et al. (1990) have developed a performance measurement questionnaire (PMQ), which they claim can be used to audit whether a firm's measurements match its strategy.

The traditional FPMs have been argued to be short-term and to provide little attention to the customer-focus. Therefore many authors have suggested the adoption of a customer-focus strategy including NFPMs (Fornell, 1992; Banker et al., 1993; Abernethy and Lillis, 1995). Abernethy and Lillis (1995) examined the link between one component of customer-focused manufacturing strategy, flexibility and the PMS; they found a negative relationship between the FPMs and flexible strategies. Ittner et al. (1997) reported that organisational strategy influences an organisation's desire to use a specific PMS.

2.6.2 Performance Measurement and Reward Scheme

Many companies set multiple objectives. Profitability is at the fore as an objective at the corporate level in all companies, though with various interpretations; share price growth, real return on equity, return on capital employed, bottom line profit and earnings per share. After profitability, the next most frequently mentioned group of objectives are those couched in marketing terms, generally sales volume growth and increased market share (Coates et al., 1995). Effective incentive reward schemes are likely to be one of the main mechanisms through which an organisation can provide strong motivation for managers and executives to achieve corporate objectives. Kaplan and Atkinson (1989) identified three aims of an incentive reward system: to attract and retain high-quality managers, to encourage profit-maximising decisions and to stimulate individuals to higher levels of performance.

The relationship between the PMS and organisation strategy is important to ensure that management incentives are aligned with a company's goals (Salter, 1973; Simons, 1987).

A large amount of literature has focused on the interrelation between PMSs and incentive reward systems (Birnberg et al., 1983; Merchant, 1985; Young et al., 1993; Atkinson, 1997; Gates, 1999; Malmi, 2001) with the aim being to increase the focus and understanding of the key strategic objectives (Franco-Santos et al., 2004). Before the 1990s, measuring and rewarding executives' performance were commonly based on FPMs such as net earnings or return on investment (Eccles, 1991; Ittner et al., 1997). These measurements have been criticized for encouraging management to over-emphasise short-term accounting returns and discourage the organisation's long-term key success factors (Kaplan and Norton, 1992 and 1996; Bushman et al., 1996; Kald and Nilsson, 2000). After the 1990s however, the use of non-financial measurements in performance evaluation has been on the increase in managerial PM and compensation. Such NFPMs include market share, efficiency/productivity, product quality, customer satisfaction and employee satisfaction or morale (Kaplan and Norton, 1996; Ittner et al., 1997; Ittner and Larcker, 1997 and 2002; Banker et al., 2000; Malmi, 2001; Johnston et al., 2002). The relationship between NFPMs and incentive reward systems has been studied by many researchers (Kaplan and Norton, 1996; Ittner et al., 1997; Banker, 2000). For example, Ittner et al. (1997, p. 251) stated that:

“We find that firms pursuing an innovation-oriented prospector strategy tend to place relatively greater weight on NFP in their annual bonus contract.... These results support the notion that firms attempt to link compensation policies to strategic objectives to ensure that management incentives and organisational goals are aligned.”

Srinivasan (1997) and Banker et al. (2000) reported that the perceived improvement of both NFP and FP was realised when organisations follow the implementation of an incentive reward system that contains NFPMs. The primary reason for the use of NFPMs is that these measurements are better indicators of future FP than accounting-based measurements. The Chrysler Company paid bonuses to its 200 top executives based on the achievement of quality and customer satisfaction targets in addition to measurements of profitability (Wall Street Journal, February 22, 1994, p. A3). William M. Mercer Inc. conducted a study of executive compensation practices at 1,400 organisations and found that 35% of them used customer satisfaction measurements in defining executive compensation and another 33% planned to do so (Journal of Accountancy, May 1993, pp. 17-18). Conversely, although there are calls for greater emphasis on NFPMs in internal PMSs (Kaplan and Norton, 1996), relatively little evidence exists on the impact of including NFPMs in performance evaluation and incentive compensation (Ittner and Larcker, 1998b). Kald and Nilsson (2000) reported that in Nordic organisations, PMs (financial and non-financial) did not play a large role in the determination of bonuses, but they still use subjective evaluation criteria to reward managers.

2.6.3 Performance Measurement and Profitability

The MA literature contends that, in the past decade, an increasing number of organisations have been using NFPMs, such as customer satisfaction and employee satisfaction, because of the managers' belief that these measurements affect economic performance and profitability (Ittner and Larcker, 2003). Generally this relationship between NFPMs and profitability is positive and statistically significant (Ittner and Larcker, 1998b). Ittner and Larcker (1998b), in their survey of vice presidents of quality for major US organisations, found that only 28% could relate their customer satisfaction measurements to accounting return and 27% to

shareholder return. A survey by Arthur Andersen & Co (1994) found that, there were two problems in implementation of customer satisfaction initiatives: 1) linking customer satisfaction and profitability and 2) understanding the point of diminishing returns for customer satisfaction. Anderson et al. (1994) in their study of the performance consequences of customer satisfaction in 77 Swedish organisations in the manufacturing sector found that customer satisfaction is positively connected with accounting return on investment.

Huselid (1995) conducted a study on the impact of human resource management practices in nearly one thousand US organisations and found that there is an economically and statistically significant impact on employee turnover and productivity and short-term and long term corporate FPMs. Anderson et al. (1997) found positive connections between customer satisfaction and return on investment in Swedish manufacturing organisations, but weaker or negative connections in service organisations. Foster and Gupta (1997) found positive, negative or insignificant relations between customer satisfaction measurements for individual customers of a wholesale beverage distributor and future customer profitability. Ittner and Larcker (1998b) contributed to the accounting literature by presenting evidence on the predictive ability and value relevance of NFPMs. They concluded that customer satisfaction measurements are leading indicators of customer purchase behaviour (retention, revenue and revenue growth), growth in the number of customers and accounting performance (business-unit revenue, profit margins and return on sales). Banker et al. (2000) also found in their study of 18 hotels that customer satisfaction measurements were positively associated with future accounting performance. Epstein et al. (2004) examined the implications of PMSs (which included FPMs and NFPMs at different levels in organisations) on economic performance. They found evidence that PMSs supported by strict control

mechanisms improve organisational profitability, while inclusive and balanced PMS with poor cascading and a lack of alignment to compensation do not.

2.6.4 Performance Measurement in an Uncertain Environment

Today's business environment is changing rapidly as result of competition, production technologies, deregulation, customer preferences, suppliers, industrial relations and economic environment and all this introduces uncertainty (Bourne et al., 2000). Uncertainty is defined as a company's inability to predict precisely the effects of these forces (Hoque, 2001). In order to survive in the changing business environment, management must adapt to this uncertainty by adopting flexible strategies, structures and systems (including PM). Fitzgerald et al. (1991) reported that the chosen PM of a company is influenced by the competitiveness in the environment for the reason that the environment determines the type of strategy. Hemmer (1996) mentioned that one explanation for changing MAS to incorporate NFPMs was the increase in foreign competition.

Lynch and Cross (1991) mentioned that organisations facing a high level of economic uncertainty are likely to use FPMs to a greater extent than NFPMs. Similarly, Hussain and Hoque (2002) concluded that in Japanese banks the uncertainty of economic conditions increased managers' attention to improving and measuring FP while they paid less attention to the improvement and measurement of NFP. Conversely, Chenhall and Morris (1986) and Chong and Chong (1997) confirmed in their studies that high levels of uncertainty drove managers to rely heavily on NFPMs.

Hoque (2001) suggested that in an uncertain environment, measuring performance will be better by using NFPMs because they will help management to consider the effects of uncertainty and act accordingly. Without NFPMs, an organisation may not gain a long-term competitive advantage (Govindarajan and

Shank, 1992; Kaplan and Norton, 1996; Perera et al., 1997; Ittner and Larcker, 1998b; Banker et al., 2000; Hoque and James, 2000). Kaplan and Norton (1996) proposed that under environmental uncertainty, an organisation must be able to anticipate customers' future needs and expectations and an organisation requires new capabilities for organisational success and managers must have the ability to understand their uncertain environments and to cope with varying degrees of uncertainty. Neely (1999) stated that organisations attempted to discriminate between themselves and their competitors by competing based on multi-dimensional measurements like quality, customer loyalty, employee satisfaction, delivery, flexibility and customisation.

2.6.5 Management Information System (MIS)

It is important to understand the relationship between the information system and PM and in the MA literature; this relationship has been frequently investigated (Johnson, 1975, 1983). Data collection and PM are fundamental activities in managing any system. A MIS provides information to decision makers who are then able to make decisions about the system being managed in order to drive performance over time toward the desired outcome. Brignall's study (1997) suggests the integration of cost system design in services with the PMS is part of a wider MIS (which also embrace non-financial information). Brignall (1997, p. 326) defines MIS as "a system that enables both internal and external information to be reported at operational, tactical and strategic level. MISs cover such dimensions as quality, flexibility and innovation, as well as finance, within an appropriate control model."

Information system plays a role in assisting managers who want to disaggregate the summary measurements (Kaplan and Norton, 1992). Organisations use a series of PMs to evaluate performance of their business and their managers. These measurements allow managers to focus on the organisation's goals and to achieve an

improvement of the organisation's future performance. When an unexpected signal appears, managers can query their information system to find the source of the problem. For example, if the aggregate measurement for on-time delivery is poor, managers with a good information system can quickly look behind the aggregate measurement until they can identify the solution to late deliveries. Conversely, if the information system is poor, it can be the achilles' heel of PM.

The power of information technology has simplified the collection and treatment of the data used for PM (Neely, 1999; and Kald and Nilsson, 2000). Kald and Nilsson (2000) reported that use of NFPMs should be integrated with other systems of planning and control.

2.6.6 Management Accounting System (MAS)

Traditional MA, as a rational system providing information for economic decisions, has been criticised for its inability to provide adequate information on non-financial and external factors crucial to the long-term survival of the organisation in an uncertain environment (Hoque, 2001). More and more management accountants are being required to move outside the realm of financial measurements.

The structure of a MAS and the use of indicators and their acceptance in an organisation are influenced by both contextual variables (such as the uncertainty of the environment and the strategy chosen) and employees' characteristics (such as their function in the organisation, training, understanding, experience) (Brinberg and Wilner, 1986; Libby and Luft, 1993; Mendoza and Bescos, 2001; Silvola, 2005).

In the MA literature there is a suggestion that a MAS should be developed to focus on an organisation's activities relative to its competitors (Bromwich, 1990). Simons (2000) suggested that MA plays a central role in mapping future directions by giving managers information for setting strategies and the ability to ensure that inputs, processes and outputs are aligned to achieve organisational goals.

Many studies have focused on the relationship between MA and NFPMs. These studies have found that when organisational philosophies move to an external orientation (customer satisfaction) in order to gain competitive advantage, MA moves away from a traditional 'cost analysis' to strategic management accounting using a combination of non-financial information together with financial information (Kaplan, 1983; Atkinson, 1998; Chenhall and Langfield-Smith, 1998; Ittner and Larcker, 1998b).

Chenhall and Langfield-Smith (1998) examined the role of management accountants in the development of PMs within organisations undergoing change programmes. They suggested five interrelated factors that may help influence the extent to which management accountants contribute to the development of PMs: a shared view of the role of the accounting task; senior management support for accounting innovations; championing the accounting task; social and technical skills of the management accountants; and the positioning of accounting within the formal organisational structure.

2.6.7 Advanced Management Practices (AMPs)

AMPs are described by Chenhall (Perera et al., 1997, p. 559) as: "comprising management philosophies embodied in practices and programmes used to enhance the manufacturing process with respect to customer focus." AMPs embrace three dimensions: cost (such as activity-based costing and just in time), quality (such as TQM and employee involvement) and dependability of supply.

Although many authors in the accounting area emphasised the importance of implementing new technologies and philosophies of production management (i.e. computer integrated manufacturing, flexible manufacturing systems, just in time, optimised production technology, benchmarking and TQM) in an organisation, they suggested that most accounting systems do not provide data for helping managers

implement these methods effectively to improve an organisation's performance and to gain a competitive advantage (Kaplan, 1983; Drucker, 1990; Albright and Roth, 1992; Ezzamel, 1994; Johnson, 1994; Ittner and Larcker, 1995; Ghalayini and Noble, 1996; Hoque and Alam, 1999; Neely, 1999).

Chenhall (1997) suggested that traditional PM involving budgetary control and financial indicators is inappropriate for TQM, which requires a more precise measurement to ensure that quality of processes are in control and can be continuously improved. TQM requires a different sort of management accounting information system, which is broad in scope and nature (data on internal management and information on customers, competitors, suppliers, employees and all stakeholders). TQM needs a multidimensional PMS. Therefore, the implementation of these methods especially the adoption of TQM was a main driver of the development of NFPMs (Ghalayini and Noble, 1996; Ittner and Larcker, 1998b; Brignall et al., 1999, Vaivio, 1999). Chenhall (1997) stated that the relation between TQM and an organisation's performance is stronger if NFPMs are used as an essential part of management evaluation. Banker et al. (1993), Abernethy and Lillis (1995), Perera et al. (1997) and Ittner and Larcker (1998b) presented empirical evidence that AMPs and manufacturing technology have a strong association with NFPMs. Cobb (1993) found that organisations adopting advanced techniques tended to move from centralised, monthly reporting in mainly financial terms to decentralised, daily or weekly reporting of operational indicators.

Management accountants can play a significant role by providing managers with high quality information to achieve an organisation's strategic goals. Therefore, they should understand the manufacturing systems, production management strategies and advanced manufacturing technology used in their organisations.

2.6.8 Performance Measurement and Organisational Structure and Culture

Managers change their organisations' structure and cultures to become more effective and efficient, for the purpose of obtaining a larger market share and guaranteeing the survival of the organisation (Hoque, 2001). Senior (1997) suggested that changes in organisations stem from many different sources: temporal (relating to the historical development of an organisation and industry cycles) as well as external and internal (political/legal change, economic conditions or technological developments).

In the literature, the types of organisational change were identified to include developmental (such as expanding into new markets, introducing new technology); transitional (implementation of a new structure or new method) and transformational (evolution of a new structure by change in the organisational strategy - consolidations) (Costello, 1994). Emmanuel et al. (1990) reported that the design of organisational structure can significantly influence and control the behaviour of employees. Senior (1997) stated that organisations change their structures for successful performance. Changes to the organisational culture refer to changes in the perceptions, assumptions and behaviour of employees (Hoque, 2001). Smith et al. (1998) reported that organisational culture impacts on the change process and that it is the managers' responsibility to change the culture to meet the organisation's objectives. Managers can obtain their desired outcomes of change by using some processes: education and training, sponsorship of the change process, alignment of incentives and customer focus (Argyris and Kaplan, 1994; Smith et al., 1998).

Organisational culture is a key component of a management control system. The organisational culture can be used to influence change when the management control system is aligned with the objectives and principles of the organisation (Hoque, 2001). Otley (1987) suggested that the management control process requires

individuals to modify their behaviour to ensure that the organisation's goals are accomplished. Therefore, when an organisation changes, the management control system should also change to motivate employees to continue to behave in a way that is conducive to obtaining the organisation's goals. Providing employees with accounting information (such as performance targets) during a period of change can lead to improved efforts and greater commitment, involvement and output from employees (Johnson, 1992).

In the PM literature there are many authors who have referred to the interaction between PM and organisational culture. Nudurupati (2003) studied how PM can impact on the way management behaves. Bourne et al. (2002) and Franco and Bourne (2003) suggested that a paternalistic culture can lead to a successful PMS implementation. They considered corporate culture as one of the critical factors supporting the use of strategic performance measurement. Bititci et al. (2004) found that organisational culture and management style should be interdependent throughout the life cycle of the PMS. They reported that a successfully implemented and used PMS will lead to more participative and consultative management style and may lead to significant performance improvements.

2.6.9 Intellectual Capital (IC)

The ability of an organisation to achieve wealth creation depends upon its implemented strategies and its resources and capabilities (Penrose, 1959). Traditionally, those resources were land, labour and physical or financial. More recently IC (non-financial factors such as customer loyalty, employee satisfaction and contribution, internal processes and organisation's innovation) has been identified as a key resource and driver of organisational performance in order to achieve sustainable competitive advantage and value creation (Nahapiet and Ghoshal, 1998; Teece, 2000; Tayles et al., 2002). Drucker (1993, p. 42) stated that

“the traditional factors of production -land, labour and capital- have not disappeared, but have become secondary. Knowledge is becoming the only meaningful resource”.

Different classifications have been proposed in the literature of the IC concept. Generally, there are three categories of IC: human capital (such as know-how, trained workforce, loyalty to organisation and motivation); organisational capital (such as information system management philosophy, corporate culture and management processes) and relational capital (such as customer loyalty, customer data and customer partnerships). The components of IC are an indicator of an organisation’s future value and ability to generate financial results (Skandia, 1994; Pablos, 2002).

The research and published literature on measuring IC is growing rapidly (Marr et al., 2003). Marr and his colleagues (2003) advocated several reasons for organisations measuring their IC. Among them are: helping organisations formulate their strategy, assessing strategy execution, assisting in diversification and expansion decisions, using it as a basis for compensation and communicating measurements to external stakeholders. In the literature, there are a number of different models of measuring IC such as European Business Excellence Model and Scandia Navigator approach.

Guthrie and Ricceri (2002) classified approaches of measuring IC into two main categories. The first one is a stock approach, which is a snapshot of stocks of IC that is suitable for comparisons between organisations. Another one is a flow approach, which uses financial and non-financial measurements in order to identify organisation value creating processes. The contributions with the flow approach lead to the creation of several guidelines, frameworks and indexes (Sveiby, 1997, 2001), which aim to help organisations to develop their capability to measure and control IC with the purpose of increasing the effectiveness and efficiency of their management

and to improve FP. The knowledge-value (Carlucci et al., forthcoming) is one of the methods that attempts to link IC to organisational performance. This method links IC with core competencies, strategic processes, business performance and value creation.

Kaplan and Norton (2003 and 2004) presented a strategy map approach as a tool to explain how the causal relationships between organisational IC value drivers and organisational performance outcomes are linked together in a cause-and-effect diagram. The BSC includes financial measurements that show the results already taken and complements them with measurements of customer satisfaction, internal processes and the organisation's capability to learn and improve the activities that drive future FP (Kaplan and Norton, 1992). In fact, Kaplan and Norton (2004, p. 54) reported that IC seldom affected FP directly. It works indirectly through complex chains of causes and effects. Prieto and Revilla (2004) studied the relation between learning flows, the knowledge stocks and business performance and found a significant and positive relation between them. They also reported that learning flows strongly guide the improvement of knowledge, which, in turn, generate a NFPM as a forecast for FP.

2.7 CONCLUSION

This Chapter reviewed briefly the history of PM, the principal reasons for NFPMs emerging and the use of NFPMs in the service sector. Furthermore, a number of performance models, non-financial performance dimensions and the design of PMSs were discussed in this Chapter. In addition, some new directions in the literature regarding NFPMs were explained. The main objective of this Chapter is to explore the current literature of NFPMs. The literature provides the researcher with a background knowledge of NFPMs, which enhances the researcher's theoretical sensitivity. Having this understanding combined with maintaining an open mind on

the topic of PM will help to define the main aspects that need in-depth investigation during the empirical work.

The next Chapter provides a description of the Libyan environmental context where the case study Banks operate and, in addition, it presents information about the Libyan commercial banking sector.

CHAPTER 3

LIBYA AND ITS COMMERCIAL BANKING ENVIRONMENT

3.0 INTRODUCTION

To understand the use of particular accounting practices (such as performance measurement) in any society, a study of the environment in that society throughout the ages is essential. Libya is not an exception. The economic, political, social and cultural environment may influence individuals' attitudes about accounting practices and appropriate PMs. The purpose of this Chapter is to provide information about developments in the Libyan environment and to discuss the nature of the commercial banking environment in Libya.

The Chapter is divided into three sections. The first section discusses the Libyan environment and provides information about the State's geography, population, language and religion, as well as historical background, political and economic aspects of the Libyan society. The second section provides an overview and a discussion of the commercial banking sector environment and outlines the main structures and key features of the sector. Finally, a conclusion to the above discussion is provided in the third section.

3.1 THE LIBYAN ENVIRONMENT

3.1.1 Social Framework

3.1.1.1 Geographical Background

Libya is located in the north-central part of Africa. It has coastal access to the Mediterranean Sea in the north and is neighboured by Egypt to the east, Sudan to the southeast, Tunisia and Algeria to the west and Niger and Chad to the south. Libya is

an important bridge connecting the African Continent with the European Continent. It links Eastern with Western Africa and Southern Europe with the rest of Africa. Recently, the State has been planning to profit from its strategic location by playing the role of trade linkage between Europe and Africa (General Planning Council, 2001).

The country occupies an area of 1,759,540 square kilometres (African Development Bank, 1995). It is the fourth largest country in Africa by area and the seventeenth largest in the world. It is approximately one-half the size of Europe or one-quarter the size of the United States, (Bait-Elmal, et al., 1973; The Economist Intelligence Unit, 1997-1998). The two large cities in the country are Tripoli in the west and Benghazi in the east. In the past the country was divided into three administrative regions. These regions were Cyrenaica to the east, Tripolitania in the west and Fezan to the south. More than 90 percent of Libya is desert or semi-desert, consisting of sand areas and two areas of hills and mountains. The mountains are Jabal Nafusa in the northwest (south Tripoli) and Jabal El-Akhdar in the northeast (east of Benghazi). The climate is mostly dry and desert-like in nature. However, the northern regions enjoy a milder Mediterranean climate. Furthermore, a feature of the Libyan climate is the Ghibli, a hot, dry, dust-laden southern wind blowing from one to four days in the spring and autumn.

3.1.1.2 Population

The human resources factor is very important for the economic development of any country as a whole and for the development of any sector, organisation and profession within that country. This is due to the fact that it is much easier in many cases to import capital from abroad rather than importing human resources. Official statistics show that during the period 1970-2006, there has been a rapid growth in the

Libyan population from 1,879,000 in 1970 to 5,323,000 in 2006. During the same period the non-Libyan population increased from 84,000 in 1970 to 350,000 in 2006. The total population is 5,673,000 giving the country an overall population density of 3.2 persons per square kilometre. Approximately 90% of the people live in the main cities, while the rest live in the countryside (see Table 3-1, the development of the population in Libya).

The 2006 census showed that the majority of the population are in their middle age and the rate of illiteracy declined to 12%, while the rate of university graduates rose from 3% to 13% over the period under review.

Table 3-1: The Development of the Population in Libya during the period 1970-2006

Nationality/years	1970	1975	1980	1985	1990	1995	2000	2006*
Libyans	1,879,000	2,316,500	2,804,600	3,373,200	4,140,000	4,389,700	5,021,400	5,323,000
Non-Libyans	84,000	366,600	441,200	295,000	703,800	409,300	405,400	350,000
Total	1,963,000	2,683,100	3,245,800	3,668,200	4,843,800	4,799,000	5,426,800	5,673,000

Source: General Planning Council, (2001a), Report of Libyan Economic and Social Indicators 1962-2000.

*<http://www.gpc.gov.ly/online/detailsnews.php>.

3.1.1.3 Language

Arabic is the official language in Libya. Although legislation requires that all signs and documents be in Arabic, English and Italian are understood by many Libyans and are often used in trade. Tamazight (i.e. Berber languages) are spoken by Libyan Berbers. In addition, Tuarges speak the Tamahaq language.

3.1.1.4 Religion

The dominant religion in Libya is Islam (97% of the population). It provides both a spiritual guide for individuals and a basis for all the State's rules and policies. The Libyan government since the 1969 revolution has been working as one of the leaders in the Islamic world. The Constitutional Declaration of the 1969 revolution declares Islam the State religion and guarantees to other religious groups the freedom of practising their religious traditions within the country (Ansell and El-Arif, 1972).

3.1.1.5 History

The name “Libya” is derived from the Egyptian term “Libu” which refers to one of the tribes of Berber peoples who lived in the west of Egypt in the 13th century (Abuarrosh, 1996). In general, the history of Libya has been one of long-time Colonisation until 1951 - because of its location which made it an easy target for all invaders throughout history - beginning with Phoenicians, Carthaginians, Greeks, Romans, Vandals and Byzantines.

Arabs conquered the country in the 7th century and in the following centuries many of the indigenous peoples adopted Islam and also the Arabic language and culture. Steel (1967, P. 191) wrote that:

“With the Arab conquest, beginning in 643 A.D., the History of Libya took an entirely different course. Its culture was changed and so were its language, religion and population. In a few years the Arabs were able to do in Libya and the rest of North Africa what neither the Romans nor the Byzantines had been able to do in centuries”.

In about 1530 Tripoli was invaded by Spain for approximately twenty-one years. From the mid 16th century (1551) until 1911 Libya was conquered by the Ottoman Turks and it remained part of the Ottoman Empire. In the twentieth century, exactly in 1911 Italy invaded Libya. Italy gained control of the area following World War I, setting up a new administrative system joining together the country’s three main regions (Vandewalle, 1998). These regions were known as Cyrenaica in the East, Tripolitanin in the West and Fezzan in the South. Libya remained as an Italian colony until 1943. In 1934, Italy adopted the name “Libya” (used by the Greeks for all of North Africa, except Egypt) as the official name of the colony.

The Italians improved the infrastructure of the State, creating roads, railroads, port facilities and irrigation projects, but did little to educate and train the inhabitants in administrative, technical or agricultural skills.

After the Second World War, from 1943 until 1951 Cyrenaica and Tripolitania were occupied by a British military administration and the Fezzan region by French forces (Naur, 1986). In 1944, Idris returned from exile in Cairo. On 24th December 1951, Libya (United Kingdom of Libya) declared its independence under the governance of King Idris of the Sanussi family. He reigned the United Kingdom of Libya (later in 1963, the name was changed to the Kingdom of Libya) until 1969. When Libya declared its independence, it was the first country to achieve independence through the United Nations (Abuarrosh, 1996).

On 1st September 1969 a small group of military officers (12 people) led by army officer Muammar Al-Gaddafi overthrew King Idris and designated themselves the Revolutionary Command Council (RCC), which formed a new government. In its first declaration on September the 1st, the RCC proclaimed the country to be a free and sovereign State called the Libyan Arab Republic. Gaddafi is referred to as the “Brother Leader and Guide of the Revolution”. The new government declared as its slogan “Freedom, Socialism and Unity”. In 1977, the official name of the country was changed to “The Socialist People’s Libyan Arab Jamahiriya” according to the implementation of “The People’s Authority”. The term “Jamahiriya” is translated to mean “power to the masses” (Wright, 1981, p.191).

In 1970, the UK and US military bases in the country were required to be evacuated as soon as possible and they were evacuated on March the 28th (UK) and June the 11th (US) 1970.

During the 1970s Gaddafi produced a book of three parts known as ‘The Green Book’, setting forth his political, economic and social programmes. The first part (1976) is “The solution of the problem of democracy”, the second (1978) is “The solution of the economic problem” and the third (1979) is “The solution of the social problem”. His focus is on the problem of freedom which resulted in rejecting both

the communist and the capitalist approaches and officially espousing an Arab Socialism that integrated Islamic principles with social, economic and political reform.

In January 1986 the US imposed economic sanctions against Libya because it was accused of being of terrorism. In April 1986, the US launched an aerial raid against Libyan targets in Tripoli and Benghazi. On August the 5th 1996, the US imposed additional sanctions as part of the Iran-Libya sanctions programme. However, in 2004 the US sanctions were lifted as a response to significant steps by Libya including abandoning its programmes to build weapons of mass destruction.

On March the 31st 1992, the UN Security Council imposed sanctions against Libya for the 1988 crash of the US Pan Am flight 103 over Lockerbie in Scotland. However, in August 2003, Libya agreed to pay compensations (\$2.7 billion) to the victims' families and cease all support for terrorism; in return, in September 2003, the Security Council formally lifted the sanctions. From 2000, Libya began to make significant policy changes that led to a détente in political relationships with Western countries.

3.1.2 Political and Regulatory Environment

3.1.2.1 Political Framework

The political regime in Libya during the early 1950s to the late 1960s was parliamentary government. On September the 1st, 1969 the governing authority became the RCC under the leadership of Gaddafi. In 1971, the RCC established the Arab Socialist Union (ASU) as a single political party to encourage the public to participate in political life. However, it failed to achieve its objectives (Abbas, 1987) because this model was inappropriate for the different traditions and culture of the Libyan community (Zuhri, 1978).

In 1973, radical changes in the Libyan political and economic system were started when Gaddafi gave his speech about what is called the “cultural or popular revolution”, which aimed to encourage the public to participate in political life. The tool for implementing this was the creation of “People’s Committees”. People’s Committees were functionally and geographically based and became responsible for local and regional administration. In the scope of their administrative and regulatory tasks and method of their members’ selection, the People’s Committees embodied the concept of direct democracy that Gaddafi declared in the first part of the Green Book. Further changes were initiated in 1977 when the General People’s Congress (GPC) was created to replace the RCC for implementing “The People’s Authority”. The focus of the new system was the General People’s Congress as a legislative body. The GPC still exists today and is headed by a Secretary. The GPC adopts resolutions creating the General Secretariat of GPC and appointing members (i.e. Secretaries or Ministers) of the General People’s Committee as an executive body. The General People’s Committee acts as the country’s government (the Cabinet).

At its conception, all legislative and executive authority was vested in the GPC, which delegated most of its authority to the General Secretariat and to the General People’s Committee. In turn, Municipal People’s Congresses (MPCs) which are now known as Sha’biyat People’s Congresses (SPCs) and Basic People’s Congresses (BPCs) which are now known as Local People’s Congresses (LPCs) were established across the country. People debate and take decisions at the LPCs level. These decisions are then passed up to the MPCs and then to the GPC for consideration and setting as national policy. Also, numerous professional associations are integrated in the State structure as a third pillar, along with the People’s Congresses and Committees. These associations do not have the right to strike. Professional associations send delegates to GPC, where they have a representative mandate.

Actually, and according to the People's Authority, the Libyan political structure consists of the legislative body and executive Authority which are the GPC and the General People's Committee/Cabinet.

3.1.2.2 Legal Codes

Governments have participated always in the economic aspects of their societies to maintain full employment and provide security for the people. To achieve these objectives many governmental agencies, commissions and regulations have to be created.

In Libya, laws are promulgated by the GPC, executive regulations and decisions are issued by the General People's Committee and ministerial decisions are issued by the individual secretariats. There are many laws (some of which were reviewed and amended after 1969 to harmonise with the Islamic Sharia) and regulations as there are in many countries. Some of the important laws and regulations in the Libyan socio-economic environment are: the Civil Law, the Commercial Code, Financial System Law, the Foreign Trade Regulations, the Income Tax Law, the Companies Law, the Petroleum Law, the Law of Organising the Accounting Profession and the Governmental Accounting Office Law.

3.1.3 Economic Environment

Having discussed the social and political aspects of Libya in this subsection the researcher will provide information on the development of the State economic policies from 1951 (year of independence).

3.1.3.1 Prior to the Discovery of Oil

Libya was once of the poorest countries in the world (Higgins, 1968; Wright, 1981; Vandewalle, 1998). The country depended on American and British money in return

for the use of military bases and aid from the UN and other organisations which helped the country to survive and overcome the economically severe years of the 1950s.

During that time the Libyan economy was described as a “dual economy”. The first sector was the agriculture and animal husbandry which was the mainstay of the Libyan economy (Higgins, 1968), with about 80% of the workers in this sector of economic activity (Lindberg, 1952) and 20% involved in the manufacturing, marketing and transporting of agricultural crops. The second sector, developed by the Italians, was characterised by companies searching for oil and other technical assistance from abroad to improve Libya’s cities (International Bank for Reconstruction and Development, 1960). The main export was the metals left over from the Second World War (Abbas, 1987).

The Libyan economy was in a bad condition. There were poor production techniques, no skilled labour and a shortage of capital and other resources for social and economic development of the country. The per capita income was very low. The country’s economy was described by many economists as a deficit economy. There was a deficit in the budget, in the balance of payments and most of the projects also operated at a deficit (Higgins, 1959). These deficits were funded by the Italian government during its colonisation from 1911-1943 (Farley, 1971), the military administering powers (UK and France) from 1943 to 1952 and since then, by foreign aid and leases of military bases to the USA and UK (Higgins and Jacques, 1967). Farley (1971, p. 30), the UN’s economist, pointed out that the Libyan economy before the discovery of the oil was far behind because there was no indication of any economic growth. Higgins (1959, p. 27) showed that the Libyan economy faced all the growth obstacles and also clarified that they were political, economic, social and technological obstacles.

3.1.3.2 After the Discovery of Oil

In 1959, oil was discovered by Esso a USA company (later renamed Exxon) and production and export of commercial quantities started in 1961 (Wright, 1981; Giurnaz, 1985; Vandewalle, 1998); as a result the Libyan economic situation changed. The Libyan economy became primarily dependent on the revenues from the oil sector, which constituted practically all export earnings and 70% of the country's Gross Domestic Product¹ (GDP) in 2005 (see Appendix 3-1: Gross Domestic Product). These oil revenues and a small population give Libya one of the highest GDPs per person in Africa (see Appendix 3-2: Per Capita Income) and have allowed the State to provide an extensive and impressive level of social security, particularly, in the fields of housing and education. The non-oil sectors, which account for 30% of GDP in 2005 (see Appendix 3-1: Gross Domestic Product), have expanded from processing mostly agricultural products to include the production of petrochemicals, iron, steel and aluminium. The surplus in the balance of payments increased each year becoming the most important source of capital formation. Thus, Libya does not have the capital formation problem which has characterised the economies of most developing countries. However, the most critical problems for Libya are the high level of inflation, the lack of skilled labour, the heavy dependence on the oil sector and the low rate of private capital formation.

During the period 1951-1969, the Libyan economic system was mainly capitalist. Private ownership existed with minimum governmental interference. Public ownership was in sectors that required large scale investment. The government launched a number of measures to encourage competition and the establishment of private business. These included the establishment of the Industrial

¹ The development of GDP and per capita income in the Libyan economy is associated with the development in the oil sector, increasing with the increase in the oil price and falling with the decline in the oil price.

and Real Estate Bank of Libya (currently known as the Development Bank) to provide loans to Libyan businessmen to build local industries, the establishment of the Industrial Research Centre to help implement the country's development plans by providing technical and economic services in both the public and private sectors and new import and export laws demanding that the import of competitive foreign goods be subject to licence (Bait-El-mal et al., 1973).

Since 1970, the economy has changed again. Several steps were taken by the revolutionary government in order to reform the economic situation and it has changed from a capitalist to a socialist economy. State intervention in the economy has increased and the government started expanding the public sector and reducing the private sector. From the late 1970s up to 1991 the Libyan economy was centrally planned and the State controlled all manufacturing activities, foreign and domestic retail trade and banking as well as insurance services. However, private companies have emerged and started to operate in Libya from the 1990s. The appearance of private companies was mainly due to the crises that the Libyan economy had faced from the mid-1980s as world oil prices fell (The Economist Intelligence Unit, 1997-1998), the decrease in the General Treasury's revenues from the domestic resources which were reflected in the performance levels and efficiency rates of service and productive enterprises and developments in the international economic environment. Moreover, the Libyan national economy faced technical sanctions (imposed from the US/UN) which hindered the industrial enterprises from importing technology. As a result of these crises, the State introduced a series of economic and political liberalisation measures permitting a significant role for the private sector. The main objectives of these measurements were to cut public spending and to enhance private sector initiatives in different sectors (Vandewalle, 1998).

The first set of reform measures, adopted in 1985 and 1988, allowed the people to be productive through creating self-management or collective ownership businesses. In 1992, to enhance economic development, the State issued Act number 9 to regulate and enhance the private sector activities in the national economy and to open the door for the privatisation of a number of public-sector companies. In 1997, the State passed Act number 5 concerning the encouragement of foreign capital investment. Therefore, the Libyan economy consists of three major sectors that form its structure: namely, the oil sector, the public sector and the private sector.

Since the early 2000s, the State has made progress on economic reforms as it attempts to rejoin the international community. It has applied for membership of the World Trade Organisation (WTO), many State-run industries are being privatised, the US and UN sanctions were lifted and many international oil companies have returned to the country.

3.1.3.3 Development plans

The appearance of oil in commercial quantities encouraged the State to have various economic development plans for either a three-year or five-year period. In 1960 the government constituted the National Planning Council to decide on policies for planning and development and in 1963 required the Ministry of Planning and Development to act as an administrative and executive body for these policies (Giurnaz, 1985). The government also decided that a minimum of 70 per cent of oil revenues must be used to finance social and economic development programmes.

The first development plan was approved in August 1963 in the form of a five-year plan for economic and social development (see Appendix 3-3: Five-year Plan 1963-1968 and Additional Year 1969). This plan called for an expenditure of LD

169.1 million². However, the annual increases in oil revenues led to an increase in the final amount spent on this plan to LD 551 million, or 325.84% of planned expenditure. This first five-year development plan aimed to accomplish seven major objectives. These objectives were: a) to ensure the improvement of the standards of living of people, b) to give special consideration to the agricultural sector; to pay attention to industry; to improve the productive efficiency of farmer and labourer; and to encourage the private sector to make investments in these fields, c) to allow the public sector to increase its investments in such services as education, health, communication and housing, d) to develop rural areas by establishing all the productive and public service projects, e) to organise the imports policy, f) to take such monetary, financial and commercial measurements – all in a coordinated effort – as may be necessary to ensure increased revenue and to enforce control on expenditures and g) to take steps to meet the lack of information and statistical data which are necessary for planning (Farley, 1971). Although the development of the agricultural sector was one of the plan's priorities, the performance of this sector was very low at the end of the plan (Abbas, 1987), however, it recorded some achievements in sectors such as health and education.

The second five year development plan was approved in May 1967. This plan was designed to allocate more than three times the actual expenditure of the first five-year plan for the period from April 1969 to March 1974. This plan provided the continuity of the work in the first plan in the fields of transportation, agriculture, public services and housing. In addition, it provided for an industrialisation programme with emphasis on petroleum refining and other light industries. However, this plan was abandoned because of the new revolutionary government in 1969

² The currency unit in Libya is the Libyan Dinar (LD) and the average exchange rates between the LD and the UK pound (£) during the 1962-2005 period ranged from £ 0.35156 to £ 2.3980 (see Appendix 3-4).

(Elmaihub, 1981) and was replaced by yearly development plans until 1973. During the period 1970-1972, the state spent LD 791 million on economic and social development. The highest amount was allocated on housing (30.5% of actual expenditure – LD 241 million), then the agricultural sector and industrial sector (17.1% and 13.8% respectively – LD 135.1 and LD 109.1 million). From 1973 to 1985 the State approved and implemented three economic and social development plans (1973-1975 plan, 1976-1980 plan and 1981-1985 plan). However, from 1985 to now, there were many attempts to prepare development plans but some of them were not implemented and the others were not completed.

The three-year development plan 1973-1975 was the first plan after the 1969 Libyan revolution. This plan was launched in 1973 and called for an expenditure of LD 1,965 million (Libyan Ministry of Planning, 1973). Housing, agriculture, industry, electricity and transportation received the greatest importance and shared roughly equal emphasis in the 1973-1975 plan (see Appendix 3-5: Socio-Economic Development Plan 1973-1975). This reflects the State's policies aimed at providing housing for people and making the country self-sufficient in food supplies as soon as possible. In the industrial sector priority was given to areas such as foodstuffs, building material and petrochemical industries (Libyan Ministry of Planning, 1976).

In 1975, the Libyan government allocated LD 7,170 million to be invested in support of the five-year development plan 1976-1980 (see Appendix 3-6: Socio-Economic Development Plan 1976-1980). This plan is considered a continuation of the development policies underlying the previous three-year plan. The main objective of this plan was to ensure diversification and eliminate the dependency of the country upon a one-product economy. In total, the plan aimed at attaining self-sufficiency at least in food products, reducing inequality of incomes and wealth and developing the country's limited manpower through expanded training programmes and improving

the Libyan educational system (Libyan Ministry of Planning, 1976). The 1976-1980 development plan was later revised (see Appendix 3-7: Revised Socio-Economic Development Plan 1976-1980) with more investment going to industry rather than agriculture (Wright, 1981).

In 1981, the 1981-1985 economic and social transformation plan was launched (see Appendix 3-8: Socio-Economic Development Plan 1981-1985). The 1981-1985 plan allocated funds of LD 17,000 million to different sectors with 23.1 per cent to industry (16.1% heavy industry and 7.0% light industry) and with agriculture coming second receiving 18.2 per cent. Encouraging the development of heavy industry became a high priority for the State in the 1980s. The plan aimed to increase non-oil economic activities' growth by 10.3%.

Shortages of foreign exchange for the Libyan government began to emerge as a problem in 1981 because of the drop in oil sales (Bearman, 1986) and with budgets in deficit. Since the mid-1980s, Libyan oil revenues had fallen to their lowest level since the first Organisation of Petroleum Exporting Countries (OPEC) price shock in 1973 and as a result development spending has declined. The fall in oil prices accompanied by the US sanctions and the UN sanctions which cost Libya approximately \$34 billion contributed to the difficulties the economy encountered.

The allocations of the 1986-1990 economic and social transformation plan were not approved and the State decided to delay it until there was an improvement of the country's circumstances in direct relation with its resources. The fall in oil prices and the large amount of the liabilities of the development projects (which increased to reach LD 4.5 million in 1986) were some of these circumstances.

The 1991-1995 economic and social transformation plan was not completed for the same difficulties affecting the 1986-1990 economic and social transformation plan.

At the beginning of 1994, the State launched a three-year programme covering the period 1994-1996. The programme's main goals were: settling the debts of previous development projects; completion of existing projects, especially in health, education, public utilities and energy sectors; encouraging investment in production sectors, especially industry, whether through the public or re-emerging private sectors; stopping all projects that had not started yet (the Secretariat of Planning, Trade and Treasury, 1993). However, this programme was abandoned with only a few of its goals achieved (see Appendix 3-9: Three-year Programmer 1994-1996). The total amount allocated to the 1994-1996 period was LD 2,400 million of which only LD 1,450.556 million, or 60.44% of the total allocation, were actually invested.

The increase of the private sector's role in the Libyan economy and the concentration on improving the economic performance of the country became one of the economic policy priorities from the early 1990s; this occurred in several places in the presentation of the five-year social and economic plan 2001-2005. In 1999 the State started to prepare a five-year –the plan 2001-2005 economic and social transformation plan- which later was adjusted to become the 2002-2006 economic and social transformation plan according to the reform of the Libyan economy. This plan was for LD 36 billion with the oil resources contributing 43% of the total and the contribution of the foreign and national domestic sectors was estimated at 57% of the total (Al-Zini, 2002).

This new style of planning specifies the role of the State in the creation of the appropriate economic environment, through the introduction of institutional and administrative changes. The difference between this plan and the previous plans is that the latest one gives a very important role for the national and foreign private sector in financing and implementing the productive and service enterprises while the State assumes its role is to finance and implement the infrastructure and service

projects. However, the approval and implementation of this plan was delayed for several reasons, the most important being the high level of liabilities of previous development plans, the size of the plan's expenditure and the international and domestic economic developments that the national economy faced (Al-Zini, 2002).

The banking sector had a significant role to play in the growth of Libyan economy, where it provided the finance and helped the various economic sectors through its banks by offering loans, opening documentary credits, selling and buying foreign currencies and discounting bills of exchange.

3.1.3.4 The State's Budget

In Libya the budget is divided into two main parts which are an administrative budget and a development budget. The Secretary of Finance organises the budget which is then discussed by the Basic People's Congresses and finally approved by the GPC. The administrative budget includes the revenue and expenditure of the secretariats and the transfers to municipalities and public enterprises. Initial proposals for the administrative budget begin at the municipal level and are then forwarded to the specialised secretariat for consolidation and then submitted to the Secretary of Finance, who reviews and forwards these proposals to the GPC for final approval.

The development budget sets out an annual project expenditure programme. This programme is sometimes set within a framework of a three-year plan (e.g. the 1973-1975 development plan, the 1994-1996 programme) or five year plan (e.g. the 1981-1985 economic and social transformation plan). The development budget is initially prepared by organisations and companies that would implement specific projects. These proposals are then sent to the Secretary of Finance, the Secretary of Economy, Trade and Investment and the Secretary of Planning for revisions and submission to the GPC. However, the Secretary has the authority to either approve or

modify the organisations' and companies' budgets according to many factors especially the availability of foreign exchange. Foreign exchange in Libya is strictly controlled by the State through the Central Bank of Libya (CBL). However, the process of budget execution is influenced by the changes in the oil price.

3.2 THE LIBYAN COMMERCIAL BANKING ENVIRONMENT

The banking sector comprises one of the most important and at the same time most sensitive, structural constituents of the economy of any country because banks perform a number of important functions in the economy, such as mobilisation of savings, playing intermediary roles, facilitating the flow of payments, allocation of credit and control of financial discipline for borrowers. Moreover, the electronic bank techniques allow the banks to offer various new types of banking services to suit customers' needs such as paying bills, updating credit data and drawing and transferring money. These banks are social organisations that are influenced by what occurs in the general environment and are affected by it. The banks have to balance the demands of groups such as shareholders, employees, customers and governmental departments.

The purpose of this study is to explore the use of NFPMs in the Libyan commercial banks. A detailed description of the Libyan environmental context was discussed in section one in order to place this study in a broader context. The aim of this section is to provide information about the commercial banking environment in Libya. This section is divided into four subsections. Subsection one introduces the CBL. The structure of the Libyan commercial banks is discussed in subsection two. Subsection three outlines briefly the historical background of the development of the Libyan commercial banks. The financial indicators of the commercial banks are outlined in subsection four.

3.2.1 The Central Bank of Libya (CBL)

CBL was established according to Law No (30) 1955 and officially started its operations on April 1, 1956 under the name of the National Bank of Libya (Al-Baih, 1970). The CBL is 100% State owned, represents the monetary authority in the State and enjoys the status of an autonomous corporate body (Central Bank of Libya, 2001). It was the first Libyan national bank vested with the tasks of the Libyan currency committee which was established in 1951 (Al-Baih, 1970). The management of the CBL is entrusted to a Board of Directors which consists of the Governor as Chairman, Deputy Governor as Vice-Chairman, the Undersecretary of the Finance Secretariat as a member and four other members who usually represent other financial and economic interests (Article (14) of the Law (1) 2005). The Governor is also the Chief Executive Officer.

The CBL's headquarters is in Tripoli and it has three branches located in Benghazi, Sebha and Sirte. It contributed to the negotiations prior to joining the International Monetary Fund. By issuing the Law of Banks, Money and Credit No (4) 1963 its name was changed to the Libyan Bank. In 1971 Law No (63) was issued which modified Law No (4) 1963 and it changed the name once again to the Central Bank of Libya. The Law establishing the CBL and the following Laws have defined the objectives of the CBL to maintain monetary stability and to work to achieve the growth of the national economy in accordance with the general policy of the State. These objectives which have grown since its establishment include the following (<http://www.cbl-ly.com/eabout.htm>):

- a) Issuing and regulating banknotes and coins.
- b) Maintaining and stabilising the Libyan currency internally and externally.
- c) Managing the State reserves of gold and foreign exchange.
- d) Regulating the quantity, quality and cost of credit to meet the requirements of economic growth and monetary stability.

- e) Taking appropriate actions to deal with foreign or local economic and financial problems.
- f) Acting as a bank to the commercial banks.
- g) Supervising commercial banks to ensure the soundness of their finances, controlling the efficiency of their performance and protecting their depositors' and shareholders' rights.
- h) Acting as a bank and fiscal agent to the State and its public organisations.
- i) Advising the State on the formulation and evaluation of financial and economic policy.
- j) Supervising foreign exchange transactions.
- k) Carrying out any other functions or transactions normally performed by a central bank, as well as any tasks charged to it under the laws of banking, currency and credit or any international agreements to which the State is a party.
- l) Issuing and managing all the State loans.

3.2.2 The Structure of the Libyan Commercial Banking Sector

Commercial banks are organisations with their main function being to manage financial assets, so they work as a link between the economic units that have monetary surplus to invest and the other economic units that need these funds (Masoud, 2003). They try to manage their sources to serve their goals of liquidity, profitability and safety without causing any damage to their customers or to the economy in general.

Commercial banks are organisations that have an economic and social role within the society and their objectives are not only to achieve the highest profits but to achieve social and economic objectives in the face of the pressures from various groups such as:

- a) Owners to achieve a satisfactory return.
- b) Society to respond to the social and economic needs of the individuals and various institutions.
- c) Employees to achieve their physical and psychological objectives.

d) Customers for achieving their satisfaction.

The commercial banks are required to achieve economic goals by providing the funds to enterprises, by acting as a mediator between the supply and demand of money, producing the banking money and other services. A commercial bank was identified in article (50) of Law (4) 1963 as:

“Any company that regularly accepts the deposits in current accounts that are payable when required or at an appointed time, opens the documentary credits, collects the cheques, gives loans and credit facilities and the other functions of the banking business”.

According to this Law, banks whose main task is real estate, agricultural and industrial finance or banks that do not accept demand deposits as one of their tasks, are not considered to be commercial banks. The Law allowed the Board of the CBL to permit financing banks to offer some of the commercial banks' services. This Law also emphasised that the contribution in financing the development plans and the assistance to economic enterprises and firms are among the main objectives of the commercial banks. The management of each commercial bank is run by a board of directors composed of a chairman (who acts also as general manager until Law (1) 2005 which separated the chairman's job and the general manager's job), a vice-chairman and three or four members who have experience and banking efficiency and all are Libyan nationals.

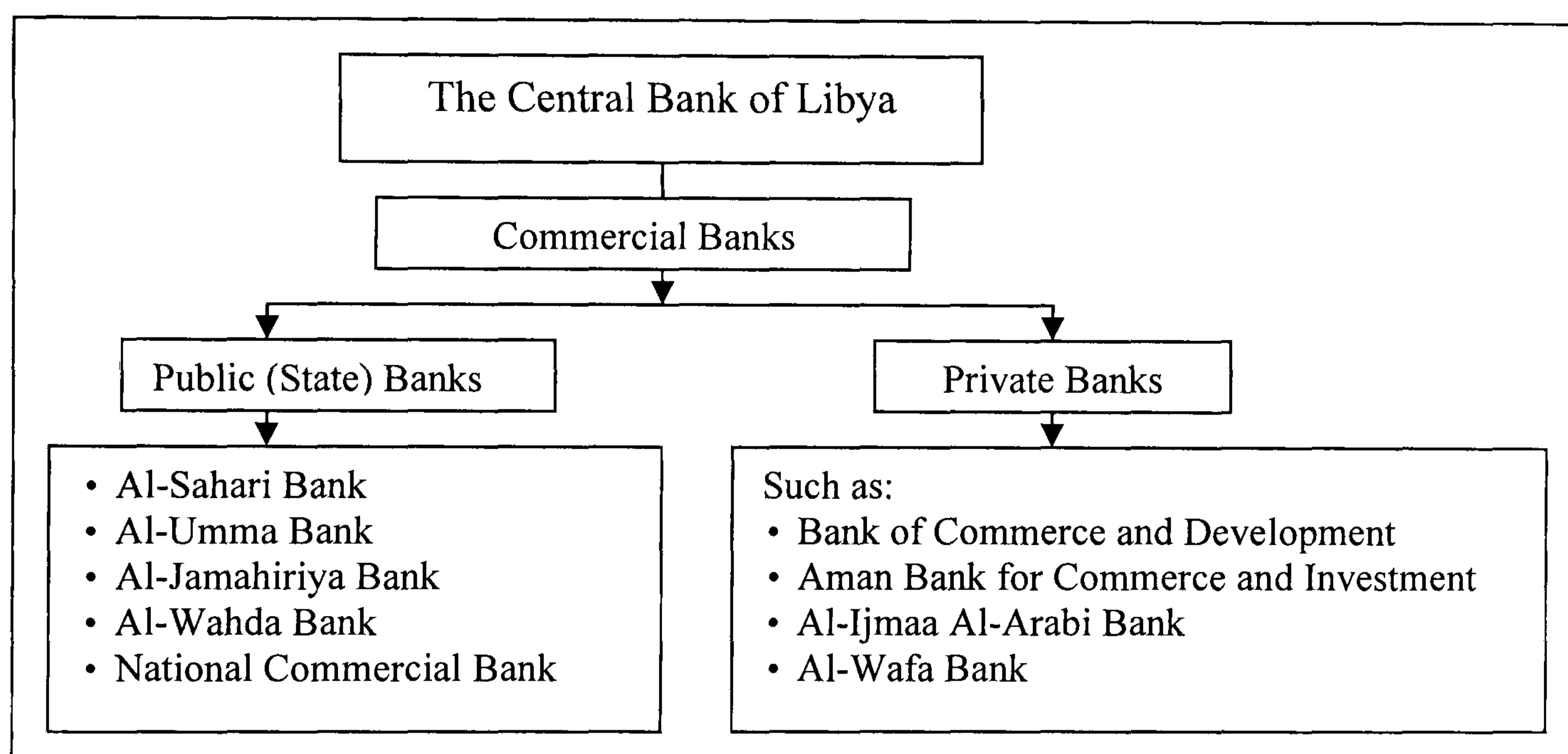
The structure of the commercial banking sector consists of banking organisations, legislation and regulations that govern these organisations (banks). The Libyan commercial banks consist of the following organisations (Central Bank of Libya, 2001):

- a) Public Commercial Banks (State Banks).**
- b) Private Commercial Banks.**

The Libyan commercial banks are subordinate to the CBL and they are controlled by Law No (4) 1963 that was replaced by Law (1) 1993 which was then modified by Law (1) 2005, the Libyan Commercial Law and the Income Tax Law. Figure 3-1 shows the structure of the Libyan commercial banks.

Libyan commercial banks had a significant role in the growth of the Libyan economy, where they provided the finance and facilities to the society's individuals and organisations by offering loans, opening documentary credits, selling and buying foreign currencies and discounting bills of exchange.

Figure 3-1: The Structure of the Libyan Commercial Banks



3.2.2.1 Public Commercial Banks

The public commercial banks are owned by the State according to the nationalisation and Libyanisation decrees that applied to the existing banks at the beginning of the 1970s. According to the Central Bank strategy, branches of these banks were located in every area in order to offer the banking services to all individuals. These banks are as follows (Central Bank of Libya, 2001; Al-Arbah, 1985):

3.2.2.1.1 National Commercial Bank

It was established according to Law No (153) 1970 that nationalised foreign shares and reorganised them. It was instituted due to separation of the commercial operations management from the Central Bank and its integration with Al-Orubah and Al-Istiklal banks.

3.2.2.1.2 Al-Jamahiriya Bank

It was established according to a decree of the RCC that determined some judgements related to commercial banks and modified by Law No (64) 1970 which commanded that some banks' shares must be transferred to the State. It was rearranged according to Law No (153) 1970.

3.2.2.1.3 Al-Wahda Bank

It was founded according to Law No (153) 1970 as a Libyan joint stock company under the name Al-Wahda Bank. Its capital consists of the net assets of North Africa Bank, Commercial Bank, Al-Nahda Al-Arabia Bank, African Banking Company and Al-Qaffilah Al-Ahli Bank. It took all those banks with all their rights and obligations.

3.2.2.1.4 Al-Sahari Bank

It was instituted due to the rearrangement of Sicilia Bank of Italy, where Sicilia sold 51% of its capital to the private sector and 29% to Bank of America and kept 20% for itself. Its name changed to Al-Sahari bank. The two shares of Sicilia and America Banks were nationalised later.

3.2.2.1.5 Al-Ummah Bank

It was established after the decree of the RCC that stipulated Libyanisation of the foreign banks, and therefore 51% of the Rome Bank's shares were transferred to the Libyan government and its name changed to Al-Ummah Bank. With the

promulgation of the decree appropriating the properties previously usurped by Italy, the Italian shares in the Bank were transferred so that the bank became completely owned by the State.

3.2.2.2 Private Commercial Banks

The period (1972-1992) was distinguished by the State ownership of the commercial banks. By issuing Law No (1) 1993 which allowed private commercial banks to operate, also permitted foreign banks to open branches, agencies or representative offices according to the requirements of the Libyan market. The main role of private banks is to serve the society along with the State commercial banks (SCBs). So they are expected to make a good contribution to banking services, financing economic activities and enhancing individuals' banking knowledge (Masoud and Al-Shrif, 2002). The private banks established following this Law are Bank of Commerce and Development, Aman Bank for Commerce and Investment, Al-Ijmaa Al-Arab Bank, Al-Wafa Bank, Representative office of Jordanian Housing Bank and 48 small private banks (Luxford, 2005; Central Bank of Libya, 2004).

3.2.3 Historical Background about the Development of the Libyan Commercial Banks

The Libyan banking sector (LBS) has passed through many stages due to the changes in the political situations that happened in the country since the Ottoman rule. The main characteristics of these stages are:

3.2.3.1 From the Ottoman Period to the Libyan Revolution

Historical sources indicate that the first occurrence of banks in Libya was at the end of the Ottoman term at the beginning of the 19th century. Since that time until the middle of the 20th century the commercial banks were just branches of foreign banks

(such as Sicilia Bank, Roma Bank, Napoli Bank and Barclays Bank) and their purpose was essentially gaining profits without any social or economic role for the advantage of the Libyan society (Al-Arbah, 1985; Al-Baih, 1970). A department of the Central Bank was allowed to carry out the banking commercial work because of the lack of national commercial banks during the 1950s (Al-Baih, 1970). From that time the Central Bank became known as a Central and Commercial Bank. In 1958 the first Libyan legislation was passed to organise the commercial banking business. In 1963 Law No (4) 1963 was passed which gave the Central Bank authority. As a result of the Central Bank policies and efforts, the following events took place between 1964 and 1969 (Masoud and Al-Shrif, 2002; Al-Baih, 1970):

- a) The Sicilia Bank of Italy sold 51% of its capital to the private sector and 29% to the Bank of America and kept the rest and then its name changed to Al-Sahari Bank in July 1964.
- b) The French Algerian Real Estate Bank transferred 51% of its capital to the Libyan private sector to become a new bank under the name of the African Banking Company.
- c) North Africa Bank replaced the British Bank of the Middle East with share capital of 51% to the Libyans and 49% to the British Bank at the beginning of 1965.
- d) Bank of Egypt was Libyanised with 51% of its capital for the Libyans and became a new bank known as Al-Nahda Al-Arabia Bank.
- e) The Commercial Bank was opened in 1964 and 51% of its capital was Libyan and 49% went to the Eastern Bank.

Subsequently each bank had its own Board of Directors with Libyan chairmanship while other foreign managers supervised most of its operations. However, there were four banks namely Roma Bank, Barclays Bank, Napoli Bank and Al-Arab Bank which remained as foreign banks' branches in spite of the separation of their capital from their headquarters; all of them were Libyanised at a subsequent stage.

3.2.3.2 From the Libyan Revolution

When the political status of the country changed after the Libyan Revolution in 1969 the banking sector was one of its priorities, where the second Libyanising process of the foreign banks' branches was accomplished. Then they were completely nationalized. This stage may be divided into two periods:

3.2.3.2.1 The Period 1969-1992

In this period the commercial banking business was restricted to five SCBs. Three of these banks were completely owned by the State and the other two were partly owned by the private sector. All the banks were subject to Law No (4) 1963 and its amendments. The most important events of this period are (Al-Arbah, 1985; Al-Baih, 1970):

3.2.3.2.1.1 Libyanisation of Banks

On 13 November 1969 the RCC issued a decree to Libyanise foreign banks to become Libyan joint stock companies with Libyan nationals owning more than 51% and the majority of their board of directors being Libyans including the chairman. Therefore, the four remaining foreign banks (Roma Bank, Barclays Bank, Napoli Bank and Al-Arab Bank) were Libyanised, and consequently all the commercial banks were Libyanized and the State or the private sector owned 51% of their capital. Roma became Al-Ummah Bank, Barclays became Al-Jamahiriya, Napoli became Al-Istiklal and the Al-Arab Bank became Al-Orubah Bank. The Bank of Al-Qafilah Al-Ahli, 100% Libyan, was also established.

3.2.3.2.1.2 Nationalization of Banks

Before the nationalization, the RCC issued a decree in 1970 to restore the properties previously usurped by Italy and, in consequence, the Italian shares in the Ummah and Istiklal Banks became the sole property of the Libyan government (Al-Arbah, 1985).

In December 1970 Law No (153) was promulgated which aimed to nationalise foreign shares in the commercial banks, specify the contribution of Libyans in the Banks, reorganise banks and increase the contribution of the Bank of Libya (today the Central Bank of Libya) to 51% in banks where it was less than that. As a result of the reorganisation of the banks and the banking combination process, the National Commercial Bank and the Wahda Bank were established, and from that time to the mid 1990s, there have been five commercial banks in the LBS which are the National Commercial Bank, Al-Jamahiriya Bank, Al-Ummah Bank, Al-Wahda Bank and Al-Sahari Bank. The situation of the commercial banks was stabilised during the 1970s until the issue of Law No (1) 1993.

The banking sector witnessed some important developments after the decree that Libyanised the banks and nationalised the foreign shares which led to a change in the structure of the banking sector and its contribution to the implementation of the economic and social development plans. In 1971 Law (63) was issued concerning the amendment of the rules of the Banking Law (4) 1963 to be in harmony with the new banking environment. It gave the CBL further responsibilities for supervision and control of the commercial banks and follow-up of their activities and coordination among them. Consequently, the commercial banks began to expand the range of their work to many areas. They contributed by providing housing loans and real estate loans in collaboration with the Industrial and Real Estate Bank to solve the housing problems. They have also provided loans toward urban development and tourist projects.

The commercial banks in collaboration with the CBL and the insurance companies established the National Investment Company (now known as the Libyan Arab Company for Foreign Investments). The Banks have also contributed in the fields of tourism in real estate investment. Moreover, several new banks' branches were opened in areas lacking banking services. These branches contributed to the system that enabled Libyan employees' salary payments to be paid through their bank accounts. The banks paid great attention to retrain and develop the capabilities of employees in banking skills in order to meet the new requirements. The Libyan commercial banks also have contributed in establishing foreign companies and banks such as the France-Arab Bank, the Euro-Arab Bank and the Re-insurance company.

The banking sector was positively affected by economic developments in the country comprising economic reconstructing and development plans (Al-Farsi, 2002). The total budget of the commercial banks has grown in line with the increasing volume of their assets and liabilities, the development in their capital and reserves and the volume of their deposits of all kinds (see Table 3-2). However, this period (1969-1992) was characterized by restricting the banking business only to the five above banks offering traditional services such as financial intermediation.

3.2.3.2.2 The Period after 1993

The same banking situation continued without any distinctive changes in the commercial banking sector structure and the above banks were the only banks. In order to keep up with the latest developments in both the national and international environment, legislation was enacted to encourage the private sector to participate in owning and managing commercial banks (Masoud and Al-Shrif, 2002). Therefore, the deregulation process of the banking sector represents the starting point of a new

stage to develop and enhance the performance of this sector so that the competition would make the services more efficient and customer-oriented.

From 1993 the banking sector witnessed important developments. Law No (1) 1993 [adjusted by Law No (1) 2005] was issued concerning the banks, money and credit which made major changes in the banking sector structure. The law contained several articles concerning the Central Bank's responsibilities, the work of commercial banks, currency control and penalties for commercial discrepancies. In terms of the work of the commercial banks, it specified the regulations affecting the establishment of commercial banks and determined their responsibilities and duties in harmony with the general benefit of the State. It dictated that the banks should contribute toward financing the development plan and contribute to economic projects. It allowed private banks to be established as well as permitting foreign banks to open branches, agencies or representative offices in accordance with conditions specified by the CBL. As a result many private banks were established and they competed with the public banks and they became effective competitors. Also the Jordanian Housing Bank opened its office in Tripoli. The Law authorised the CBL to formulate general rules for control and supervision relating to the rating of assets, of liquid assets, investments, reserves, financial rates and fixing the interest rate for all credit and debit accounts.

From the establishment of that Law and its amendment the commercial banks have offered their services and conducted their work according to this Law and in harmony with the general policy of the State. Despite the sanctions imposed on Libya the banking sector achieved good rates of return (Masoud and Al-Shrif, 2002).

Concerning the observance of international standards, the CBL has issued the necessary regulations for the commercial banks to observe, such as the decisions of the Basle Committee concerning the suitability of capital so as be in line with

international developments and innovations and in order to reach a banking standard that qualified them to work in the international banking domain. The commercial banks continued their activities to improve performance under the circumstances referred to above through expanding the range of their services, updating their equipment and instruments and introducing up-to-date technology. The changes made to the LBS structure mentioned above had positive results. The commercial banks achieved an improvement and growth during this period from the beginning of the competition between the private and public banks.

3.2.4 Financial Indicators for the Libyan Commercial Banks

The policies of the CBL had encouraged commercial banks to extend their services to include all the vital areas and boost economic activity. The most important financial indicators of the commercial banks (both State and private) during this stage are shown in Table (3-2).

Table 3-2: Major Financial Indicators for the Libyan Commercial Banks (In Libyan Dinars/Millions)

Year	Assets	Deposits	Credit	Shareholders' Equity	Contra Accounts *
1969	227.7	101.0	93.0	8.5	92.8
1973	1,040.0	367.1	240.9	24.2	587.7
1977	3,052.6	1,044.4	853.2	65.3	1,578.0
1981	7,964.7	2,841.3	2,167.7	164.3	4,017.5
1985	6,661.8	3,247.7	2,033.0	208.8	1,967.7
1989	6,999.3	3,374.7	2,441.9	287.3	1,708.1
1993	8,746.6	4,301.8	3,710.2	391.2	1,418.7
1997**	11,335.2	6,143.6	4,192.2	585.5	1,616.6
2001	14,714.4	8,725.4	6,454.4	833.3	2,067.5
2005***	23,537.1	15,500.8	6,730.7	1151.1	3,354.1

Source: Central Bank of Libya, (2001), the Banking and Monetary Statistics during 1966-2000.

Central Bank of Libya, (2001), Economic Bulletin, Vol. 41, First Quarter.

Central Bank of Libya, (2002), the Annual Report No 45th (2001).

***<http://www.cbl.gov.ly/en/listview/index.php>.

* Consists of the Value of the Documentary Credits and Letters of Guarantee.

** Before 1997 the indicators only for the public Banks.

The indicators in Table (3-2) show the growth by the commercial banks during this period (1969-2005) and the following is a comparison between the indicators of the end of 1993 with the same indicators at the end of 2005:

- a) The assets reached LD 23,537.1 million by the end of 2005 which was an increase of LD 14,790.5 million (a growth of 169.1%) compared to 1993.
- b) The value of deposits totalled LD 15,500.8 million by the end of 2005 increasing by LD 11,199.0 million compared to 1993 (growth of 260.3%) reflecting the ability of the banking sector to attract funds from all sectors of society.
- c) The credit granted rose to LD 6,730.7 million by the end of 2005 which was an increase of LD 3,020.5 million (a growth of 80.4%) compared to 1993.
- d) The shareholders' equity reached LD 1,151.1 million by the end of 2005 which was an increase of LD 759.9 million (a growth of 194.2 %) compared to 1993.
- e) The documentary credits and letters of guarantee (contra accounts) totalled LD 3,354.1 million at the end of 2005 (a growth of 136.4% from 1993) which is a clear indication of increasing foreign trade.

These banks also played a distinctive role through their participation in attracting and gathering funds and reinvesting to accomplish the economic and social growth objectives. The following are the major achievements of these banks:

- a) They offered many services including current accounts, saving accounts and term deposit accounts.
- b) They financed and executed the foreign trade processes through documentary credits as well as carrying out money transfers for non-resident individuals and firms.
- c) They offered and facilitated many services such as collecting bills (such as electricity and consumer goods) and paying and selling foreign currencies.
- d) They provided the required funds to finance the economic and social sectors.
- e) They helped to establish many institutions and supported them to grow whether by direct investment in their share capital or by loans.

Finally, the Union of Arab Banks³ has a list of the top one hundred Arab banks. In the period 1999-2000 four of the five Libyan commercial banks were in the top fifty of this classification of Arab banks. Two of the researcher's case studies were among these top fifty Arab banks.

3.3 CONCLUSION

In the first section of this Chapter a general description was given of the Libyan social, political, regulatory and economic environment. The history of Libya from the colonisation of Libya to the 1969 Revolution is described. The discussion then explored the political and regulatory context. The Libyan Revolution has introduced a new political system based on democracy and then Libya was governed by the GPC and the General People's Committee. The economic system also has changed to a socialist economy since the late 1970s. This new socialist philosophy has affected the economy in terms of the ownership of the economic activities and in the way of planning, managing and controlling economic enterprises' objectives. The Libyan economy still depends heavily on the oil revenues. The State's development plans after the revolution were directed towards reducing the dependency on oil revenues by developing the agricultural and industrial sectors in order to achieve self-sufficiency in food production.

In section two a descriptive analysis of the Libyan commercial banking environment was provided. The structure, historical development and growth of the commercial banks are discussed. The discussion revealed that, firstly, the Libyan banks started in 1956 by establishing the CBL which also worked as a commercial bank while the Libyan commercial banks started in 1964. Secondly, in the period from 1969 to 1992 the commercial banking business was restricted to five SCBs.

³ The leading financial Arab Organisation.

Thirdly, from 1993 the banking sector started to be more in harmony with international developments. Law No (1) 1993 (adjusted by Law No (1) 2005) was issued concerning the banks, money and credit which made major changes to the banking sector structure and as a result private commercial banks entered the market as competitors to the SCBs. Fourthly, since that time, the commercial banks have witnessed a clear growth in their deposits, shareholders' equity and assets.

The next Chapter focuses on the literature of grounded theory and case study as the methodology and method used to conduct this research project.

CHAPTER 4

METHODOLOGY AND RESEARCH METHODS

4.0 INTRODUCTION

The relevant literature together with the research objectives provide the basis for the appropriate methodological approach which determines the data collection and the methods of analysis. Methodology focuses on how to gain knowledge about the world and is about a way to investigate phenomena (Lincoln and Guba, 1985; Guba, 1990). The major objective of this research project is to explore the current development and use of NFPMs in the LCBS. Grounded theory methodology is used to achieve this objective.

This Chapter discusses the factors influencing the selection of the appropriate paradigm, methodology and research method adopted to conduct this research project in order to achieve the research objectives. This Chapter is divided into five sections. The aim of the first section is to provide a basis for selecting the paradigm. In the second section, the reasons for using grounded theory and the fundamental procedures for the grounded theory methodology used in this project are discussed. The third section focuses on the research method which is the case study method. The fourth section presents applications of ground theory for all four case studies. Finally, a conclusion of the above discussions is provided in the last section.

4.1 RESEARCH PARADIGM

In attempting to develop theories, researchers use one or more paradigms (Kuhn, 1970) that guide and direct their thinking and research (Hopper and Powell, 1985). Gioia and Pitre (1990) defined a paradigm as a way of understanding organisational phenomena. A paradigm includes the following elements; ontology (nominalism

versus realism), epistemology (anti-positivism versus positivism), human nature (voluntarism versus determinism) and methodology (ideographic versus nomothetic). Researchers' ontology and epistemology guide and direct their methodology (Hopper and Powell, 1985).

Ontology raises basic questions about the nature of reality, the very essence of the phenomena under investigation. Under ontological beliefs, there are two approaches which are the objectivist and subjectivist. The objectivist approach supposes that the social world is real and made of hard, tangible, concrete things and with a relatively constant structure (realist). On the other hand, the subjectivist approach supposes that the social world is abstract and spiritual (non-realist). Non-realists believe that the social world is created by individual consciousness and its names, concepts and labels created by individuals to understand it and to communicate the conceptions of the social world to others (Burrell and Morgan, 1979; Kolakowski, 1993). Reality is considered as objective, real and independent by the researcher in quantitative research whereas, in qualitative research, it is considered different depending on who perceives the phenomenon (namely a researcher), things being investigated and reader. So a researcher who adopts this approach should attempt to understand multiple reality (Lincoln and Guba, 1985).

The researchers' epistemology addresses the questions: How do we know the world? "What is the nature of the relationship between the knower or would-be knower and what can be known?" (Guba and Lincoln, 1994, p. 108), that is, the grounds of knowledge. In addressing this question, objectivists adopt positivist criteria. A positivist assumes that knowledge is hard, real and could be acquired from a position outside the site without a need for experience. On the other hand, an anti-positivist believes that knowledge is soft, spiritual and based on individual experience. In quantitative research, a researcher attempts to be distant and

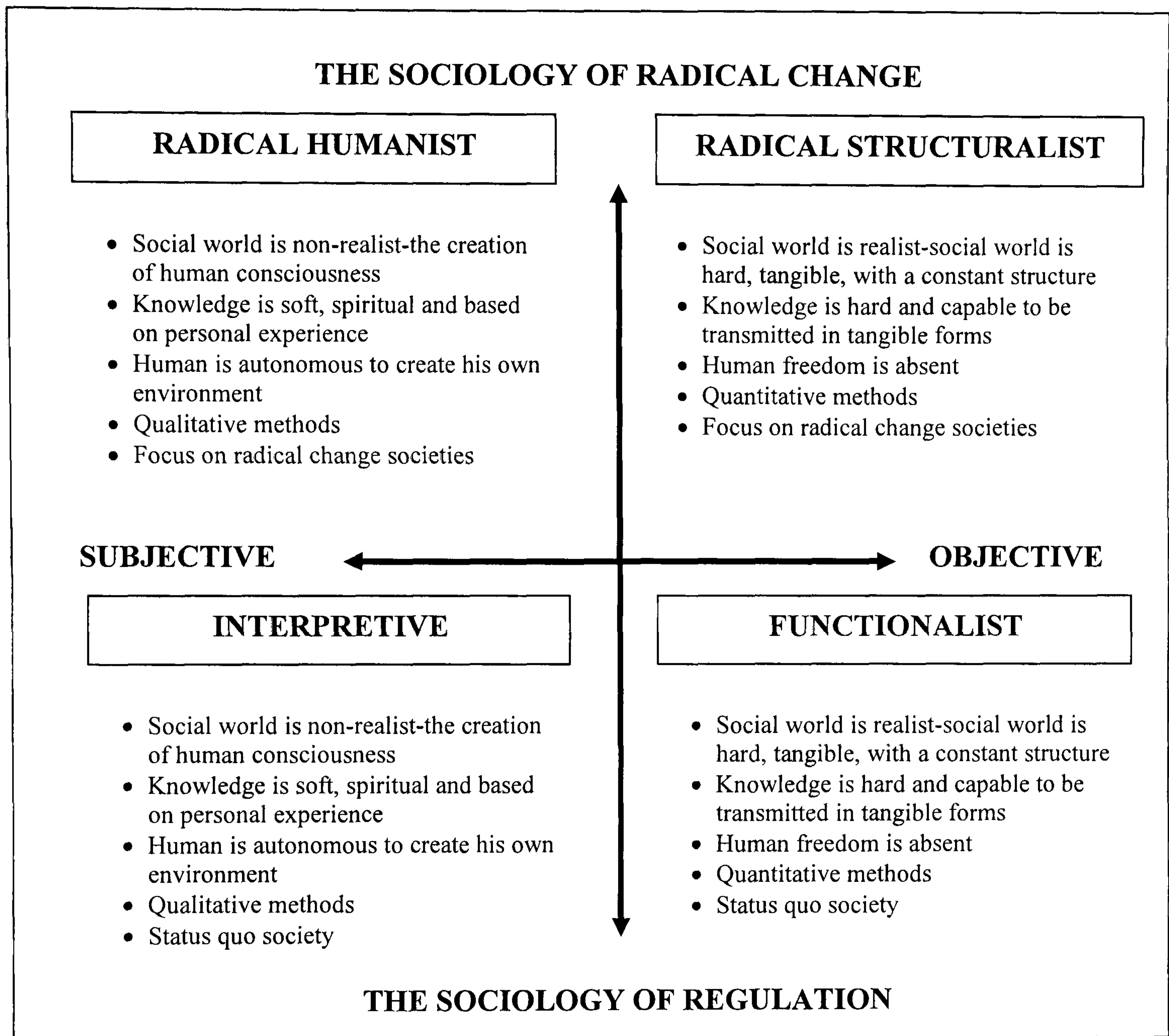
independent from what is being studied whereas in qualitative research a researcher is encouraged to interact with those being researched by means of participation, observation or collaboration (Creswell, 1994).

Methodology is the basic assumptions and underlying philosophy that a researcher uses in a research setting to achieve her/his intentions (Gioia and Pitre, 1990; Creswell, 1994). Strauss and Corbin (1998, p. 3) defined the methodology as “a way of thinking about and studying social reality.”

Human nature focuses on the relationship between human beings and their environment. Researchers’ methodologies and beliefs depend on each other and they clarify how researchers see the world and learn about it.

Burrell and Morgan (1979) provided their theoretical framework based on the idea that “all theories of organisation are based upon a philosophy of science and theory of society” (Burrell and Morgan, 1979, p. 1) and they argued that researchers approach their work during their implicit and explicit projects about the nature of social science. In their framework they categorised social science and society into four paradigms and each of these paradigms has its specific characteristics (see figure 4-1). This categorisation of the theoretical literature in accordance with its principal theoretical and philosophical assumptions facilitates the task for researchers. Burrell and Morgan (1979, p.23) explain this as follows:

“Each of the paradigms shares a common set of features with its neighbours on the horizontal and vertical axis in terms of one of the two dimensions but is differentiated on the other dimension. For this reason they should be viewed as contiguous but separate-contiguous because of the shared characteristics, but separate because the differentiation is of sufficient importance to warrant treatment of the paradigms as four distinct entities. The four paradigms define fundamentally different perspectives for the analysis of social phenomena. They approach this endeavour from contrasting standpoints and generate quite different concepts and analytical tools.”

Figure 4-1: Burrell and Morgan's Paradigm

Source: Burrell and Morgan (1979, p. 22)

4.1.1 Burrell and Morgan's Social Science and Society Paradigm

Burrell and Morgan (1979) developed a framework for understanding social science approaches to empirical research. They dealt with a worldview that defines the nature of the world, social world constituents and the possible relationship between the world and its social constituents. They classified and grouped the different theories related to social science and society into dimensions, namely the subjective-objective social world dimension on the horizontal axis of the framework and regulation-radical dimension on the vertical one. The two independent dimensions include four paradigms which are functionalist, interpretive, radical humanist and radical

structuralist (see figure 4-1). They are used as methodological frames of reference and form the basis for researching the social world.

4.1.1.1 Functionalist Paradigm

This paradigm adopts the objectivist view of the social world and the regulation and order of societies. It presumes that the social world is composed of concrete, hard and real relationships. The paradigm uses causal relationships that emerge from reality as an effort to explain social phenomena in society without any intention of changing it. Theory building within this paradigm involves a deductive approach, “testing” theory, rather than generating a theory (Gioia and Pitre, 1990).

4.1.1.2 Interpretive Paradigm

The interpretive paradigm adopts the status quo as a given. It is similar to the functionalist paradigm’s view which assumes that researchers can build theory without causing any change to society. It attempts to understand the meanings of social interaction and show how individuals construct social reality in social contexts from a subjective standpoint. The individuals are seen as active participants in the construction of the world emphasising the need to “understand the social world by obtaining first-hand knowledge of the subject under investigation” (Burrell and Morgan, 1979, p. 6). The objective of this paradigm is to describe and explain the phenomenon under investigation in order to understand and develop theory (Gioia and Pitre, 1990). The interpretive paradigm permits the research questions to emerge through the research process. It does not use predetermined research questions (hypotheses) that will limit the contributions of the research. Researchers’ interaction on the operational site will expand their understanding of the whole phenomenon being investigated and the relationships and interactions of the components of the

social world and the related society which will in turn increase the effectiveness of the research (Hopper and Powell, 1985).

4.1.1.3 Radical Humanist Paradigm

The concern of the radical humanist paradigm is to focus on radical change in societies from the subjective perspective. The objective of this paradigm is to “free organisation members from sources of domination, alienation, exploitation and repression by critiquing (describe and critique) the existing social structure with intent of changing (in order to change)” (Gioia and Pitre, 1990, p. 588). It shares the interpretive paradigm’s view of the subjective nature of the social world where the reality is merely a reflection of human cognition.

4.1.1.4 Radical Structuralist Paradigm

The radical structuralist paradigm adopts structural change from an objectivist perspective. It mainly focuses on changing or transforming the social order so it is similar to the radical humanist paradigm. It is also like the functionalist paradigm when it assumes that social reality is objective. The objective of this paradigm is “to understand, explain, criticise and act on the structural mechanisms that exist in the organisational world, with the ultimate goal of transforming them through collective resistance and radical change, to identify and persuade in order to guide revolutionary practices (achieve freedom through revision of structures)” (Gioia and Pitre, 1990, pp. 589-590).

4.1.2 The Factors Influencing the Selection of Interpretive Paradigm

In choosing an appropriate research paradigm for this study the researcher was guided by several influential factors, which are related to the researcher’s beliefs or to the nature of the research topic (Strauss and Corbin, 1998). Researchers should

choose their paradigm based on their ontological perspective and on the nature of the research topic. This researcher believes that social reality is constructed by human beings, therefore, it is subjective and it is the product of a researcher's cognition. In addition, the knowledge of the social world is subjective and acquired by personal experience. Thus, these place the research project at the subjective end of Burrell and Morgan's (1979) framework. That is, this research project excludes the radical structuralism and functionalism paradigms and it is likely to be located within the radical humanist paradigm or in the interpretive paradigm in Burrell and Morgan's (1979) framework. In attempting to determine which one of these two paradigms is appropriate, the objective of the research project is to understand and explore the current development and use of NFPMs by managers in commercial banks without any purpose of change. Therefore, this assumption eliminates the radical humanist paradigm. On the basis of the ontological and epistemological beliefs and the objectives of the research project, this research project is conducted within the interpretive paradigm which will provide the core concept of building theory and will provide a useful framework for analysing the use of NFPMs in the LCBS.

The nature of the research topic is another important factor that researchers should take into consideration when they select an appropriate paradigm. Strauss and Corbin (1998) believed that the nature of the research problem is one of the valid reasons for choosing an appropriate paradigm and a suitable methodology. This research project requires a methodology that assists the researcher to focus on exploring the current practice of NFPMs in commercial banks and the factors affecting this practice where there has been no previous study conducted in Libya concerning this subject. The literature has revealed that NFPMs' practices in the service sector in general and in the banking sector in particular still needs in-depth investigations (Fitzgerald et al., 1991; Berry et al., 1993; Hussain, 2000; Hussain and

Gunasekaran, 2002). Moreover, the existing literature about the phenomenon under investigation is mainly related to US and the UK cultures, which are completely different from the Libyan culture where the research project will be conducted. Consequently, it is difficult to suggest a priori assumptions (hypotheses); hypotheses derived from this literature may be irrelevant to the phenomenon under investigation in Libya. Strauss and Corbin (1998, p. 287) suggested that:

“However, if a foreign student is studying [abroad] but wishes to collect data in his or her own country, then most certainly he or she can use this method or other qualitative methods. It is important that other countries not borrow theories but instead develop their own one, ones that reflect their societies’ or citizens’ cultures and behaviours.”

Since the theory of the NFPMs in the banking sector is comparatively immature and not well developed, the researcher has selected the interpretive paradigm and its qualitative approach. The interpretive paradigm with its qualitative methods could provide a better understanding of the phenomenon under investigation (Tomkins and Groves, 1983) because it has the ability to allow “research questions to emerge from research process, rather than being predetermined at its outset, it is hoped that they will be more pertinent to the problems of the subjects” (Hopper and Powell, 1985, p. 447). Strauss and Corbin (1998, p. 11) also argued that “qualitative methods can be used to explore substantive areas about which little is known or about which much is known to gain novel understandings.”

The deductive approach may contribute very little when applied to different cultures and environments. Otley (1984) argued that deductive theories had rarely been translated into empirical investigations and that much of the empirical work undertaken had made little contribution to theory development, resulting in a pressing need for more theoretical work that is grounded in real-world observation. Interpretive theory building is inductive in nature. Inductive perspectives on research

are characterised by the belief that the researcher should begin with observation, since it is from the basis of observation that grounded theory will emerge. There is strong criticism in the literature (Chua, 1986; Colville, 1981) of both theoretical and empirical research projects conducted from a 'distance'. Therefore, the requirement for this research project was to bring the researcher as close as possible to the real situation of PMSs that organisations used.

The purpose of this research project is to investigate the NFPMs used in the LCBS as an exploratory study. There has been much concern about the descriptions and analysis of the environments in which accounting and management operate (Atkinson, 1998). This environmental analysis is required prior to formulating accounting theories. This kind of environmental analysis of social and economic aspects as an exploratory study can be provided in the interpretive paradigm and its qualitative methodology (Parker and Roffey, 1997). Furthermore, Chua (1986, p. 585) has argued that: "accounting research is hampered by a rarefied, asocial, image of theorising which is rooted in an implausible notion of scientific rationality". For this reason, exploratory studies need to examine interrelationships with their environment, culture and other influential factors, which could be achieved through the adoption of the interpretive paradigm and its qualitative approach which allows researchers to get close to participants, penetrate their realities and interpret their perceptions. Therefore, the qualitative paradigm was identified as an appropriate approach with which to explore and develop an understanding of the substantive research problem, representative of the 'natural' environment from which data were acquired.

Silverman (1993, p.21) pointed out that research conducted from the interpretive approach perspective is concerned "with observation and description and, at best, generating hypotheses." Gill and Johnson (1991, p.126) reported that the interpretive

approach seeks to “understand how people make sense of their worlds, with human action being conceived as purposive and meaningful rather than externally determined by social structures, the environment or economic stimuli.” The interpretive paradigm and its qualitative methodology are appropriate to understand the phenomenon being investigated in the LCBS context.

4.2 RESEARCH METHODOLOGY

In the previous section, the researcher has shown that this research project is exploratory in nature and located in the interpretive paradigm. The method for the interpretive paradigm is qualitative for generating hypotheses (Silverman, 1993). Such methods include case study, namely interviews, document analysis and observations (Yin, 1994). This method allows the researcher to explore in-depth the current development and use of NFPMs in the LCBS by being as close as possible to the individual, listen to them to gain a better understanding of their use of NFPMs in their natural setting and to build a theory based on their ideas (Tomkins and Groves, 1983; Creswell, 1994). In qualitative research, researchers use qualitative procedures rather than statistical procedures (quantitative) to collect and analyse data (Strauss and Corbin, 1990). One of the qualitative approach methodologies is grounded theory (Covaleski and Dirsmith, 1990) which allows for the development of an in-depth understanding of the phenomenon under investigation (Glaser and Strauss, 1967; Strauss and Corbin, 1990, 1994 and 1998; Glaser, 1992; Parker and Roffey, 1997).

4.2.1 Grounded Theory Approach

Grounded theory is a qualitative research approach that was developed originally by Glaser and Strauss in 1979. It also has become more commonly used in sociological and anthropological studies. Strauss and Corbin (1990 and 1994) reported that the

grounded theory and other qualitative research methods are similar in terms of the source of collecting data namely, interviews, observations and documents of all kinds but grounded theory emphasises theory development. In a grounded theory approach, hypotheses and theory are inductively generated from data (Jarvis et al., 1996).

Grounded theory is an invaluable research methodology for accounting researchers who study phenomena about which little is known (Hines, 1989). It offers a way of attending in detail to qualitative material in order to develop systematically theories about the data that is collected from observations and inquiries. Its analysis permits the grounded theory researcher to include wider implications that might hide behind the phenomena under investigation and promote a deeper understanding of accounting in practice. Strauss and Corbin (1990, 1994 and 1998) considered grounded theory as one of the research methodologies that encourages researchers to adopt an open minded approach during their fieldwork.

The lack of a theory about the NFPMs in the banking sector and the motivation for developing a theory encouraged the researcher to take an open-minded approach. Ferreira and Merchant (1992) suggested that field researchers should be open-minded specifically in the early stages of the field research process to learn from their field observations and not just impose a preconceived and immutable framework on them. Moreover, the flexibility of the grounded theory approach permits the researcher to go into the research site without having any hypotheses in mind and offers to the researcher more flexible procedures for understanding the phenomenon under investigation and for explaining why particular practices occur (Strauss and Corbin, 1990). Grounded theory enables the researcher to get answers to what, how, why, when and where questions about a particular phenomenon (Strauss and Corbin, 1990).

From the above arguments, the researcher decided to adopt the grounded theory developed by Strauss and Corbin (1990) as the methodological approach for this exploratory research project to understand the use of NFPMs in the LCBS where little is known. Following this methodology, the researcher will begin with a broad area of research, generate large volumes of non-standardised data, process them as they are collected, evolve meaning from the data and permit the hypotheses or theory to emerge from the data by using the flexible procedures and techniques for analysis of qualitative data which are given by Strauss and Corbin's approach (Strauss and Corbin, 1990, 1994 and 1998). These hypotheses can be tested in future research (Strauss and Corbin, 1990, 1994 and 1998).

4.2.1.1 Grounded Theory Definition

Grounded theory is one of the different methodologies in the interpretive paradigm (Covaleski and Dirsmith, 1990) which employs interpretive strategy for theory development (theory generation) and not verification (Artinian, 1982). Grounded theory is defined by Strauss and Corbin (1990, p. 24) as:

“A qualitative research method that uses a systematic set of procedures to develop and inductively derive grounded theory about a phenomenon.”

Glaser (1992, p. 16) defined the grounded theory as:

“A general methodology of analysis linked with data collection that uses a systematically applied set of methods to generate an inductive theory about a substantive area.”

Strauss and Corbin's explanation of grounded theory (1998, p. 12) is:

“Theory that was derived from data, systematically gathered and analysed through the research process. In this method, data collection, analysis, and eventual theory stand in close relationship to one another. A researcher does not begin a project with a preconceived theory in mind (unless his or her purpose is to elaborate and extend existing theory). Rather, the researcher begins with an area of study and allows

the theory to emerge from the data. Theory derived from data is more likely to resemble the ‘reality’ than is theory derived by putting together a series of concepts based on experience or solely through speculation.”

Grounded theory researchers start within a particular social context to research and allow the theoretical framework to develop during the process of study of the phenomenon under investigation. The analysis and processing of data collected aim to produce a well-constructed theory (Strauss, 1987). That is, many ideas will emerge from continuous interaction between data collection and analysis, then further data are gathered and analysed until the theory being constructed from the patterns found in the data is no longer being refined by future data (Strauss, 1987; Parker and Roffey, 1997). Therefore, researchers are able to understand the phenomenon better and this enables them to manage the complexity of the grounded theory approach. Researchers who adopt this methodology need to understand the world in all its real components and circumstances in order to provide a foundation for developing a theory which will be used as a basis for future explanation (Parker and Roffey, 1997).

4.2.1.2 Aspects of Grounded Theory

Discovery and theoretical sensitivity are the main aspects of the grounded theory methodology. A summary of these aspects are addressed in more detail in the following subsections.

4.2.1.2.1 Discovery

Glaser (1978) stated that the discovery process is an important task of grounded theory researchers who must discover what is there. Creativity is a fundamental factor of grounded theory methodology which assists the discovery process (Strauss and Corbin, 1990). Creativity means that, the researchers have the ability to code the

concepts and create appropriate categories that represent the underlying socially constructed reality of the particular study. It permits the researcher to make new insights with the data which help the researcher to avoid “conceptually thin and poorly validated research” (Strauss and Corbin, 1990, p. 94).

Grounded theory researchers are allowed to use multiple sources of data which increase the validity of subsequent explanation of the phenomenon under investigation in order to realise their objectives. These sources include interviews, archival documents, newspapers and others that relate to the phenomenon under investigation. This variety of sources enhances the researchers’ understanding and helps them to develop representative explanatory theoretical frameworks; it orients them toward identifying and articulating concepts and their properties and dimensions and their connections as explanations of patterned behaviour (Parker and Roffey, 1997; Lye et al., 1997).

4.2.1.2.2 Theoretical Sensitivity

Theoretical sensitivity denotes the capability of researchers to think about the data in a theoretical way. Strauss and Corbin (1990) refer to it as a researcher’s knowledge about the phenomenon under investigation. Strauss and Corbin (1990, p. 42) mentioned that:

“Theoretical sensitivity refers to the attribute of having insight, the ability to give meaning to data, the capacity to understand, and capability to separate the pertinent from that which isn’t.... you have a rich background of information that ‘sensitises’ you to what is going on with the phenomenon you are studying.”

Grounded theory requires researchers to enter the research site with different levels of knowledge depending on previous reading and their personal as well as professional experiences that are relevant to the area of investigation (Strauss and Corbin, 1990 and 1994). Although having such knowledge about the phenomenon

under investigation is a critical factor, the findings of the study using a grounded theory approach are developed from the analysed data not from any preconceived theory (Strauss and Corbin, 1990). Therefore, the researcher is required to think about the data theoretically and interact continuously with the data during the collection and analysis phases ask about any ambiguous meanings and then make conclusions after all the data have been analysed.

Parker and Roffey (1997) suggested that during the interactive processes between data and analysis of grounded theory research, researchers should do the following. First, inquire about the nature of the phenomenon under investigation, “what is really happening in this situation?” Second, stay conscious and sceptical about hypotheses that seem to emerge early in the study where additional testing is required. Third, validate the initial hypotheses or categories with reference to the data frequently and discard invalid categories.

This theoretical sensitivity can be enhanced by using several techniques such as inquiring, literature review, personal and professional experience, constant manoeuvring comparability and interaction with the data (Strauss and Corbin, 1990; Lye et al., 1997). These techniques provide researchers with the ability to associate concepts that have emerged from the data with the analytical procedures to get deeper in the data, related concepts and relationships. At the end of the research project, the researcher will have a thorough knowledge of the phenomenon under investigation and will be able to place the emerging theory in context with the existing theories and work on the project.

4.2.1.3 Approaches to Grounded Theory

In the relevant literature, there are two methodological approaches to grounded theory namely, Strauss and Corbin’s (1990) and Glaser’s (1992). They are similar in

generating core concepts and developing a theoretical framework and generating theory from the phenomenon under investigation. However, there are some differences between the two approaches of grounded theory. Parker and Roffey (1997, p. 222) have summarised these differences in three specific areas. First, the main problem of investigation is specified before the researcher selects the research site according to Strauss and Corbin's approach, whereas it is determined on the site of the study according to Glaser's approach. Second, Strauss and Corbin's approach is more detailed and structured in identifying a specific set of analytical procedural steps to help researchers with the interpretation process which includes specific procedures and techniques available to the researcher namely open, axial and selective coding. Strauss and Corbin specify codes as causal conditions, context, intervening conditions, action/interaction strategies and consequences and relate them to the main phenomenon for theoretical framework. However, Glaser prefers analytical procedures that are viewed as general methodology. His methodological approach relies on constant comparisons of events, perceptions and relationships. The result of comparisons is used to specify inconsistencies, contradictions and gaps (Strauss and Corbin, 1990, 1994; Glaser, 1992; Parker and Roffey, 1997). Third, Glaser has left the testing of the emerging hypotheses to other researchers interested in such a study. By contrast, Strauss and Corbin's approach focuses on verifying the emerging hypotheses to determine the likely validity of concepts and relationships between them (Strauss and Corbin, 1990, 1994; Parker and Roffey, 1997). Nevertheless, these differences between the two approaches do not affect the main core of the grounded theory because these differences do not indicate meaningful ontological or epistemological differences (Parker and Roffey, 1997).

4.2.2 Strauss and Corbin's Approach

To specify a particular grounded theory methodological approach for this research project, the researcher addressed other aspects of the two approaches. The more general frame of reference required by Glaser's approach could be difficult to operate while the Strauss and Corbin's approach is more practical and easier to implement (Parker and Roffey, 1997). Strauss and Corbin's approach has an advantage that its more structured procedures assist the researcher to handle a large volume of qualitative data gathered and to analyse this data for building theory (Parker and Roffey, 1997). Finally, Strauss and Corbin's approach saves the researcher time and resources because of its advantages over the Glaser's approach as mentioned above. From the above discussion and the similarity and the differences between the two approaches, the researcher decided to adopt Strauss and Corbin's (1990) grounded theory methodological approach for this research project.

4.2.3 Main Procedures and Techniques

Grounded theory methodology has procedures and techniques which can be used by researchers who conduct grounded theory research to develop a well-integrated set of concepts that provides a thorough theoretical explanation of the phenomenon under investigation. The procedural applications of the Strauss and Corbin (1990) approach will be followed for this research project. Strauss and Corbin's procedures will inform the collection and analysis of data in order to discover whether any theory or hypotheses emerge from the pattern found in the data. These procedures and techniques are discussed in more detail under the following sub-headings.

4.2.3.1 Theoretical Sampling

Theoretical sampling is a critical attribute of grounded theory methodology. It has important applications for theory building. Theoretical sampling is defined (Glaser and Strauss 1967, p. 45) as:

“The process of data collection for generating theory whereby the analyst jointly collects, codes, and analyses his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges.”

Parker and Roffey (1997, p. 231) identified theoretical sampling as:

“The process of sampling events, situations, populations and responses, making comparisons between the samples of responses, descriptions, and behaviours to guide the developing theory.”

Strauss and Corbin (1990, p. 176) defined theoretical sampling as:

“Sampling on the basis of concepts that have proven theoretical relevance to the evolving theory.”

Theoretical sampling is not statistical sampling which is a representative sample drawn from a population of a specific group. Theoretical sampling focuses on events, incidents and happenings which are important to the development of relevant concepts that will prove the theoretical relevance to the evolving theory. Concepts are deemed to be significant because they are repeatedly present or notably absent when comparing incident after incident and throughout the coding procedures they earn the status of categories (Strauss and Corbin, 1990). The theoretical sampling objective is to maximise the opportunities of comparing events and incidents to specify how categories vary in terms of their properties and dimensions. This will enable researchers to densify categories and distinguish between them in order to determine their range of variability (Strauss and Corbin, 1998).

Theoretical sampling is a cumulative, consistent and flexible instrument. In the initial sampling, researchers focus on generating as many categories as possible.

Once researchers have some categories, sampling is modified to developing, densifying and saturating these categories in a consistent and flexible manner (Strauss and Corbin, 1998). Sampling will continue depending on the findings of the research project and it is stopped by the researcher when the information collected from participants is repetitive and no new information is emerging. In that time, the theoretical sampling paradigm's elements are covered and the relationship statements between the categories have been validated for building theory (Strauss and Corbin, 1990; Parker and Roffey, 1997).

4.2.3.2 Memos and Diagrams

Memos and diagrams are an essential technique in analysis for grounded theory researchers. They enable researchers to keep records of analytical procedures during the open, axial and selective coding and capture ideas that derive from the various stages of the research process. They also provide researchers with enough freedom to observe the relationships between concepts and document them using any style of writing (Lye et al., 1997). According to Strauss and Corbin (1990, p. 198) memos and diagrams are defined as follows:

“Memos represent the written forms of our abstract thinking about data. Diagrams, on the other hand, are the graphic representations or visual images of the relationships between concepts.”

Glaser's explanation of the memos (1978, p.83) are,

“Memos are the theorising write-up of ideas about codes and their relationships as they strike the analyst while coding. Memos lead, naturally, to abstraction or ideas. Memoing is a constant process that begins when first coding data, and continues through reading memos or literature, sorting and writing papers or monograph to the very end. Memo-writing continually captures the ‘frontier of the analyst's thinking’ as he goes through either his data, codes, sorts and writes....The basic goals in memoing are to theoretically develop ideas (codes), with complete freedom into a memo fund, that is highly sortable.”

They begin at the early initial analysis and continue throughout the research process until the final writing. Memos and diagrams assist the researcher to obtain analytical distance from materials and data, to abstract thinking and then to ground these abstractions in reality (conceptualising) (Strauss and Corbin, 1990). Therefore, the conceptualising should be the main attribute of researchers' memos. Strauss and Corbin (1998, p. 223) stated that:

“Most important, the analyst should be conceptual rather than descriptive when writing memos. Memos are not about people or even about incidents or events as such. Rather, they are about the conceptual ideas derived from these. It is the denoting of concepts and their relationships that moves the analysis beyond description to theory.”

They can take several forms depending on their objective. Firstly, code notes and relate to the coding procedures. Secondly, theoretical notes relate to the final stage of the grounded theory and to building the theory. Thirdly, operational notes relate to the operational process. Finally, there is a mixture of these types (Strauss and Corbin, 1990).

4.2.3.3 Coding Procedures

Coding is the initial aspect of the data analysis in grounded theory methodology. Coding is a dynamic and flexible procedure that provides the linkage between the data and the theory (Lye et al., 1997; Strauss and Corbin, 1998). Strauss and Corbin (1990, p. 57) defined coding as:

“The operations by which data are broken down, conceptualized, and put back together in new way. It is the central process by which theories are built from data.”

The analytic procedures of grounded theory are designed to provide the grounded data, build the density and develop as well as enhance the theoretical sensitivity and integration needed to create rich, tight and explanatory theory rather

than only test theory (Strauss and Corbin, 1990). Analysis in grounded theory is based on three major types of coding which are: open coding; axial coding; and selective coding. The movement between one form of coding to another is allowed, especially between open and axial coding.

Coding techniques are allied with constant comparison, theoretical questioning, theoretical sampling and concept development procedures. Effective theoretical coding is enhanced by theoretical sensitivity (Glaser, 1978; Strauss and Corbin, 1990). The techniques of theoretical sampling and constant comparison are associated with theoretical sensitivity (Strauss and Corbin, 1994). Constant comparisons are used in coding procedures to discover specific categories and their properties and dimensions, to specify similarities and differences and to facilitate the development of grounded theory systematically (Glaser and Strauss, 1967). With regard to the techniques of theoretical sampling, each type of coding procedure has its specified theoretical sampling which guides the collection of data, open coding is related to open sampling, axial coding to relational and variational sampling and selective coding to discriminate sampling (Strauss and Corbin, 1990).

4.2.3.3.1 Open Coding

Open coding is the first analytical phase of the research project. Strauss and Corbin define open coding (1990, p. 61) as: “The process of breaking down, examining, comparing, conceptualizing, and categorizing data”. At the first stage of open coding, researchers decompose and check the data that is taken from interviews, observations and documents on a line-by-line, a sentence-by-sentence and a paragraph-by-paragraph basis to uncover incidents, ideas, events and happenings relating to the phenomenon (Strauss and Corbin, 1990; Parker and Roffey, 1997). After that, the researchers have to ask questions about each one of the incidents and events, (Strauss

and Corbin, 1990, p. 63) like: “What is this? What does it represent?” The researchers then compare incident with incident as they go along looking for similar incidents or events. The similar incidents or events are given the same name. These names are called concepts. Strauss and Corbin (1990, p. 61) defined the concepts as: “conceptual labels placed on discrete happenings, events and other instances of phenomena”. The concepts are fundamental elements in building theory. Blumer (1969) stated that the conceptualising data process is the fundamental step in analytical procedures. Blumer (1969, p.143) mentioned that:

“They are the means, and the only means of such connection (between theory and the empirical world), for it is the concept that points to such empirical instances about which a theoretical proposal is made.”

Once concepts begin to accumulate, researchers need to group the similar concepts together around a particular idea and give them names closely related to the data they represent. This process of grouping the concepts is called categorising and the given names are called categories which are more abstract than that given to their related concepts. Categories are considered the cornerstones needed to build a theory because they offer the means by which a theory can be integrated (Strauss and Corbin, 1990). A category is defined by Strauss and Corbin (1990, p. 61) as:

“A classification of concepts. This classification is discovered when concepts are compared one against another and appear to pertain to a similar phenomenon. Thus the concepts are grouped together under a higher order, more abstract concepts called a category.”

After that, researchers develop these categories by identifying the properties (attributes or characteristics pertaining to a category) of each category and each property is then broken down into its dimensions (location of properties along a continuum) (Strauss and Corbin, 1990). These properties and dimensions are important to identify and develop because they constitute the basis for building

relationships between categories and subcategories and for analytical procedures for creating a grounded theory (Strauss and Corbin, 1990). Strauss and Corbin's explanation of open coding (1998, p. 101) is:

“The analytic process through which concepts are identified and their properties and dimensions are discovered in data.”

In order to discover the largest number of categories, the researchers can use the open sampling connected with open coding to sample places, persons and situations that provide the greatest opportunity to gather the most relevant data (Strauss and Corbin, 1990). In fact, during these analyses, researchers begin to perceive patterns that form the foundation of theory building (Strauss and Corbin, 1998).

4.2.3.3.2 Axial Coding

Once the categories and their properties and dimensions have been established during the open coding, the researchers then put back the data around the axes of core codes. This procedure is called axial coding which is defined by Strauss and Corbin (1990, p.96) as:

“Axial Coding is a set of procedures whereby data are put back together in new ways after open coding, by making connections between categories. This is done by utilizing a coding paradigm involving conditions, context, action/interactional strategies and consequences.”

By using axial coding researchers are able to specify the relationships between open codes to create core codes which basically account for a substantial proportion of the variance in the phenomenon under investigation. In the axial coding the researchers' focus is on identifying a category (phenomenon) in terms of conditions (that aim to help the researcher to know why certain events occur), the context (properties), the action/interactional strategies which aim to help the researcher to know how individuals and organisations act or interact in response to certain

problems (conditions) and the consequences of these strategies. These elements form the components of a coding paradigm which is an analytical instrument devised to assist researchers to integrate conditions with actions and interactions (Strauss and Corbin, 1998). That is, through this coding paradigm subcategories are related to a category.

The phenomenon indicates the main idea, event, happening or problem in the data. It could be determined by repeatedly asking respondents questions such as: What is this data referring to? What is the action/interaction strategy meant to handle or respond to? The researchers ask these questions while the data are being examined. The researchers' focus is to search for repeated patterns of happenings and events or actions and interactions that can be found by tracing what individuals say and do. The phenomenon explained what is occurring. A subcategory is also a category that answers partial questions about the phenomenon. It is an enhanced category because of its ability to give more precise and complete explanations about a phenomenon (Strauss and Corbin, 1990 and 1998).

Causal conditions refer to the events or incidents that give rise to a phenomenon. They are often pointed to in the data by terms such as: when, while, since, because, due to and on account of. Moreover, researchers can define causal conditions without such terms by focusing on a phenomenon and examining their data for these events or incidents which precede it (Strauss and Corbin, 1990 and 1998).

Context indicates particular properties, dimensions and conditions pertaining to the phenomenon and specific conditions within which the phenomenon is managed and handled. Intervening conditions are the broader conditions which are outside of the phenomenon, which facilitate or constrain the strategies (actions/interactions) adopted for managing it (Strauss and Corbin, 1990).

Action/interaction refers to strategies taken to manage and handle a phenomenon. Actions/interactions have certain properties which represent their specifications. They are described as processual (sequences, movements, change over time), purposeful and goal oriented. Consequences are the results of action and interaction taken in response to or to manage a phenomenon. Strauss and Corbin (1990, p. 106) reported that:

“The consequences may be actual or potential, happened in the present or in the future... The consequences of action/interaction at one point of time may become part of conditions in another.”

Strauss and Corbin (1990) asked researchers to give their attention to the failed actions and interactions because of their consequences which are as important as successful ones. In this stage, researchers associated the axial coding with relational and variational sampling to uncover and validate relationships between subcategories, categories and the phenomenon under investigation with the purpose of specifying the variations of those relationships and to discover what happens when change occurs.

4.2.3.3 Selective Coding

Through the axial coding, the development of categories into their properties and dimensions and the specification of the relationship between the categories and subcategories have been achieved. Researchers then use the last technique of coding procedures which is selective coding to integrate all categories to determine the core category and build a grounded theory (Strauss and Corbin, 1990 and 1998). Selective coding is defined (Strauss and Corbin, 1990, p.116) as:

“The process of selecting the core category, systematically relating it to other categories, validating those relationships and filling in categories that need future refinement and development.”

The selective coding technique embraces several steps, which assist researchers to formulate the whole theory. The researcher writes a story line about the central phenomenon describing what is going on and identifies the core category from those categories emerging from the axial coding process. A story line is defined (Strauss and Corbin, 1990, p.116) as: “the conceptualization of the story.” Then, the researcher has to give the central phenomenon a name by looking at the list of categories to find if any one of them is abstract enough to encompass all that has been described in the story. If there is no single category broad enough, then the researcher has to create a name for the phenomenon. The chosen name becomes the core category which is defined as: “the central phenomenon around which all the other categories are integrated” (Strauss and Corbin, 1990, p. 116). Then the researcher defines the properties and dimensions of the core category and relates all the other categories that emerge from the axial coding in a systematic manner to the core category by using a paradigm to build a theoretical framework of interrelated concepts. The theoretical framework shows the paradigmatic relationships between the core category of the phenomenon, its conditions, context, action/interaction strategies that are taken to manage and handle it and their consequences (Strauss and Corbin, 1990). After that, the researcher examines the validity of the relationships against the data with the aim of determining whether they fit the data or not. If not, the researcher needs to go back using discriminate sampling associated with selective coding for verifying the story line and the relationships between the categories in order to identify the non-fit relationships and the reasons for the lack of fit and fill in categories that need refinement and development until the relationships are valid in relation to the data (Strauss and Corbin, 1990).

The grounded theory methodology enables the researcher to interpret ideas and events derived from the participants’ perspective by coding these events at different

levels, determining some categories and subcategories and then integrating them into a core category which forms a theoretical framework. “The categories are grouped along the dimensional range of their properties in accordance with discovered patterns” (Strauss and Corbin, 1990, p. 132).

The final outcome of the research process which is developed by the grounded theory methodological approach is presented in two levels which are substantive theory and formal theory. A substantive theory is “grounded in research on one particular substantive area” and “substantive theory is a strategic link in the formulation and generation of grounded formal theory” (Strauss and Corbin, 1990, p. 281). Strauss and Corbin’s (1990, p. 174) differentiation between the substantive and formal theory is:

“Any substantive theory evolves from the study of a phenomenon situated in one particular situational context.... A formal theory, on the other hand, emerges from a study of a phenomenon examined under many different types of situations.”

Strauss and Corbin (1990) suggested that in order to develop a substantive theory into a formal theory, researchers could do that by studying the phenomenon in other situations. Thus, the researcher is going to study the phenomenon in different organisations (banks) in order to generate substantive theory for every bank and then develop them into formal theory (hypotheses). These hypotheses can be tested in larger scale studies in the future for the purposes of generalisation.

4.3 RESEARCH METHODS

In previous sections, the researcher discussed the grounded theory methodology of the qualitative paradigm which was adopted to direct and guide this exploratory research project. This methodology will lead the researcher to collect and analyse the data by using a flexible approach that will allow the researcher to investigate in-

depth the phenomenon under study. The choice of the research methods for studying the phenomenon depends on the objectives of the study and its methodology (Scapens, 1990). Grounded theory relies on case studies as the primary data collection. This section deals with the appropriate research methods which will be used in this research project. The case study method approach was adopted as the primary research method for this research project. The next subsections will discuss the justification for using this method; the considerations that the researcher will take into account to use such method and the case study research design.

4.3.1 Case Study Method

To understand the phenomenon of MA practices, a case study is a manner of obtaining an in-depth view of the actual practices of MA in its organisational context (Scapens, 1990; Ryan et al., 1992; Yin, 1994; Parker and Roffey, 1997). “Case studies offer us the possibility of understanding the nature of MA in practice: both in terms of the techniques, procedures, systems, etc. which are used and the way in which they are used” (Scapens, 1990, p. 264). Case studies provide exploration of management accounting practices of real individuals in a work place and explanation of management accounting theories (Scapens, 1990).

The relationship between qualitative methodology and case study method is very well defined. Case studies provide a strong empirical foundation for the collection of qualitative data in generating theory about the real world (Burns and Kaplan, 1987; Scapens, 1990).

Using a case study method has facilitated the development of theory based on empirical evidence rather than testing of preconceived theories (Kaplan, 1986; Eisenhardt, 1989). Kaplan (1986, p. 442) stated that “case studies tend to be used more for hypotheses-generating than for hypotheses-testing.” A case study allows the

research process to be open and flexible and the actions of the researcher are not restricted or directed to prearranged goals or actions. It allows researchers to record interpreted reality which is constituted by the interaction between actors. Yin (1994, p. 13) defines the case study method as:

“An empirical inquiry that investigates a contemporary phenomenon within its real-life context when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used.”

Yin (1994) and Ryan et al. (1992) classified different types of case studies used in research including descriptive, illustrative, experimental, exploratory and explanatory case studies. Spicer (1992) addressed the classification of case study research and he grouped case studies into the following major categories. In the first place, descriptive and/or exploratory case studies seek to describe or explore reasons for particular practices. The majority of case studies go beyond the descriptive or exploratory purpose to generate hypotheses about the reasons for the observed practices. In the second place, informative or explanatory case studies are used to explain the reasons for observed practices. The distinction between exploratory and explanatory case studies is not completely clear. Yin (1993) suggested that case studies have been defined as exploratory when only the general aspects of the study design are determined in advance. However, it is the researcher who ultimately determines the distinction between the two categories; that depends on the nature of the research and the methodology (Ferreira and Merchant, 1992; Spicer, 1992; Ryan, et al., 1992).

In MA, exploratory case studies aim to describe or explore changes in accounting practices. They are used when there is insufficient knowledge to allow researchers to formulate hypotheses that can be tested using the deductive approach. The objectives of exploratory case studies are: to describe how and explore why

practices have changed and how and why new practices have been adopted. Examples of such exploratory studies in MA are the introduction and implementation of activity-based accounting systems and the studies of management accounting practices that related to advanced manufacturing technologies and AMPs (Spicer, 1992).

The use of the case study method is now more widely accepted for social science research (Silverman, 2001) and particularly for areas of performance measurement and management it is relevant where the phenomenon to be investigated is based in a real life context (Yin, 2003). It is particularly relevant to this research project as its use allows comparisons to be made and the similarities and differences to be found and used to build a theory. It is preferred when posing how and why questions in a real-life context. The case study method is appropriate when the focus is on a contemporary phenomenon and the researcher has little control of events (Yin, 1994) which are relevant to the phenomenon under investigation (NFPMs) and have not been investigated adequately.

This research project will be conducted to explore changes in specific management accounting practices. It is going to explore why practices have been changed and describe how practices such as NFPMs have been adopted. It aims to explore the NFPMs used in the LCBS as they exist in their organisational context. The traditional (Financial) performance measurement systems have been criticised and the need for new PMSs which include both financial and non-financial measurements have been suggested (as mentioned in chapter two).

In summary, the case study approach was adopted to provide rich and deep insights into PM practices in particular organisational contexts and to retain the “holistic and meaningful characteristics of real life events” that case studies provide (Yin, 1994). It is an appropriate research method for this research project because of

the following reasons: the objectives of the research project; the qualitative paradigm adopted; and the exploratory nature of this research project. The exploratory studies need: intensive case studies taking into account all their aspects and presenting detailed descriptions and analyses; direct contact with the organisations' staff in an attempt to provide more dependable knowledge. Moreover, the case study method allows the researcher to have a great degree of flexibility and motivates the researcher to get an adequate range concerning the amount of data to be collected, the collection procedures and the sources of information to be used (Yin, 1994). Case studies are able to stimulate insights in studying unexplored subjects, reveal more information for understanding relationships between actual variables and generate hypotheses for future research.

Researchers' awareness about advantages and disadvantages of the case study approach is a critical factor which can lead them to maximise the strengths and avoid the weaknesses of the case study approach. There are several advantages and strengths in adopting the case study approach. First, a case study gives researchers the opportunities to observe events, incidents and happening as they emerge in their natural setting (Yin, 1994). Second, researchers can use a variety of data collection methods such as interviews, observations and documents which increase the reliability of research findings (Ferreira and Merchant, 1992; Yin, 1994). Third, it allows researchers to recognise any discrepancies in information which will ensure further exploration (Ferreira and Merchant, 1992; Yin, 1994). Fourth, a case study can continue over a period of time which permits researchers to maintain a continuous trend of observations (Ferreira and Merchant, 1992; Yin, 1994). Finally, collected data and emerging findings can be constantly inspected and refined to enhance their reliability (Yin, 1987; Ryan et al., 1992).

In spite of such strengths of the case study method, it has also limitations and weaknesses which researchers have to take into their consideration so that they can be minimised. Those limitations and the suggestions that can be used to minimise them are discussed in the next sub-section.

4.3.2 Validity and Reliability

Validity and reliability are defined (McKinnon, 1988, p.36) as: “Validity is concerned with the question of whether the researcher is studying the phenomenon she or he purports to be studying” and “reliability is concerned with the question of whether the researcher is obtaining data on which she or he can rely.” Brownell (1995) reported that a good case design must satisfactorily address construct validity, internal validity, external validity as well as reliability. Some authors (for example Yin, 1984 and 1994; McKinnon, 1988; Eisenhardt, 1989; Spicer, 1992) introduced some ways to deal with the problems of construct validity, internal validity, external validity and reliability.

Construct validity necessitates that the phenomenon and the rationale for making an effort to explore it must be clearly identified. It can be reached by using: multiple data collection methods; creating a case study database; and maintaining a chain of evidence (Yin, 1989). Yin (1984) asked researchers to have the draft case study report reviewed by key informants for increasing construct validity.

With regard to internal validity, it creates a causal relationship whereby certain conditions are shown to lead to other conditions. Brownell (1995) suggested that researchers must make explicit the rival hypotheses and design their study in a way as to provide for their assessment. He argued that the identification of all rival explanations is practically impossible. A well considered strategy for data analysis and the use of a formal interview protocol as well as the above procedures for

construct validity reinforce the internal validity of the study results. Yin (1984) identified the following tactics: use multiple sources of evidence and build a chain of evidence, which can be used to assess the efficiency of rival hypotheses.

With regard to external validity, the case study method has been criticised because the findings derived from cases studies are not applicable to the whole population (Brownell, 1995). In the case study method, researchers attempt to expand and generalise theories [analytic generalisation] and not to itemise frequencies [statistical generalisation] (Yin, 1989). Yin (1989, p. 21) reported that “case studies, like experiments, are generalisable to theoretical propositions and not to populations or universes.” Similarly, Brownell (1995) mentioned that a case study should be considered as an experiment because case study research is like experimental research in that it aims to assess theories about the population of setting, place and time. The findings (hypotheses) from the case study approach need to be verified in the future to be generalised (Yin, 1987; Strauss and Corbin, 1990; Ryan et al., 1992). Spicer (1992, p.13) stated that:

“The objective of explanatory case research is not to draw inferences to some larger population based on sample evidence, but rather to generalise back to theory. In this sense generalisation from case studies proceeds in a way that is analogous to generalisation from experiments. An attempt is made to match the patterns of observations made in the case back to those suggested by theory. Replication may be sought by studying sets of similar and dissimilar cases. If these additional cases yield patterns of evidence which match back to theoretical patterns then it is possible to build support for the generalisability of the theory.”

To improve the quality of the case study method, Yin (1994) mentioned that the external validity is a standard which indicates the establishment of a domain for generalising the findings of a particular study. Yin (1984) maintained that researchers should use replication logic in multiple-case studies to achieve external validity.

With regard to the reliability, it indicates that the operations of a study can be performed again to arrive at the same findings (Brownell, 1995). This implies that reliability is directed toward the elimination of errors and biases in a case study. Yin (1989) proposed two tactics to maximise reliability. These tactics are: a case study protocol; and a case study database. Yin (1994) advised researchers to keep a detailed report of data collection that would enable them to replicate the procedures of a qualitative case study in another setting. Brownell (1995) asked researchers to document their procedures and data because if they repeat the study that would maximise the reliability of a case study. Yin (1984) suggested that researchers should perform the study as if someone were always looking over their shoulder to handle the reliability problem.

4.3.2.1 Threats to Validity and Reliability

The threats that are made to validity and reliability in case study research are: observer-caused effects; observer bias; data access limitations; and complexities and limitations of the human mind (McKinnon, 1988). These threats are discussed below.

The observer-caused effects are that the presence of a researcher on the phenomenon under investigation may influence the participants to change their behaviour and conversations (McCall and Simmons, 1969; McKinnon, 1988) and that, as a result, “the researcher is not observing the natural setting” (McKinnon, 1988, p.37). However, the case study method depends on the researchers’ perceptions about management’s meanings, not on some ‘objective reality’ as with other qualitative methods.

With respect to observer bias, it is defined as the leaning to observe the phenomenon in different way from the true observation (Simon and Burstein, 1985). McKinnon (1988, p.38) notices that “each researcher comes complete with a unique

set of biases which mean that the way in which an event is seen, interpreted and recorded may differ from one observer to another.”

With respect to data access limitations, the constraints that have been made to data access are: firstly, researchers may be on the site of study for only a limited period of time and that, as a result, they do not have chances to observe totally the phenomenon under investigation. Secondly, the chosen time to visit the site of study could be unsuitable for researchers to observe the actual events. Thirdly, data access restrictions may be imposed on researchers during their visits to the site of study.

With respect to the complexities and limitations of the human mind, McKinnon (1988) maintained that the complexities and limitations of the human mind may cause two types of threats to validity and reliability - for example, the participants might on purpose provide misleading data to the researchers. One can also argue, although participants try to be honest when they present data to the researchers, natural human tendencies and fallibilities may affect their statements.

4.3.2.2 Countering Threats to Validity and Reliability

McKinnon (1988) suggested some preventive tactics to overcome some of the threats to validity and reliability of case studies. These tactics include:

- a) The amount of time the researcher spends in the study site.
- b) The use of multiple methods and multiple observations.
- c) The researcher's social behaviour while in the study site.
- d) Note taking.
- e) Selection of some kind of participant observation.
- f) Team research.
- g) Choice of informants and respondents interviewing.
- h) The use of probing questions.

With respect to the problem of bias, McKinnon (1988, p.38) stated that:

“The nature of observer bias is such that it is a problem of management rather than elimination... The individual cannot be separated from them or ‘de-biased’ prior to his assuming the role of observer. Consequently, the approach to overcoming observer bias must proceed on an acceptance of its existence, and be directed towards what actions the researcher can take to protect the collection and analysis of data from the contaminating effect of their own bias.”

Researchers must take initiatives during the research design to eliminate these threats to validity and reliability. For this research project the researcher will take into account all these tactics except the use of team research.

4.3.3 Multiple Case Studies

Case study design can embrace a single case or multiple cases (Yin, 1994). A suitable number of cases depends on existing knowledge, the topic and to what extent further information can be achieved from extra case studies (Eisenhardt, 1991). Eisenhardt (1991, p.620) proposed that “multiple-cases are a powerful means to create theory because they permit replication and extension among individual cases.” Multiple cases also allow the data to be analysed and compared to identify similarities and differences that provide the basis for building theory (Spicer, 1992). Multiple-case studies are a powerful means to create theory because they help researchers to pursue any missing and unclear points in the data and provide more confidence in the results (Brownell, 1995; Yin, 1994). Brownell (1995, p. 66) cautioned researchers from the key risk with a single case study when he reported that “the prospect that a rival explanation of what is found in the study is not uncovered and that suffers, as a result, from an internal validity weakness.” Ryan et al. (1992) mentioned that one case study cannot allow hypotheses to emerge because its objective is to explain the particular circumstances of the case. Therefore, they suggested that multiple case studies could protect against this risk by providing

further settings within which the rival hypothesis is given a chance to surface. Because of the risk associated with the single case study, multiple cases were chosen for this research project.

4.3.4 Multiple Data Collection

A case study implies multiple data collection sources such as documents, archival records, interviews and observation allowing researchers to carry out a complete inspection of the study (Eisenhardt, 1989; Simon and Sohal, 1996) and can also help to avoid subjective bias. In-depth investigation of the phenomenon gives the researcher deep knowledge which allows new insights about the subject to emerge. The findings from using a case study method with multiple data collection sources are often more persuasive than that from a survey. Scapens (1990) and Parker and Roffey (1997) suggested the use of multiple data sources in interpretive research as a means of increasing the validity of management accounting research.

4.3.5 Research Design

4.3.5.1 Case Study Research Design

A case study design depends on the objectives of the research project. Depending on only one case study can be unreliable (as mentioned above). Therefore, the researcher decided to undertake four in-depth case studies which were conducted in the LCBS. Four case studies would be manageable providing enough studies to make cross-case analysis worthwhile. The researcher will take into account the aforementioned procedures and techniques in designing the case studies of this research project to obtain quality data from these case studies which will be informed by grounded theory.

4.3.5.2 Data Collection Methods

Grounded theory uses case studies as the primary data collection method. The main sources of data collection used in case studies include interviews, document analysis, direct observation and participant observation (Brownell, 1995). Researchers need to be aware about them and need to be prepared to follow them up in an appropriate way (Scapens, 1990). For this research project, the researcher decided to collect data using interviews, document analysis and observation. The researcher will collect adequate data not only about the research problem but also about each organisation as a whole. Ferreira and Merchant (1992) mentioned that the case study research should include sufficient data on different aspects of the organisation. A summary of each source of data collection is presented under the following sub-headings.

4.3.5.2.1 Interviews

The most important evidence that the case study researcher can get, is from interviews (Brownell, 1995). They are categorised into unstructured; semi-structured; and structured interviews (Sekaran, 1992; King, 1994; May, 2001). The unstructured interview is the most common used in qualitative studies (Sarantakos, 1998). In this type, case study researchers enter the interview setting without defined detailed questions that they would be asking the participant. The wording of the questions, the order of questions and the interview schedule are not restricted. On the other hand, structured interviews are applicable when researchers know exactly what information is needed and they have predetermined questions for the participants (Sekaran, 1992).

The advantages of interviewing as a research method (Sarantakos, 1998) are: it provides researchers with a means of flexibility to deal with different situations; it results in a high response rate; it is easy to administer; it enables the researcher to

observe non-verbal behaviour; it gives researchers an opportunity to correct any misunderstood information; it enables researchers to use more complex questions because their presence can assist in clarifying any question. The researcher decided to employ semi-structured and open question interviews using the research objectives as a basis for asking questions. When the researcher needs any explanations of any ambiguous replies, she will ask participants by using open questions such as “Please, could you give me more explanation?”, “What does it mean?”, “Could you give me an example?”, “Why do you use this procedure?”, “How do you use this thing?”. Or any other similar open question will be used depending on the situation. Therefore, it is important that the researcher is open-minded but not empty-minded (has theoretical sensitivity) to ensure the collection of sufficient and relevant data but the researcher should not introduce her own knowledge and experience to influence the participants and then the research.

Taylor and Bogdan (1984) mentioned that the keys to successful interviewing are: researchers have to pay attention to what the interviewee is saying and need to have a high degree of sensitivity and seek constant clarification. The questions that were used during the interviews for all four case studies were:

- a)** What important aspects of non-financial performance are being measured and tracked in your bank? (Research objective 1).
- b)** What is the role of management accounting concerning NFPMs? (What information about NFPMs is reported to managers? How often? Do you use any information related to NFPMs in your decision making? Are NFPMs included in the annual Budget? (Research objective 2).
- c)** What are the motives for using NFPMs in your bank? (Research objective 1, Neely, 1999)
- d)** What are the internal and external environmental factors that influence (positively or negatively) the use of NFPMs in your bank? (Research objective 3).

- e) What strategies, plans and processes has the bank's management adopted in conjunction with the use of NFPMs? (Research objective 1; Otley 2004).
- f) What are the impacts of using NFPMs? (Research objective 4).
- g) Is there any relationship between the use of FPMs and the use of NFPMs? If so, what kind of relationship? (Research objective 4).
- h) What is your view about NFPMs?

4.3.5.2.2 Document Analysis

Documents will be inspected because they give the researcher other important evidence in addition to the interviews about personalities and participants and about behaviour which the researcher observes. Brownell (1995) suggested that the case study researcher should look for the documentary evidence which will assist in the establishment of construct validity of the phenomenon. It may contain details about the final reporting, the reporting system that related to PM, the control system, the hierarchy of the organisation, the organisation's objectives, management strategies and any other relevant document.

4.3.5.2.3 Observation

Observation is another way to gather and to record information about the processes, activities and people and their behaviour in their natural work environment by describing what they actually do (Sekaran, 1992). It is the researchers' own written record about what they have seen (Brownell, 1995). Therefore, researchers should have the ability to know what should be recorded and how to record in a reliable and accurate way for valuable data.

4.3.5.3 Site Selection

Having selected the grounded theory methodology informed by the Strauss and Corbin approach; the case study method; and the interview, documentation analysis and observation methods to be used for collecting data, the site of the case study was

also specified before conducting the case studies. Patton (1987, p.51) contended that the main factor in selecting and making decisions about the appropriate site of the case study is to decide “what unit it is that you want to be able to say something about”. This research project has focused on the NFPMs in the banking sector (commercial banks) in Libya and this sector was selected as the site for the cases for a number of reasons. Firstly no previous study has been conducted in the use of NFPMs in the Libyan commercial banks. Secondly, this sector is economically and socio-politically important for Libyan society. The banking sector in Libya has been used to encourage economic development. Thirdly, the Libyan economy has been passing through a period of development and reform such as privatisation, establishment of new private banks and the entry of foreign banks to the banking market. The fourth reason for choosing the banking sector is that the researcher had some prior familiarity with it having done her masters degree in cost accounting in the LCBS. Therefore, exploring the use of NFPMs in the banking sector may provide useful information for improving and developing this Sector. This could consequently result in the improvement and development of the Libyan economy as a whole.

The researcher’s selection of case-banks for in-depth investigation is made on the basis of the following criteria. First, easy accessibility into the banks and the participants’ willingness to be interviewed are essential in this type of research method. The ability to collect effective data without any fear of stopping the study or eliminating some data is necessary to obtain reliable hypotheses. Second, the degree of the bank’s development is another important factor related to the subject of this research. The use of NFPMs is associated with well-established organisations to ensure their future success (Brignall, 1997). Therefore, the researcher chose these four Banks which represent successful cases among the Libyan banks.

With respect to the number of case-studies to be conducted, while there is no perfect number of cases, the choice of between 4 and 10 cases is recommended by Eisenhardt (1989, p. 545).

“A number between 4 and 10 case studies usually works well. With fewer than 4 cases, it is often difficult to generate theory with much complexity, and its empirical grounding is likely to be unconvincing, unless the case has several mini-cases within it... with more than 10 cases, it quickly becomes difficult to cope with the complexity and volume of the data.”

Yin (1994) stated that in multiple case designs, it is not possible to specify with any rigour how many cases should be incorporated. Therefore, the choice of four case studies for this research study was subjective (Yin, 1994). The Libyan commercial banks are categorised under two type of ownership which are State (public) and private banks. So the researcher could cover these two categories, therefore, the researcher has chosen two case studies (Bank B and Bank C) which represent the State banks and two other case studies (Bank A and Bank D) which represent the private banks with more than five years in the banking market.

With respect to the period of time, on average, six and half weeks were spent on each case collecting data through various methods (details will be provided in individual case study Chapters). With respect to the accessibility to data, the four Banks were contacted by letters (one from the University of Dundee and another from the University of Garyounis), addressed to the top manager in the head office of each Bank (Chairman, Vice Chairman, General Manager or Deputy General Manager) asking for permission to enter the head office and some of the Bank's branches to interview managers at all management levels. These letters explained the objective of the study and the possibility of helping the researcher by providing the necessary data (see Appendix 4-1; 4-2a and 4-2b). Then each Bank's top manager

charged one member of the executive management to be at the disposal of the researcher in order to facilitate her task.

4.3.5.4 Data Analysis

Determining the unit of analysis is an important step to be handled in any research design since it assists in specifying the researcher's boundaries. The unit of analysis can be considered as part of a case study research design. The choice of the suitable unit of analysis results from accurately identifying the primary research question. Also, in multiple case studies research, the unit of analysis should be similar in order to allow comparisons and specify the similarities and differences. Therefore, it could be a person, department, management level, organisation, sector or economic policy (Yin, 1994). The unit of analysis of the phenomenon under investigation is difficult to specify because of the nature of the subject. The subject the researcher intends to explore is NFPMs. The appropriate unit of analysis for this subject is an organisation because the phenomenon of NFPMs is spread throughout the organisation. For instance, the quality of service is the responsibility of many departments and through different management levels and not just one department or one management level. Therefore, the researcher chooses the organisation as the unit of analysis for this research project.

The method of analysis of the collected data adopted was the grounded theory informed by Strauss and Corbin (1990). Strauss and Corbin have provided a formula for generating theory which embraces specific coding procedures. It provides a systematic way to analyse the enormous amount of data associated with the case study research. The approach consists of three types of coding: open coding focuses on classifying the collected data labelling it in concepts and their properties and dimensions; axial coding focuses on the grouping of similar concepts to help create a

foundation of theory building; and selective coding is the stage categories are integrated around core category to form a grounded theory (hypotheses). A detailed explanation of the data analysis is presented in section two of this Chapter. These procedures will be followed for each case study. Case study method analyses data for each unit/organisation (bank) separately but also includes comparisons across units/organisations (banks) (Glaser and Strauss, 1967; Spicer, 1992). The hypotheses emerging from the individual case are regarded as substantive hypotheses (Strauss and Corbin, 1990). These substantive hypotheses, then, will be compared in a cross-case analysis (Strauss and Corbin, 1990; Miles and Huberman, 1994) to discover the similarities and differences (common patterns) across all four cases in order to develop formal theory (hypotheses) (Strauss and Corbin, 1990), which will be regarded as the main findings of this research project.

4.4 APPLICATIONS OF GROUND THEORY FOR ALL FOUR CASE STUDIES

At first it was difficult to gain access to these case studies. Therefore, the researcher had to use her contacts in these banks to convince the management of these banks to participate in this research project. The researcher used semi-structured interviews as a method to collect the data. During the first visit to each Bank the researcher tried to get an overview of all the Bank's strategies, systems, units and products. The researcher conducted the case studies by interviewing, observing and inspecting documents.

The researcher made a conscious effort to gain the trust of the executive management and other management levels and confirmed to managers and employees that the interview data would be dealt with confidentially, even within the Banks. The researcher will respect her pledge and keep the cases anonymous. The

interviews were conducted in the interviewees' offices at the Banks' premises. The interviews were not recorded according to the interviewees' wishes. Therefore, the researcher had to write everything carefully and sometimes she wrote summaries and key words. After each interview finished, the researcher immediately wrote up the interview in detail. Data collected during observations and conversations was not recorded until the researcher left the site and then the notes were written up.

The issue being investigated was the implementation of NFPMs in the LCBS. The researcher's main methodology is the grounded theory informed by Strauss and Corbin and the case study method with semi-structured interviews. During the interviews, the researcher asked open and broad questions which allowed the researcher to be more flexible, independent and objective when she was exploring in depth the phenomenon under investigation. The researcher used broad questions to try to ensure that she did not introduce her knowledge to influence the discussion during the interviews. The researcher made great efforts to ensure the neutrality of each case study. At the beginning of the interviews, the researcher gave the interviewees some information about the definition of the grounded theory approach because she thinks that this methodology has not been used before in the Libyan environment. After that she then opened the discussion by asking the general research questions which were focusing on the objectives of the research (see research questions above). The researcher used these questions just to allow the interviewees to talk specifically and openly about the topic and then the researcher guided the discussion by asking for more details, explanations and examples such as "can you explain this in more detail?" or "can you give an example?" which assisted her to explore the research subject in depth.

The researcher set a condition for managers and employees to be interviewed, namely, they had to be from either the executive management level or the operational

management level, because some people think that NFPMs are operational measurements and are used by operational managers and others believe that these measurements have to be used by the executive level of management. Therefore, the researcher conducted some interviews with the head officer managers and others with the managers from the Banks' units in different areas of Libya.

The researcher did not have any specific hypotheses and did not know which concepts were going to emerge from these case studies. The data collected from the research sites were analysed in accordance with the grounded theory methodology of Strauss and Corbin. The methodology has analytical procedures, namely, open, axial and selective coding. This detailed open coding enabled the researcher to obtain initial related points. The researcher identified, summarised and listed the main points (concepts) raised from each interview and each case. These points were compared and the relationships between them were noted with a view to facilitate and develop coding procedures.

The major aim of coding and comparing data is to classify the ideas that have emerged from the data and analysing related points (concepts) and giving these a label. These labels depicted the major idea from related points and each label should associate with the data it describes. For instance, from Case Study A, the DMAPD stated that "the regulations and publications of the CBL have prevented this Bank from achieving customer satisfaction sometimes." The VCDGM mentioned that "the Board of Directors has to get acceptance from the CBL to produce any new service or to discharge banking transactions." The CGM also pointed out that "the constraints imposed by the CBL have impeded this Bank's activities." These interviewees and others talked about regulations and instructions of the Central Bank of Libya and accordingly the researcher decided to give these points a label namely "the Central Bank of Libya's regulations" which represents the interviewees' points.

Finally, these labels were checked off making sure that all the labels had been considered.

The researcher decided to group all related labels in appropriate categories. Understanding the relationship between the phenomenon and the labels gave rise to several categories emerging, which led the researcher to specify the fundamental categories. Using the Strauss and Corbin's paradigm model will assist the researcher to associate labels to the focal category. Strauss and Corbin's paradigm model relates labels to the phenomenon in terms of causal conditions, context, intervening conditions, actions/interactions strategies and consequences. However, the researcher has made minor adjustments to the paradigm model, using internal environmental factors (which are the influencing factors within the organisation's boundary) as contextual conditions and external environmental factors (which are the influencing factors outside the organisation's boundary) as intervening conditions. These adjustments are allowable according to the Strauss and Corbin approach (Strauss and Corbin, 1998). The tables inside every case study display the main categories that the researcher specified and developed from analysing the data from each case study. Then the researcher tried to specify the relationships between category labels and the focal category of each case study, which is NFPMs. In addition, the researcher will develop some hypotheses which emerge from the relationships between the focal category and other related categories of each case study and these relationships will be described in the researcher's model.

4.5 CONCLUSION

This Chapter has provided an overview of the four paradigms of Burrell and Morgan's framework and presented the methodological frames of reference as the

basis for the research. The methodological basis for this research project is located in the interpretive paradigm using grounded theory.

Grounded theory is a qualitative interpretive approach and the grounded theory approach adopted for this research project is the approach developed by Strauss and Corbin (1990). Strauss and Corbin (1990) have introduced a formula for building theory which includes particular techniques such as data collection, coding procedures, theoretical sampling, memos and diagrams which enhance the researcher's abilities to build theories systematically.

Also, an overview of the case study approach was presented explaining the nature of the case study approach, limitations of the case study method and ways of minimizing such limitations. The research design also was discussed. Four in-depth case studies will explore and provide an understanding of the use of the NFPM system and the related environmental factors in the LCBS. Within the case studies three data collection methods namely interviewing, document testing and observing will be used. Finally, applications of grounded theory for all four case studies were presented explaining the use of this approach.

The use of NFPMs was investigated in-depth in four case studies. These four case studies were conducted in four of the Libyan Commercial Banks: two in State (public) commercial banks and the other two in private commercial banks. Each of the four case studies is presented in a separate Chapter. The four case studies follow in Chapters five to eight.

CHAPTER 5

BANK A

5.0 INTRODUCTION

Bank A is one of the private commercial banks in the LCBS. The case study is divided into nine sections. Section one gives details about interviewees and the background of the Bank. The data analysis is discussed in section two. Section three investigates the motives for adopting NFPMs. Internal environmental factors that influence the use of NFPMs are discussed in section four. Section five reports on the external environmental factors affecting the use of NFPMs. The strategies that are used by Bank A's management in conjunction with the implementation of NFPMs are discussed in section six. Section seven discusses the consequences of using NFPMs. Section eight reports the findings from this case study in terms of Strauss and Corbin's paradigm model. Lastly, section nine concludes with the substantive hypotheses emerging from this case study.

5.1 INTERVIEWEES' AND BANK'S BACKGROUND

5.1.1 Interviewees

The interviews were conducted over a period of seven weeks, during which sixteen semi-structured interviews were completed. During the first visit to the Bank, the researcher met the Chairman/General Manager of Bank A who gave the researcher an overview of all the Bank's objectives, strategies, systems, units and products; the researcher then conducted the case study by interviewing, observing, and inspecting documents. Most interviews lasted at least one and half hours, some lasted two hours, and one lasted three hours, and three interviewees were interviewed twice (see Table 5-1), because the interview time was insufficient for them to complete their

discussion and they were very busy. Some of the interviews were conducted during the working day and the others were conducted after working hours at the interviewees' offices in the Bank's premises. Table 5-1 shows some details about the interviewees who participated in this case study such as job title, interviewees' experience and qualifications and the number of interviews.

Table 5-1: Profile of Interviewees and Number of Interviews Conducted

Job Title	Symbol	Number of Years with Banking Sector	Number of Years with This Bank	Number of Years in Current Job	Qualification	Number of Interviews
Chairman/General Manager	CGM	38	11	11	MSC in Accounting	2
Vice Chairman and Deputy General Manager	VCDGM	27	5	5	Bachelor of Law	1
Manager of Inspection and Audit	MIA	36	4	4	Bachelor of Law	1
Deputy Manager of Administration and Personnel Department	DMAPD	9	9	4	BSC in Accounting and Business Administration	2
Manager of Credit Department	MCD	19	3	3	MSC in Finance	2
Deputy Manager of IT	DMIT	4	4	1	BSC in Accounting	1
Head of an Agency	HAHA	15	4	1	High School Certificate	1
Head of an Agency	HABA	15	6	2	BSC in Economic	1
Head of an Agency	HAFA	9	9	2	BSC in Management	1
Head of Accounts of a Branch	HATB	5	5	1	BSC in Accounting	1
Employee in Accounts Department Head Office	EADHO	3	3	3	BSC in Accounting	1
Manager of a Branch	MBMB	9	9	1	BSC in Accounting	1
Head of a Business Centre	HAABC	7	1	1	High Diploma in Accounting	1
Total						16

The researcher followed the steps and conditions that were mentioned in the previous chapter (see Chapter 4 for more details). During the interviews, the

researcher asked open and broad questions which concentrated on the research objectives (see Chapter 4 for research questions). She also tried to ask for more explanation and examples which helped her to investigate the research problem in-depth - the use of NFPMs in the LCBS.

5.1.2 Bank¹

Bank A is a private commercial bank operating in the Libyan market that has been dominated by five State Commercial Banks (SCBs) since the Revolution of 1969. The founders considered that the market was ready for more modern and more efficient services than provided by the SCBs. It was established in the mid 1990s in accordance with statute number (1)1993 and its amendments.

Bank A started operations as a joint stock company and is widely acknowledged to be Libyan's most capable and innovative commercial bank. Bank A is based in Benghazi - Libya's second city - but most of its business goes through its Tripoli branches, which confirms that the Bank's regional base has not been a major impediment to its business development. Bank A is a member of the Union of Arab Banks, a member of the Association of Libyan Banks and a member of the Union of AL-Magreib Banks (Arabic Western Banks Union).

The Bank was established with capital of under LD 10 Million. In 2002 the capital was increased because of the devaluation of the Libyan Dinar. In early 2005, the Shareholders' Meeting also decided to increase the capital to around LD 50 million by the beginning of 2007 to meet the Basle II conditions that the CBL decided to implement in the Libyan banking sector. Bank A has concentrated on direct national investments both private and public. It invested more than LD 30

¹ The information in this section is taken from Bank A's annual reports (1997-2003), the Basic Regulations of Bank A, interviews with Bank A's employees, Bank A's publications and the CBL's publications.

million in 2003. Bank A adopts a policy of caution and conservatism when considering credit facility applications, whether in the form of commercial loans or overdrafts. Although the practice in other banks, whether international or local, is to grant loan ratios ranging from 50% to 70% of total deposits, Bank A adheres to its conservative policy of granting approximately 10% of its deposits as loans. The Bank hopes to grant secured long-term loans jointly with the other commercial banks to finance various economic activities such as agricultural, industrial, and services which will generate guaranteed returns for the shareholders. The manpower of Bank A increased in all areas to reach approximately 300 employees in 2003 and all the staff are of Libyan nationality.

Since Bank A started, it has built its dominant position in the domestic national market as a commercial bank from its Head Office and one main branch to reach almost 50 units including branches², agencies³, business centres⁴ and children agencies⁵ (young people's banking agency) in 2003. During the life of the Bank, in spite of the economic and other difficulties faced and imposed on Libya (such as the US embargo), Bank A has achieved a strong reputation.

5.1.2.1 Bank's Ownership

Bank A's ownership is widely dispersed. Libya's banking laws require that no enterprise can own more than 5% of a bank and that the limit for any individual is 1% and 2% for families. Bank A's founding investors (shareholders) were legal and natural persons. The number of these shareholders totalled less than 4000 including

² Branch is unit that provides all the Bank's services to its customers.

³ Agency is unit smaller than branch and provides some of the Bank's services to its customers.

⁴ Business centre deals with Legal Person's Accounts such as business account of partnerships, corporations, public companies, travel agencies, airlines, embassies and foreign companies.

⁵ Young people's banking agency deals with all banking transactions related to children's saving accounts and is equipped with Library, art studio, and a modern information technology hall to provide some free activities for young people. This idea is drawn from one of the Jordanian Banks.

public and private corporations, organisations and individual shareholders. The Chairman and his family are minority shareholders.

5.1.2.2 Bank's Management

The Bank is managed by a Board of Directors which consists of a Chairman and six members who are elected at the Shareholders' Meeting. The Chairman of the Board of Directors also performs the function of the General Manager of the Bank. The dynamic Chairman/General Manager dominates the management. He is widely respected within and outside the Bank. Under the Chairman, managers appear to be well motivated and efficient. Bank A has attracted highly qualified, experienced and energetic managers from State banks (the majority from Wahda Bank), which has been an essential ingredient of its success. They have been attracted by a more dynamic future, higher salaries, and performance-related bonuses.

The Chairman/General Manager and the majority of the management team have been in place from the date of establishment of the Bank. The Chairman is a driving force behind the Bank, and this inevitably raises questions about management succession. Moreover, senior managers are of a similar age, although they have several more years before retirement and the Bank has worked to develop a cadre of younger officers over the medium term to take over senior roles. From the establishment of the Bank the management has adopted a customer-focused strategy and the executive management has recruited staff accordingly.

Bank A's management capability is evident not only in terms of generating strong operating results but also in its strategic vision. Bank A's lower and middle level management have enjoyed a long-standing relationship with its senior

management and they work as one family in all Bank A's units⁶, which has provided it with stability and continuity.

5.1.2.3 Bank's Organisational structure

Bank A's organisational structure is relatively flexible and is consistent with the Bank's strategies and long-term objectives. Because of the expanding activities and adopting AT, managers believe that the current organisational structure needs to be harmonious with the competitive environment and management strategies and it also needs to be less centralised while providing co-ordination between the Bank's units. Therefore, the Board of Directors has decided to add new departments such as banking services and systems and divisions such as banking service marketing in order to be consistent with the competitive environment and its strategies.

5.1.2.4 Bank's Management Objectives and Strategy

Bank A's strategy aims to strengthen its national position of being the commercial banking leader by developing its banking and commercial services. Bank A's vision is "to be the bank favoured by everyone". In addition Bank A's mission is "to provide the best, highest quality, and most reliable and fastest modern banking services, to introduce the most advanced technologies and methods used in the banking industry and human resources, to satisfy its customers by providing diversified products and services to meet their varied purposes, needs and activities, and gain significant community acceptance". The objectives of Bank A are "to meet its customers' expectations and gain their satisfaction, be always in the forefront, increase Bank's business and multiply its financial indicators resulting in reduced costs, increased profits and returns on its shareholders' equity and guaranteeing them a lucrative dividend ratio every year. It holds as a principal objective the

⁶ Bank A's units include branches, agencies, business centres and the departments of the Head Office.

development of its human resources. It aims to hone their skills by providing them with care and continuous local and foreign training in theory as well as the practice of their tasks, and outstanding employees are rewarded. Bank A has extensive training programmes for its employees with an eye to increasing customer service and satisfaction. Amongst its goals the performance has to be as one family in all its units under the guidance of the Bank's top management".

Bank A's competitive environment has driven the executive management to adopt an offensive strategy, in order to build its market share. The Chairman/General Manager said that "the Bank takes the transaction from the lion's mouth." The management has adopted a customer-oriented strategy. Focusing on enhancement of its critical success factors, Bank A has invested in advanced technology machines with improved functionality, such as a phone banking system, home and internet banking. It also enables units' employees to be more involved with customer development. Bank A signed a contract with a foreign consulting company. This consulting company covered many aspects that related to the improvement of Bank A's performance. The Chairman/General Manager mentioned that benchmarking is used in Bank A. He argued "no one can say that the company performance was good or bad until he/she compares this performance with another company's performance or with the entire economy's performance." He calculated and found out the important indicators of every bank in the LCBS and then compared his bank with the best bank. That is Bank A's Benchmarking Model.

5.1.2.5 Employees' Benefits and Incentives

The Bank's top management has developed employee incentives system, as well as medical care and social services which motivate employees to provide a better banking service. The Bank provides free medical care to employees and their

families and pays for the medications. The Bank also provides opportunities for medical treatment abroad for some of the cases that cannot be treated locally. The Bank bought a collective insurance policy providing coverage for all the employees and the directors against accidents and death. Three years' salaries are paid in varying ratios in the case of accidents and death in addition to a saving feature in the policy, which is the payment of an end-of-services benefit upon resignation or retirement. The Board of Directors established the Bank Employee Social Fund to meet their social commitments and to emphasise the cooperative principle. The Bank also pays annual bonuses to the employees in accordance with efficiency and performance reports. The Bank also established the model employee award. It means selecting the best employee in each branch, agency and business centre and among the department managers in Head Office. The Bank grants social loans to employees who have more than one year of service. The interest free loan is calculated on the basis of the total income for one year, repayable in 72 instalments.

5.1.2.6 Bank's Environment

Bank A has faced the challenge of competition from its inception with both the SCBs and the private commercial banks opened by many businessmen and covering different areas of Libya. A second type of competition that Bank A uses is internal competition, which is a practical method that has been used to motivate its branches, agencies, business centres, and the departments of Head Office. It is not real competition but artificial competition that aims to mimic future international competition and to maintain a competitive advantage, and to force Bank A's units to apply the management strategy of being customer-focused, and to develop critical success factors. This competition has encouraged Bank A's units to use more NFPMs. It has proved to be worthwhile in creating a competitive spirit and

increasing productivity, proficiency, and dedication amongst the Bank's employees. A third type of competition is the future international competition, which will start at the beginning of 2007. In 2007, Libya will be affiliated to the WTO and many foreign banks will enter the domestic market and compete with the Libyan banks for market share.

Bank A operated as a competitor in the national market of the commercial banking sector. The competitive position of Bank A comes from its attempts to provide the latest in the world of banking services. In addition to the conventional banking services and the services provided to some of the major Libyan companies, the Bank provided a bundle of differentiated new services in the Libyan banking services market including: phone banking in all branches, agencies, and business centres; local currency travellers' cheques; safe deposit boxes; internet banking services; mobile phone banking services; home banking; touch-screen services in all branches and agencies and business centres; drive-in banking; automatic teller machines (ATMs); the first credit card (Visa) in collaboration with the Jordanian Housing Bank, as a means of guaranteed payment for use outside the country.

The basic strategy is to increase the Bank's share in the market, cut costs, save time and publicise the Bank's growth and development. This strategy provides the Bank with an opportunity to expand, improve communications with its customers, obtain customer satisfaction and meet their expectations and attain society acceptance.

5.1.2.7 Bank's Information Technology

Bank A wants to be the technology leader among commercial banks in the LBS. All parts of the country are connected on-line with the result that all the branches, agencies, and business centres appear to the Bank's customers as a single branch

regardless of which unit they are dealing with. Bank A's banking system covers all the services the Bank provides at the present such as phone banking, ATM cash services, SWIFT, as well as any services to be provided in the future such as e-commerce. This system has many features and is capable of being upgraded to provide more advanced services with complete ease.

5.1.2.8 Bank's Performance System

5.1.2.8.1 Financial Performance

Bank A's performance history shows a year-on-year increase in profits every year except in 2002. The 2002 performance can be explained by two facts. First, there were the punishments imposed on the Bank by the CBL on the sale of foreign currencies in Libyan Dinars, and in addition, the Bank was barred from the purchase of foreign currencies for the last six months of 2002. However, the Bank was able to depend on its banking activities to attract foreign currencies from its customers and discharged all of its obligations. Second, the Bank upgraded all its computer equipment to a quality equalling the most modern in computing technology. Bank A's assets were under LD 500 million and its depositors' accounts were under LD 400 million in 2003. The loans and credit facilities amounted to under LD 60 million being an increase of 12% over the previous year. Bank A has a trend of increasing shareholders' equity and realised a year-on-year increase to under LD 50 million in 2003. The profit per share after taxes increased from approximately LD 0.5 in the second year to approximately LD 3.5 in 2003. The annual reports show dividends, which were between 9%-25% of the capital from the second year to 2003. The Bank's capital adequacy rate was between 8%-12% in 2003.

5.1.2.8.2 Non-financial Performance Measurements

The importance of NFPMs is recognised by the Chairman/General Manager of Bank A. Therefore, Bank A's executive management has encouraged its units to implement and use NFPMs gradually since its establishment to evaluate service quality, on-time delivery, customer satisfaction, customer retention, flexibility, employee satisfaction, employee loyalty and community acceptance.

At first, Bank A's Board of Directors concentrated on developing service quality, on-time delivery, flexibility and customer satisfaction, which were reported in the first annual report of Bank A's Board of Directors in 1997. Bank A's annual report of the Board of Directors each year disclosed more information including results of NFPM such as improvement of services, on-time delivery, customer satisfaction, employee satisfaction, market share and community acceptance.

The Chairman/General Manager of Bank A considered that "Confidential Mixture", which is the quality of service and on-time delivery, is fundamental to the success of his Bank. Bank A's executive management has introduced NFPMs that relate to employee satisfaction because of its belief that employees are one of the main critical success factors. The administration and personnel department uses these measurements that relate to employees' needs, loyalty and satisfaction. These measurements are then reported to the Chairman/General Manager to be assessed and used in the decision making process. The following are examples of measurements that are used in relation to Bank A's employees:

- Employee selection standards.
- Employee qualifications and skills.
- Employee's productivity, creativeness and effectiveness.
- Employee's ability to be pro-active to customer needs, rather than re-active.
- Responsiveness of employees.
- Employee's ability to create and guide customer needs.

- Employee's ability to create and innovate.
- Relevance of training programmes to employee duties.
- Employee's cooperation and participation with work group.
- Responsiveness to and availability to cover customers' needs.
- Employees' meeting with the manager of the unit four times a year.
- Employees' and managers' meeting with the Chairman/General Manager once a year.
- Employee medical absentee rate.
- Capability to guide and influence customers' taste.
- Employee's ability to attract more customers.
- Employee's ability to retain customers.
- Cleanliness, tidiness and appearance of employee.
- Competence and courtesy of employee.
- Employee's punctuality and working time.
- Friendliness (smiling and greetings) and readiness.
- Competence in executing customers' requirements.
- Knowledge and competence of employee.
- Employee's ability to work after official working time.
- Availability and suitability of car parking for employees.

Credit Department and Banking Operations Department evaluate success factors relating to customers. They assess service quality that is directly related to customers. They use the information reported by the Bank's units. Such information is reported to the Chairman/General Manager to be assessed and used in the decision making process. The methods used to assess and evaluate customer satisfaction are:

- Customer surveys.
- Customer complaints and suggestions boxes.
- Hot lines complaints.

The measurements used to evaluate service quality are:

- Number of accounts that have been opened according to the type of account⁷.

⁷ Account type includes personal account, partnerships accounts, corporations accounts and public companies accounts.

- Number of accounts closed and reasons for closure.
- Number of transactions processed (daily, weekly, half monthly, monthly, three monthly, six monthly, and yearly).
- Duration of faults.
- Customer waiting time in queue.
- Cleanliness and tidiness of units and their divisions.
- Transaction time span in comparison with competitors' time.
- Availability and suitability of bank facilities.
- External and internal design of the Bank.
- Responsiveness to customers' needs.
- Customer retention rate.

Bank A's Board of Directors has attempted to assess R&D by using the following:

- The number of new ideas and innovations that each employee suggests and each manager introduces.
- Four times a year brainstorming meeting between employees and the manager of the Bank's unit.
- An annual brainstorming meeting between Bank A's Chairman/General Manager and employees.
- Availability of Bank A's brochures, leaflets, and reports.

Bank A has built a relationship with its community. The Board of Directors and executive management are concerned about community acceptance and the degree of satisfaction about the Bank's services. Bank A has contributed to many social projects. The measurements used by Bank A to assess and evaluate community acceptance are the degree of contribution to the community compared with competitors, and number of accounts that are opened and number of transactions during the period (daily, weekly, half monthly, monthly, three monthly, six monthly, and yearly).

The above measurements are reported periodically in Bank A's units. The Executive Committee meet regularly to evaluate the results of such measurements. Bank A's NFPM system is not finished yet and is being developed by studies that are being conducted to build a complete PMS.

5.2 DATA ANALYSIS

The collected data from the research site were analysed in accordance with the grounded theory methodology of Strauss and Corbin. This methodology has analytical procedures, namely, open, axial and selective coding (see Chapter 4 for more details). The open coding is the initial one and during this coding the researcher used sentence-by-sentence coding to analyse the data collected from each interview. This detailed open coding enabled the researcher to obtain initial related points. The researcher identified, summarised and listed the main points (concepts) raised from each interview. These points were compared and the relationships between them were noted with a view to facilitate and develop coding procedures. Table 5-2 presents the points which were raised by the interviewees.

Table 5-2: Main Points Raised by Interviewees

No	Points
1	<p>Limitations of FPMs</p> <ul style="list-style-type: none"> <li>i. FPMs do not suit long-term objectives and strategies. They do not have ability to predict what the future performance is likely to be. Inefficiency of these measurements gives rise to the NFPMs <li>ii. FPMs are short-term and internal looking indicators and so on. The deficiencies of FPMs encouraged managers to use NFPMs. <li>iii. Managers' long-term experience and their accounting background helped them to understand the deficiencies of FPMs and encouraged them to use NFPMs.
2	<p>Existing and Future Competition</p> <ul style="list-style-type: none"> <li>i. Competition for survival. (NFPMs are effective indicators for the future). <li>ii. The competition is still low. However, it will be more aggressive in the future. <li>iii. Before establishing the Bank, market was monopolistic or semi-competitive with five State Banks, but now it is more competitive and it will be more aggressively competitive in the future. Therefore, we adopted NFPMs. <li>iv. Libya is going to affiliate to WTO, which will allow international organisations to access the market, which is the main fear for the future. <li>v. Foreign banks may open branches, which is the main fear for the future (Poaching bank's staff and customers). <li>vi. Globalisation means foreign banks will enter the domestic market and take some of our market share. Globalisation suggests impacts, which will impinge on banks' survival. Competition is a drive that influenced management to use operational measurements.

3	<p>Management's Knowledge of the Relationship between NFPs and FPs</p> <ul style="list-style-type: none"> i. "Confidential Mixture" [which consists of NFP and its measurements 'NFPs' (such as quality of service and on-time delivery)] is the important factor for achieving success. ii. The management's attention has concentrated on NFPs, rather than FPs, because they are of more value. iii. Management knows that, there is a strong relationship between NFPs and FPs. Since adopting NFPs the profitability and customers' deposits have increased. iv. Management knows that NFPs are the ladder to achieve the financial objectives for any organisation.
4	<p>Demanding Customers</p> <ul style="list-style-type: none"> i. Since the Bank was established, customers seem to be more demanding. ii. The openness makes customers more demanding and to satisfy them management adopted non-financial measurements (such as customer surveys). iii. The executive management concentrated on non-financial factors and adopted customer-oriented strategy because they believe that one of the important factors for achieving competitive advantage is what are customers' needs specially they are become more demanding. The Bank's badge is "We are always with our customer/ we are always near our customer." iv. One of the important factors for the Bank is what are customers' needs. Therefore, Bank A adopted a customer-oriented strategy.
5	<p>Nature of Banking Industry</p> <ul style="list-style-type: none"> i. Banking industry is service-oriented and depends on proficient and competent employees and a high level of customer loyalty. ii. The fundamental point in banking work (service sector) is to obtain customer satisfaction, which will then be reflected in financial indicators.
6	<p>Offensive Strategy</p> <ul style="list-style-type: none"> i. Since the establishment of the Bank, the executive management adopted offensive strategies with NFPs to increase number of customers and then increase its market share. However, in the future the Bank will change its strategies to more defensive ones.
7	<p>Operational Experience and Competence of Management</p> <ul style="list-style-type: none"> i. The operational experience and competence of management was behind the implementation and use of NFPs. ii. Managers' long-term experience and their accounting background encouraged them to use NFPs.
8	<p>Level of Management</p> <ul style="list-style-type: none"> i. The kind of PMs to be used relies on the level of management, the lower-level used more NFPs. ii. NFPs are operational performance measurements. iii. NFPs are better when evaluating operational divisions (Bank's units).
9	<p>Top Management's Interference</p> <ul style="list-style-type: none"> i. The interference of top management in operational processes is driving force behind the Bank to concentrate on NFP and measure it. ii. Chairman/ General Manager's interference in daily processes is an influencing factor in using NFPs and the Bank's success. iii. The assignments are restricted and dependent on executive management even where there is good job description.
10	<p>Stability of Management</p> <ul style="list-style-type: none"> i. Long-term recruiting strategy encourages managers to focus on non-financial factors (such as quality of service and customer satisfaction) and use NFPs.
11	<p>Collective Working Group</p> <ul style="list-style-type: none"> i. Working as a concerted group under the top management was behind the Bank's use of NFPs and the Bank success in achieving competitive advantage.
12	<p>Flexible Organisational Structure</p> <ul style="list-style-type: none"> i. Flexibility of organisational structure has helped the management in adopting NFPs. ii. Although the organisational structure is relatively flexible, it needs to adjust to be consistent with new environment and services and to achieve an effective use of NFPs.

13	<p>Long-term Objective</p> <p>i. Bank's goal to be the leader bank in the Libyan banking market has directed the management to adopt long-term strategies and to use NFPMs.</p>
14	<p>Central Bank of Libya's Regulations</p> <p>i. The regulations of the CBL have prevented the Bank from achieving customer satisfaction sometimes.</p> <p>ii. The constraints imposed by the CBL have impeded the Bank's activities.</p> <p>iii. The Board of Directors has to get acceptance from the CBL to produce any new service or to discharge banking transactions.</p> <p>iv. The CBL's new regulations have influenced the management to adopt the advanced management practices and technologies.</p>
15	<p>Information Shortage</p> <p>i. Information shortage impinged on management's attitudes to the implementation and use of NFPMs.</p> <p>ii. The stock exchange started in Libya just this year, that is, there was a shortage of data, which has impeded the executive management from implementing AMPs.</p>
16	<p>Weakness of Infrastructure</p> <p>i. The weakness of infrastructure (telecommunications system) in Libya has hindered the implementation of NFPMs.</p>
17	<p>Traditional Educational System</p> <p>i. Traditional education system does not encourage the implementation of NFPMs.</p> <p>ii. Weakness of financial and managerial educational system negatively impacts the implementation of NFPMs.</p>
18	<p>General Public's Lack of Banking Knowledge</p> <p>i. NFPMs require a specific level of education, competency, effectiveness and consciousness of the General Public to prosper and progress.</p>
19	<p>Uncertainty of Economic Environment</p> <p>i. US sanctions caused business uncertainty requiring more NFPMs.</p> <p>ii. In uncertainty, NFPMs are better than FPMs.</p>
20	<p>Financial Mentality of Shareholders</p> <p>i. Financial oriented mentality dominates Bank's shareholders.</p> <p>ii. Financial mentality of shareholders impacted on the implementation of NFPMs.</p>
21	<p>Development of Human Resources</p> <p>i. Management developed successful human resources strategies in conjunction with the use of NFPMs to enhance the Bank's critical success factors.</p> <p>ii. Management's outlook to adopt the newest in banking industry encouraged it to adopt extensive and continuous training programmes for improving service quality and creating customer satisfaction.</p>
22	<p>Performance Reward System</p> <p>i. NFPMs were connected with the reward system. This will motivate the employees to provide better services and achieve the Bank's objectives.</p>
23	<p>Development of Banking System (Bank's Operating, Information and Reporting System)</p> <p>i. Management developed the Bank's system in conjunction with the use of NFPMs to enhance the Bank's critical success factors.</p> <p>ii. The concentration on non-financial factors and the adoption of NFPMs encourages management to develop the Bank's operating, reporting and information system to increase the efficiency of services provided to customers and to provide up-to-date information in order to support the Bank's objectives and its critical success factors.</p>
24	<p>Development of Organisational Structure</p> <p>i. The adoption of NFPMs encourages management to develop its organisational structure to be consistent with the competitive environment and new services.</p> <p>ii. Although the organisational structure is relatively flexible, it needs to adjust to be consistent with new environment and services. Therefore, executive management is going to modify it by adding new departments and divisions.</p>
25	<p>Adoption of Advanced Management Practices</p> <p>i. The Bank has used simple TQM which encouraged the use of NFPMs.</p> <p>ii. Although, there was a shortage of data the executive management has used benchmarking in conjunction with the use of NFPMs.</p>

26	Adoption of Internal Competition i. The executive management created internal competition between the units of the Bank in conjunction with the use of NFPMs.
27	Variety and improvement of services. i. The adoption of NFPMs encourages management to improve and diversify the bank's range of services.
28	Introduction of advanced technology. i. The adoption of NFPMs encouraged adoption of advanced technology.
29	Positive Effects on FPMs i. The adoption of NFPMs increasing profitability of the Bank. ii. By using NFPMs, our market share has increased, at the expense of the public banks. iii. There is a strong relationship between NFPMs and FPMs. Since adopting NFPMs the profitability and customers' deposits have increased.
30	Capital Expenditure i. The adoption of NFPMs leads to an increase in capital expenditure.
31	Effectiveness of Management Decision i. The adoption of NFPMs activates management decisions. ii. Operational units have reported requested data (financial and non-financial) regularly, which has helped executive management to perform its job. iii. The use of NFPMs encouraged executive management to produce analytical reports for the Chairman/General Manager to use in decision process.

The major aim of coding and comparing data is to classify the ideas that have emerged from the data and analyse related points (concepts) giving these a label. The researcher followed the steps and instructions mentioned in the previous Chapter (see Chapter 4 for more details and an example on p. 162). These labels depicted the major idea from related points, and each label should associate with the data it describes. Finally, these labels were checked off making sure that all the labels had been considered.

The researcher decided to group all related labels in appropriate categories. Understanding the relationship between the phenomenon and the labels gave rise to several categories emerging which led the researcher to specify the fundamental categories. Using Strauss and Corbin's paradigm model will assist the researcher to associate labels to the focal category. Tables 5-3 to 5-7 display the main categories that the researcher specified and developed from analysing the data in this case study.

In the following sections, the researcher will try to specify the relationships between category labels and the focal category of this study, which is the use of

NFPMs. In addition, the researcher will develop some hypotheses which emerge from the relationships between the focal category and other related categories and these relationships will be described in the researcher's model (Figure 5-12).

5.3 MOTIVES FOR USING NFPMs

Bank A has implemented and used NFPMs related to quality of service, customer satisfaction, employee satisfaction, and community acceptance. Table 5-3 gives the labels, which represent the main motives for using NFPMs and shows which interviewees stated them. Each motive will be discussed in more detail in the following subsections from 5.3.1 to 5.3.6.

Table 5-3: Motives for Using NFPMs (Labels of Causal Conditions)

Interviewees	LFPMs	EFC	MKR	DCs	NBI	OS
CGM	√	√	√			√
VCDGM			√		√	
MIA	√	√			√	
DMAPD	√	√	√	√		√
MCD	√	√		√		√
DMIT		√	√	√		
HAHA		√	√	√		√
HABA	√	√	√			
HAFA		√	√		√	√
HATB	√	√		√		√
EADHO		√				√
MBMB		√	√			√
HAABC	√	√	√	√		

LFPMs: Limitations of FPMs.

EFC: Existing and Future Competition.

MKR: Management's Knowledge of Relationship between NFPMs and FPMs.

DCs: Demanding Customers.

NBI: Nature of Banking Industry.

OS: Offensive Strategy.

5.3.1 Limitations of FPMs

Modern technology has negatively impacted on the use of FPMs. It revealed that FPMs are insufficient to measure the true performance and FPMs need something else to support them which are NFPMs. Therefore, the deficiency of FPMs to

measure performance is a factor influencing the use of NFPMs. The CGM and HABA respectively stated that:

“In the technological era, an organisation’s performance is measured from non-financial aspects such as quality of service, on-time delivery, and customer satisfaction which provide a clear picture of how an organisation is operating for long-term period.”

“Inefficiency of FPMs gives false image of actual performance. Therefore, there are other measurements an organisation should use to measure its true performance. These are non-financial measurements such as customer satisfaction which we can measure by using customer survey or questionnaire. Actually, these measurements give a clear image about how an organisation performs for the long-term.”

The DMAPD mentioned that the dual operational and accounting background of the Chairman/General Manager and the managers helped them to understand the FPMs’ limitations such as they focus on historical events, are internal looking and do not concentrate on the future success factors (such as quality of service, and on-time delivery). He argued that:

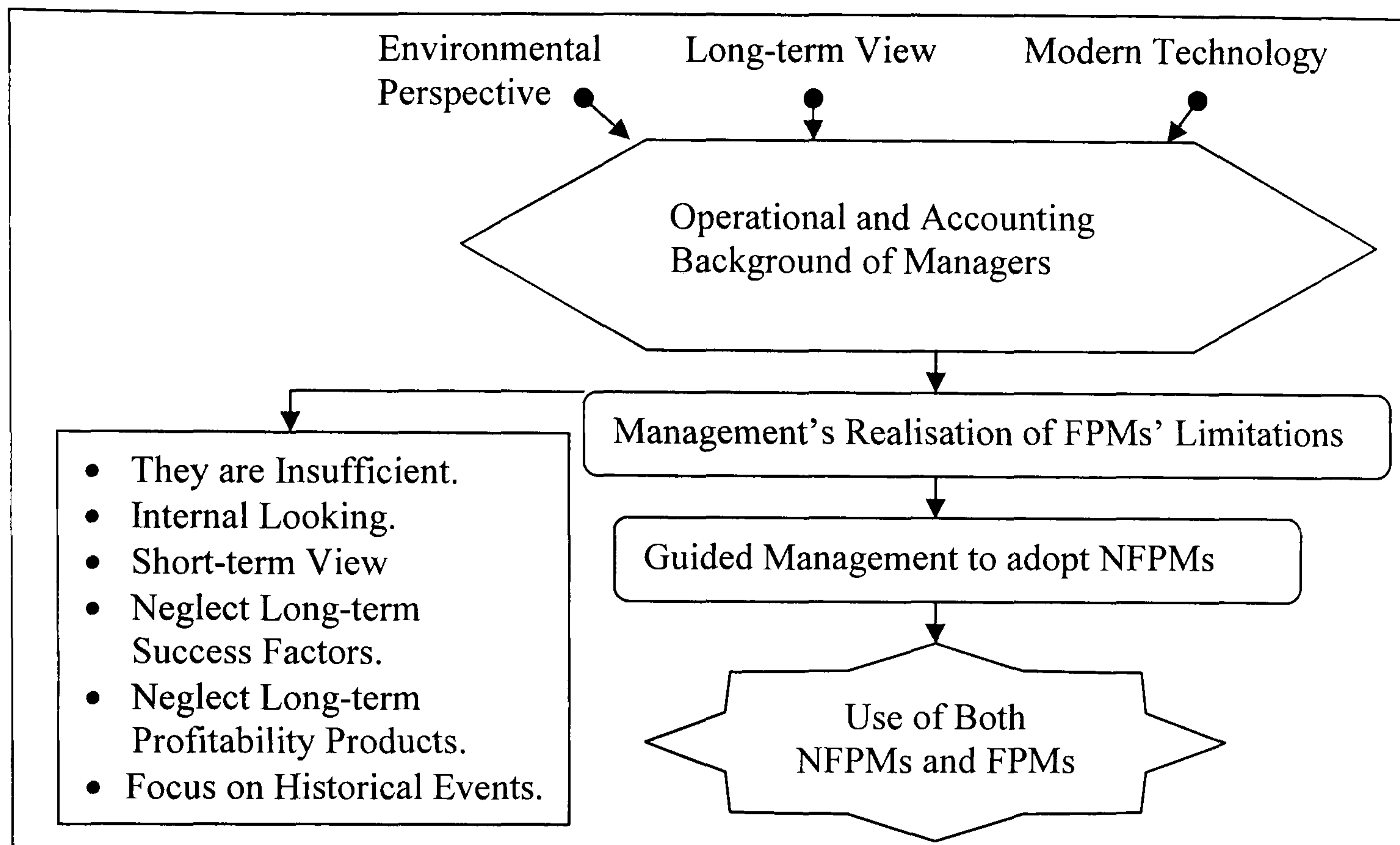
“The operational experience and accounting background of Chairman/General Manager and management affected their understanding of FPMs’ limitations and the implementation and use of NFPMs.”

The MIA criticised financial indicators as being too internal looking, restricting management’s view outside the organisation, concentrating on short-term profitability, neglecting long-term profitable products and services and not telling us what will happen in the future. The HAABC considered that the financial indicators are insufficient. They are internal looking and do not indicate the whole organisational performance because they show only the financial aspect of this performance, which resulted from the critical success factors of the organisation (such as quality, delivery and employee satisfaction). He asserted that the use of both financial and non-financial measurements can guide management to assess and

evaluate in-depth organisational activities. The CGM pointed out that nowadays, the success of an organisation does not depend only on its profitability, but it depends on how it achieves customer satisfaction and community acceptance for future profitability.

The HATB emphasised that in order to increase long-term profitability of products, organisations should encourage the use of NFPMs such as quality, on-time delivery, customer satisfaction, innovation, flexibility, community acceptance, and employee satisfaction. These kinds of PMs give management a clearer picture of its effectiveness, true performance and the degree of customer satisfaction and community acceptance. However, these activities cannot be measured and evaluated by traditional financial measurements because they are inadequate. Therefore, Bank A's management adopt more long-term and forward looking PMs. He added that the Chairman/General Manager had appreciated the limitation of financial measurements and had encouraged managers to use both non-financial and financial measurements from the establishment of Bank A.

The MCD agreed that the financial indicators were not enough and were not able to reflect and measure true organisational performance which resulted from organisational non-financial critical success factors such as quality of services, on-time delivery, employee satisfaction, customer satisfaction, and community acceptance. Figure 5-1 displays management's realisation of FPMs' limitations and the use of NFPMs.

Figure 5-1: Limitations of FPMs and the Use of NFPMs

5.3.2 Existing and Future Competition

The DMAPD mentioned that before the establishment of Bank A, the Libyan banking market was monopolistic or semi-competitive with five SCBs. The entrance of Bank A into the Libyan banking market increased the degree of domestic competition between the private and public banks. This competition enhanced Bank A's desire to focus on developing strategies to improve its service quality, customer satisfaction, on-time delivery, flexibility, employee satisfaction, internal processing, R&D, and community acceptance. DMAPD confirmed that NFPMs are an effective competitive technique for the future. He also asserted that in the next few years, international competition may come and therefore banks need to adopt advanced management tools such as NFPMs. He stated that:

“Before establishing the bank, the market was monopolistic or semi-competitive with five State Banks, but now it is more competitive and will be ever so competitive in the future. The foreign banks may open branches which will create very aggressive competition. This competition is the main fear for the future because it may poach the Libyan bank's staff and clients. Therefore, our Bank's management is

focusing on developing some strategies to counter any future competition.”

The HATB confirmed that there is direct relationship between competition and the adoption of NFPMs such as quality of services, delivery, and customer satisfaction. The establishment of Bank A made the environment more competitive and management realised that. Therefore, its strategy was to deliver a higher quality of services, more diverse services and on-time delivery to get more satisfied customers and then to increase its market share. The HAHA confirmed the prominence of competition in playing a significant role to create and develop NFPMs. Competition directs an organisation’s attention to improving its products and services and its relationships with its stakeholders such as employees, customers and community. Bank A has faced domestic competition from its establishment and this competition was based on quality of service, on-time delivery and other non-financial factors. The HAFA and EADHO asserted that competition is one of the main motives for Bank A to adopt customer focused strategies that require using customer and service quality measurements which are NFPMs. By using these operational measurements Bank A is now very active within this industry domestically.

The CGM mentioned several motives for Bank A’s use of NFPMs, the most important being competition. He contended that a monopoly encourages management to use FPMs in order to assess their ability to increase profitability. He pointed out that:

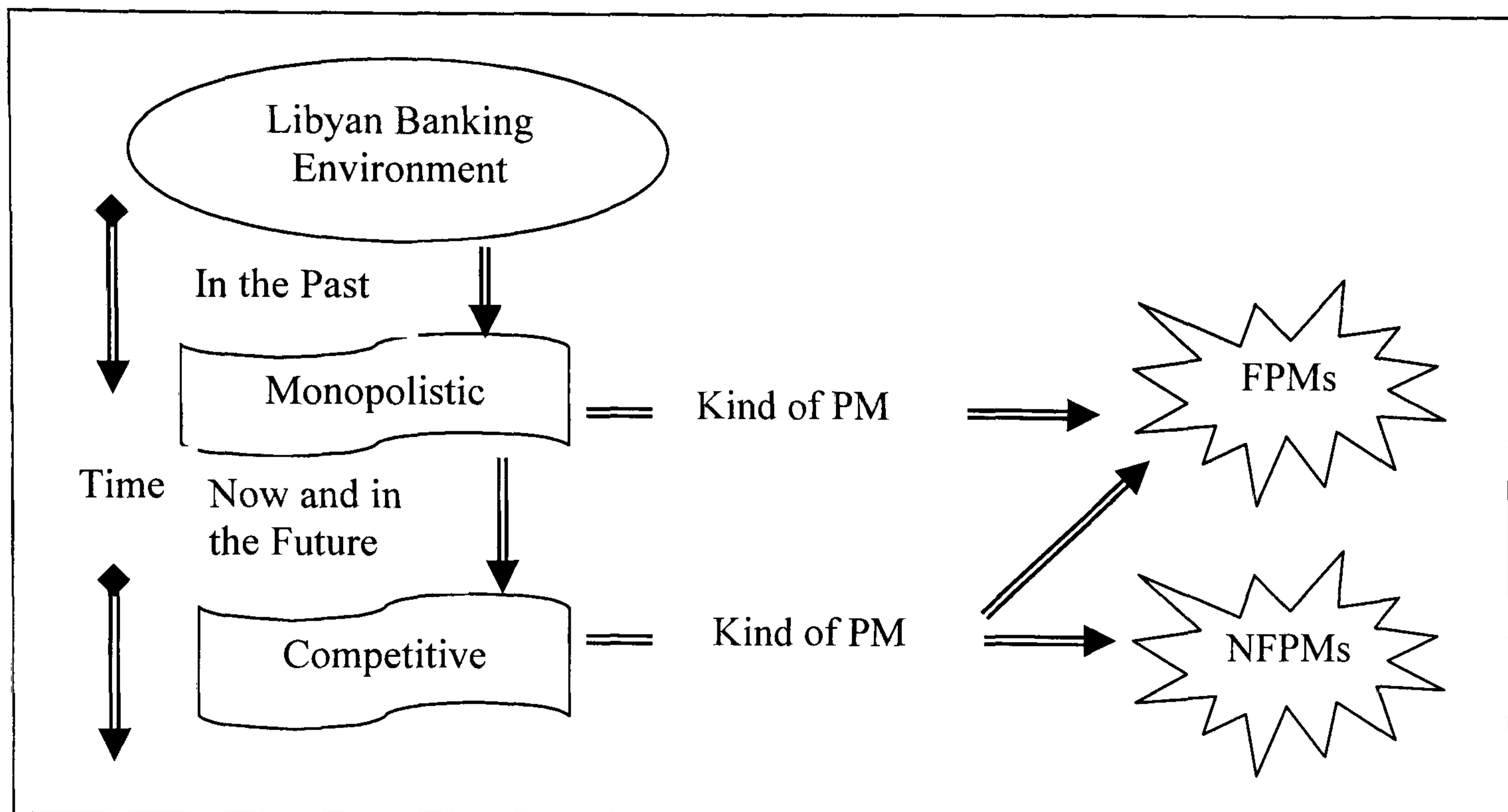
“Competition with other banks is one of the influencing factors for using these operational measurements. Bank A wants to increase its market share. Therefore, its management decided to compete on quality of service, on-time delivery, and other critical success factors to the same level as foreign competitors.”

The DMIT stated that:

“Bank A’s management concentrate on non-financial aspects such as service quality, customer satisfaction, on-time delivery, employee satisfaction and community acceptance because it has been preparing itself for future competition.”

The HAABC pointed out that globalisation encourages foreign organisations to enter any new market. These foreign organisations are using NFPMs, so Bank A also adopted NFPMs. The HABA mentioned that in the next few years the international WTO agreement is coming and foreign banks will then enter the Libyan banking market which will increase competition. The MIA added that this has directed Bank A’s strategy to be firmly focused on its long-term success drivers, to build its position in the market and adopt appropriate measurements that give it a true picture of actual performance. Thus, if a bank enters into competition with Bank A for its market share, it will not find it easy.

The MBMB indicated that NFPMs are one of the techniques adopted to help counter existing domestic and future competition. The MCD reported that in today’s business world, survival depends on the ability to compete in a very competitive environment, so every organisation looks to improve its profitability by improving and developing its products or services. He said that: “NFPMs are effective operational indicators for the future, *Competition for Survival*.” The majority of interviewees believed that there was a direct relationship between competition and using NFPMs. Figure 5-2 summarises the relationship between the kind of environment and the use of NFPMs.

Figure 5-2: Kind of Environment and Performance Measurements

5.3.3 Management's Knowledge of Relationship between NFPMs and FPMs

The HAFA pointed out that managers' understanding of the relationship between NFPMs and FPMs as an important driver to create long-term profitability was a catalyst to implement NFPMs. The VCDGM and DMAPD mentioned that the Chairman/General Manager and manager's realisation of the positive relationship between NFPMs and FPMs was one of the most important influencing factors in the use of NFPMs. The DMAPD added that this understanding of this relationship was attributed to management experience which played a greater role in considering NFP and implementing NFPMs. The implementation of NFPMs has positively impacted on Bank A's long-term success factors such as customer loyalty, employee loyalty, market share, customers' deposits, and profitability. He said that:

“Consciousness of Chairman/General Manager and executive management of the relationship between NFPMs and FPMs is an influencing factor for paying attention to NFPMs and using them. The long operational experience of Chairman/General Manager and some of the executive management that they got during their operational jobs in the banking sector is behind the understanding of this positive relationship. NFPMs are the ladder to achieve the financial objectives for any organisation.”

The HABA stated that the educational level, training and experience of managers have encouraged them to identify the appropriate type of PMs to be used. The majority of Bank A managers have developed during their work over a long period in the Libyan banking sector moving from one department to another and the Chairman/General Manager also has worked with a foreign bank outside Libya. HABA stated that:

“The operational experience of Chairman/General Manager and executive management is behind the appreciation of the direct relationship between NFPMs and FPMs which encourages managers to pay attention to NFP and implement NFPMs.”

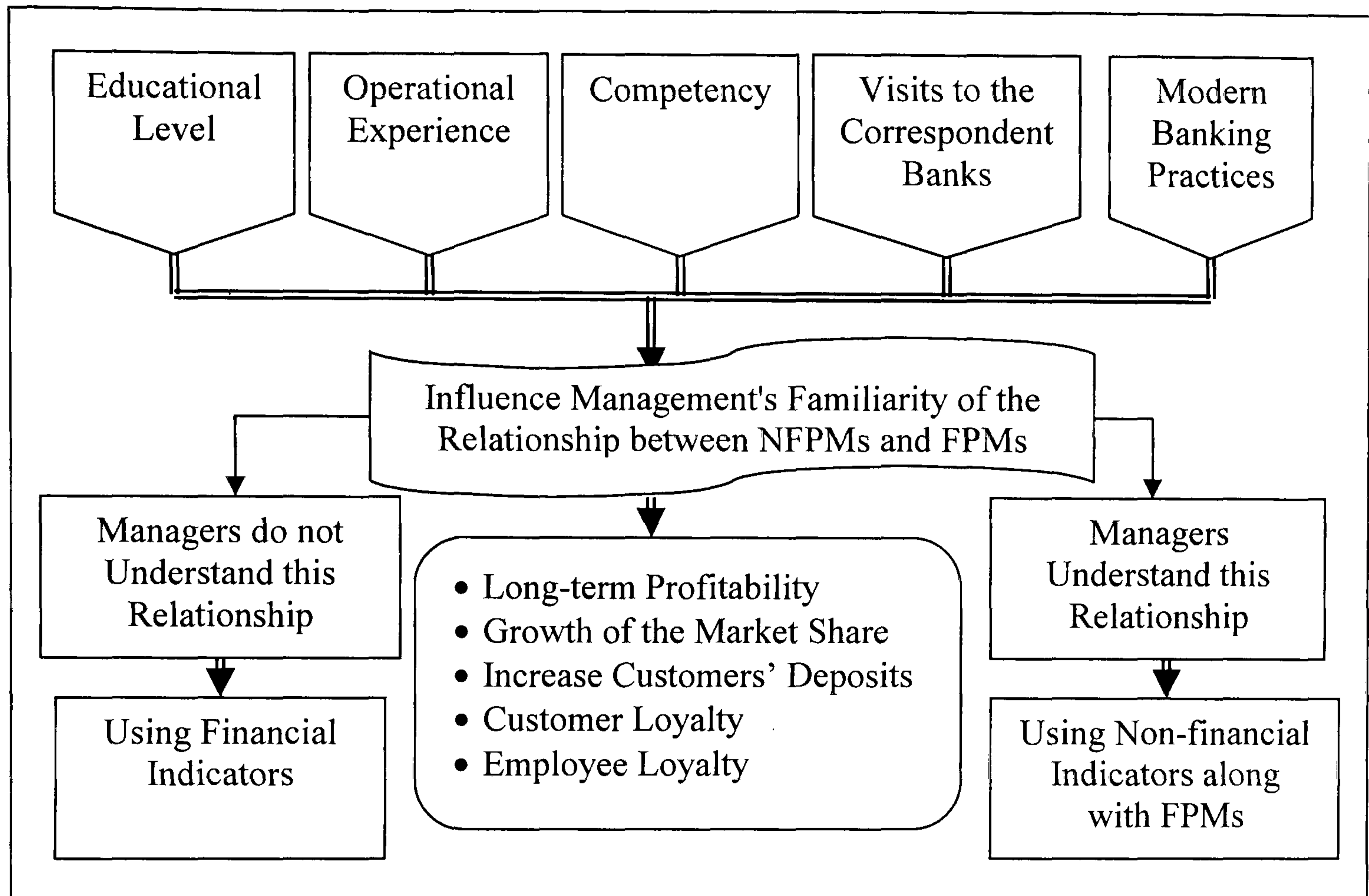
The MBMB pointed out the Chairman/General Manager and the managers' visits to correspondent banks and the modern banking practices are influencing factors behind their understanding of the relationship between NFPMs and FPMs and using them. He stated that:

“Since the establishment of the Bank, the Chairman/General Manager decided to start from the point that banks in the world arrived at, that means to adopt the newest services and recent practices in the banking industry and continue developing employees for creating customer satisfaction. There are a lot of banks adopting NFPMs and they have made outstanding achievements such as a large market share, high profitability, loyal employees, and customer loyalty. By using NFPMs, our market share has increased at the expense of the public banks.”

The DMIT, HAHA and HAABC mentioned the same point as DMAPD and HABA that is, Bank A's managers have the ability to absorb the relationship between NFPMs and FPMs and this capability is because of their high level of education, competency and long-term experience. Furthermore, their openness to international AMPs had a very big influence. The CGM confirmed that if the executive management of any organisation understood the relationship between NFPMs and FPMs and its positive impact, then it will adopt NFPMs immediately.

Figure 5-3 demonstrates management's appreciation of the relationship between NFPMs and FPMs and related influencing factors.

Figure 5-3: Management's Appreciation of the Relationship between NFPMs and FPMs



5.3.4 Demanding Customers

Customers are one of the most important stakeholders in any organisation and their satisfaction is one of the influencing factors for organisations' long-term success. The DMAPD mentioned that from the 1990s, customers' behaviour has changed noticeably from being simplistic to being more demanding. So, since the Bank was established, the customers seemed to be more demanding. He stated that:

“Before the 1990s customers were simple and undemanding. However, in the 1990s the society has developed and became more open and sophisticated, despite the imposed sanctions on Libya by the US in that time. This development and openness make customers more demanding. Therefore, when Bank A was established, its management was aware about this change of customer behaviour. So it decided to direct its strategies towards customers' needs and other non-financial activities.”

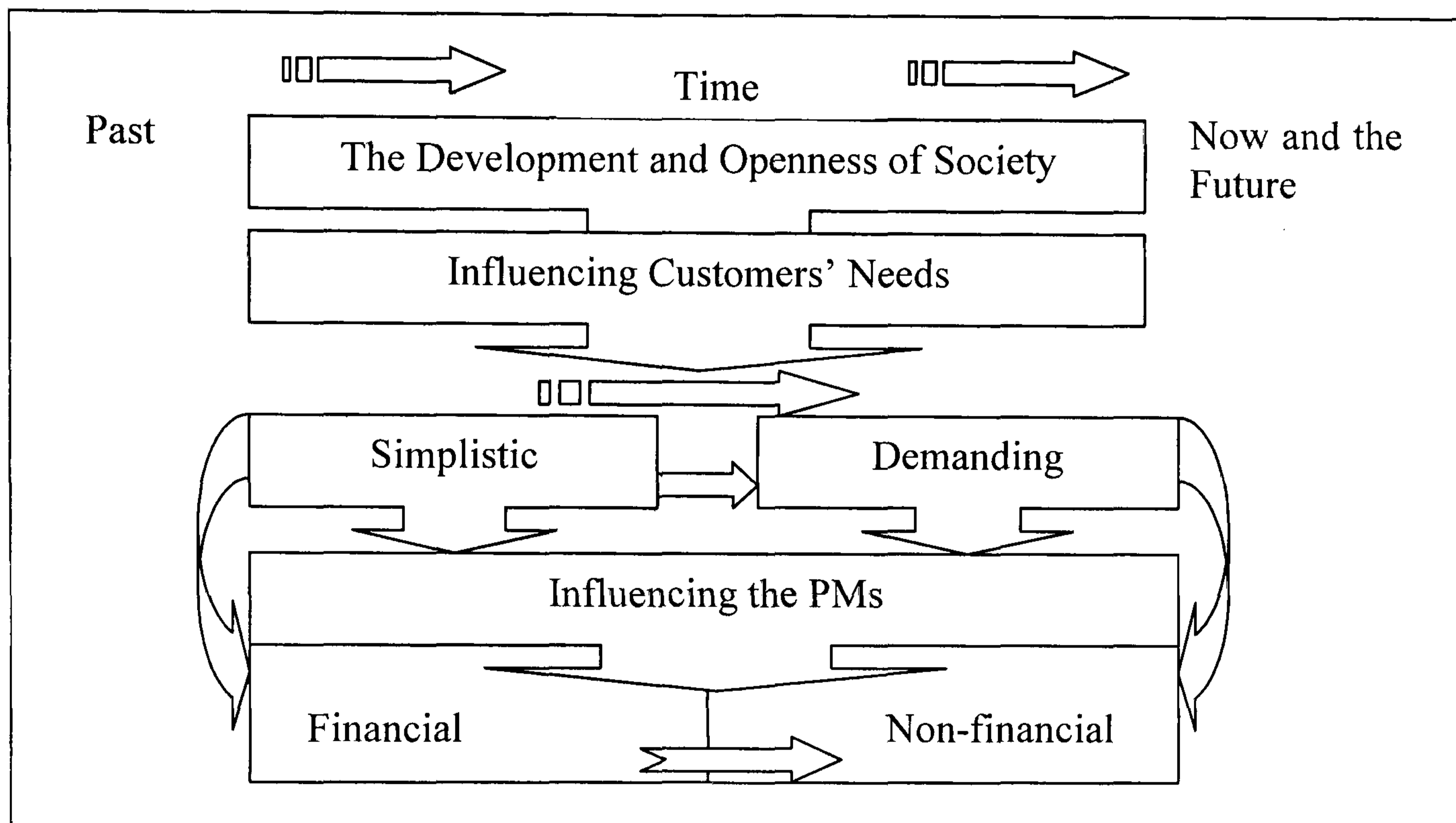
The HAABC and HAHA mentioned that Bank A's management believes that the use of NFPMs is an appropriate technique for dealing with these more demanding customers. The HAHA stated that "the demanding customer is one of the most important factors which shifted management's attention to non-financial factors. In fact, satisfaction of any customer is one of the important factors influencing the use of NFPMs." The HAABC, HAHA and DMIT confirmed that the Bank's Chairman/General Manager encouraged employees to focus on quality and delivery of services to increase the level of customer satisfaction.

The DMAPD and HATB pointed out that international TV channels and openness of society have created a new type of customer who is very demanding and is influenced by a western lifestyle. Therefore Bank A's management focused on identifying customers' needs to anticipate their future needs and to satisfy them. Nevertheless, they also indicated that some of the customers were not well-informed about advanced international banking services so they were not very demanding. The MCD stated that to get customer satisfaction and loyalty, an organisation has to know customers' needs and expectations. However, if an organisation does not pay attention to its customers and does not use NFPMs, it may lose its market share and destroy its reputation. He suggested that organisations should research their customers and specify their needs and expectations.

During one of the interviews, the researcher observed discussion between one of Bank A's manager and two customers about quality and delivery of services and the price of the service. One customer mentioned that the price of service is less important than the quality, on-time delivery of service and how an employee deals with the customer. Today, customers compare Bank A's quality of services and delivery with other competitors' services without paying too much attention to the price of services. However, the manager mentioned that not all the customers do not

care about the price, it depended on the customer's background, job, and educational level. Figure 5-4 summarises the relationship between the demanding customers and the use of NFPMs.

Figure 5-4: Customers' Needs and the Use of NFPMs.



5.3.5 Nature of Banking Industry

The banking industry is service-oriented and intensive in labour depending on human resources and satisfied customers especially because it deals with a very sensitive commodity which is money. This nature has forced organisations to implement and use NFPMs. The VCDGM emphasised that the nature of the banking industry is service oriented that depends on human resources and forced Bank A's management to be very aware about achieving a high level of quality, on-time delivery, customer satisfaction and loyalty, and employee satisfaction and loyalty which are NFPMs. He stated that:

“The banking industry depends on the service that employees provide to customers and it also depends on a high level of customer loyalty which results from combined factors. The important one is a proficient and competent employee. Therefore, the nature of the banking industry is one of the motives for using NFPMs.”

The HAFA and MIA confirmed the same point that the nature of the banking industry is service oriented and depends on its quality and delivery of services and its relationship with stakeholders (employees, customers, and community). They stated that the nature of banking required the management to concentrate on NFP and use of NFPMs to assess the true performance. They also mentioned that employee satisfaction and loyalty and their work as a group are important as critical success factors.

5.3.6 Offensive Strategy

There are some factors that influence an organisation's marketing strategy such as the kind of market, organisation's age, objectives, size of its market share, and other environmental factors. The type of marketing strategy then affects the kind of PMs that an organisation should use. The CGM stated that since the establishment of the Bank, it has adopted offensive strategies as it was looking to get as many customers as it could to increase its market share, because it was a new arrival to the banking market. He added that an offensive strategy is necessary in this early stage of Bank A's operation with long-term objectives and furthermore he mentioned that this strategy was a result of the competition with the public banks which dominated the banking market. In addition, he believed that this strategy encouraged Bank A's management to pay attention to non-financial aspects such as quality of services and on-time delivery, to satisfy customers. The MCD, MBMB, and EADHO argued that the offensive strategy encouraged Bank A's management to use NFPMs because these measurements are consistent with such a strategy and as well with a competitive environment that the Bank has faced.

The HAFA and HAHA mentioned that the competitive environment encouraged Bank A's management to adopt a more offensive strategy, to concentrate on NFP and

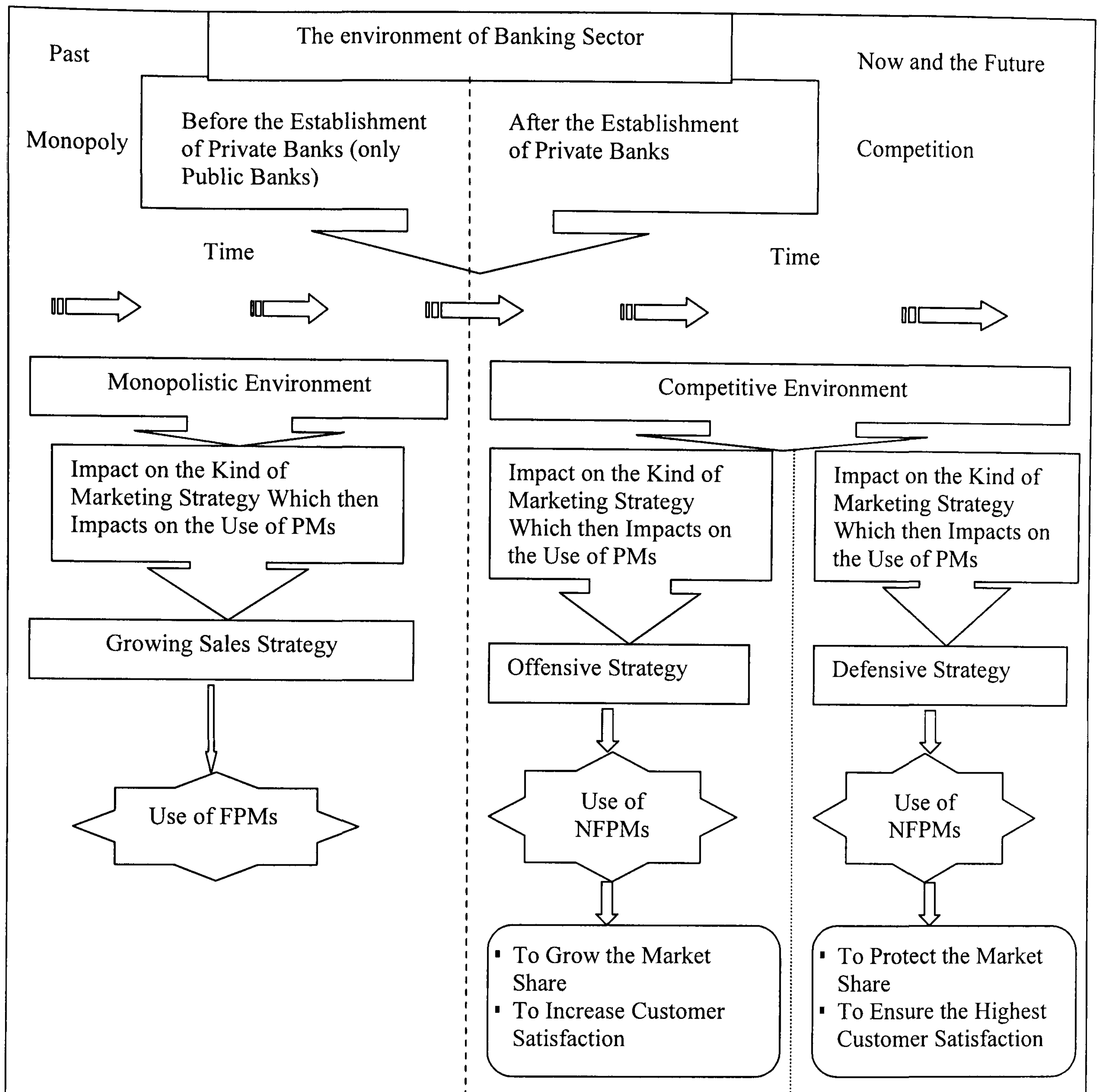
to use NFPMs. However, in the future when management achieves the largest market share it will then change its strategy to be more defensive than offensive which will also influence Bank A's management to continue implementing and using NFPMs.

The DMAPD stated that:

“Since the establishing of the bank, the executive management adopted offensive strategies with NFPMs. It implemented many techniques to develop its service quality, on-time delivery and customer satisfaction to increase number of customers and then increase its market share. However, in the future the Bank will change its strategies to defensive ones.”

The DMAPD and HATB confirmed that the use of an offensive strategy will change once the Bank has achieved some of its long-term objectives such as growth of its market share and then the executive management will modify Bank's strategy to a defensive strategy. This change in strategy will be accompanied by using more NFPMs and the suggested strategy will be to protect the market share and to ensure a higher degree of customer satisfaction. Figure 5-5 illustrates the relationship between a market strategy and the use of NFPMs.

Figure 5-5: The Kind of Market Strategy and the Use of NFPMs.



5.4 INTERNAL ENVIRONMENTAL FACTORS THAT INFLUENCE THE USE OF NFPMs

In this section, Bank A's internal environmental factors that influenced management to use NFPMs are discussed. Internal environmental factors are the contextual conditions that surround the phenomenon and have impacted on it in an organisational context. These internal environmental factors impact either positively

or negatively on the use of NFPMs. Table 5-4 summarises the internal environmental factors labels influencing the use of NFPMs. These labels are related to the interviewees who mentioned them. Each label will be discussed in more detail in the subsequent subsections from 5.4.1 to 5.4.7.

Table 5-4: Internal Environmental Labels

Interviewees	OECM	LM	TM I	SM	CWG	FOS	LO
CGM	√	√		√	√	√	√
VCDGM	√			√		√	√
MIA	√			√	√		√
DMAPD	√	√	√	√		√	√
MCD	√						√
DMIT	√					√	
HAHA	√	√		√	√		
HABA	√			√	√	√	
HAFA	√		√	√			
HATB	√	√	√	√			
EADHO	√			√			
MBMB	√	√		√	√		
HAABC	√	√				√	

OECM: Operational Experience and Competence of Management.

LM: Level of Management.

TM I: Top Management's Interference.

SM: Stability of Management.

CWG: Collective Working Group.

FOS: Flexible Organisational Structure.

LO: Long-term Objectives.

5.4.1 Operational Experience and Competence of Management

The DMAPD pointed out that there is a relationship between managers' competence and operational experience and their interest in adopting non-financial activities and measuring them. He stated that the Chairman/General Manager had passed through different operational departments and been promoted through different administrative levels when he was working in the banking sector before establishing this bank. He believed that the Chairman/General Manager's accounting and management background and operational experience are drivers for encouraging the use of NFPMs. The DMIT mentioned that the Chairman/General Manager is an accountant with long-term professional experience which led him to pay attention to

operational measurements and use them to assess and evaluate the Bank's real performance.

The MIA pointed out that Bank A's management was interested in adopting the newest technology and services in the banking industry to increase quality of service which in turn would encourage managers of units to use more NFPMs. He asserted that the Chairman/General Manager's accounting and management background and his openness to international developments and advanced practices were behind this interest. The EADHO mentioned that the Chairman/General Manager's operational experience was combined with a management and accounting background which positively affected the implementation of NFPMs.

The HAABC, MBMB, HAFA, HAHA, and HABA who are managers of Bank A's units pointed out that the Bank's Chairman/General Manager and executive management competence and operational experience are important drivers that support and stimulate the use of operational measurements (NFPMs). The MCD stated that:

“Bank A has got Chairman/General Manager and executive management with long-term operational experience and competence and with accounting and management background which had encouraged the Bank to use NFPMs such as quality of service, customer satisfaction and other non-financial measurements.”

The CGM mentioned that management competence and operational experience had a direct relationship with the adoption and use of NFPMs. He confirmed that operational experience enables managers to understand their operations and detailed processes and then how these should be measured. Conversely, lack of operational experience encourages managers to focus on FPMs and pay no attention to NFPMs. The HATB said that the majority of Bank A's managers came from the banking sector and they had worked there for a long time. These managers, who spent time

moving through the operational departments developing themselves, are competent managers with wide operational experience. He confirmed that this competence and operational experience were behind the creation of a suitable organisational environment for understanding the non-financial activities and use of NFPMs which focus on developing quality of service and enhance customer and employee satisfaction. The VCDGM stated that Bank A's managers' operational experience had a positive impact on the use of NFPMs because they are familiar with the detailed processes that should be measured. He asserted that the operational experience leads managers to concentrate on NFP and measure it. The DMAPD said that:

“Bank A's management had both operational experience and competence which drove management to adopt and use NFPMs along with FPMs.”

There was general agreement among interviewees that the Chairman/General Manager and the majority of managers had a high level of competence and operational experience which enhanced the use of the NFPMs.

5.4.2 Level of Management

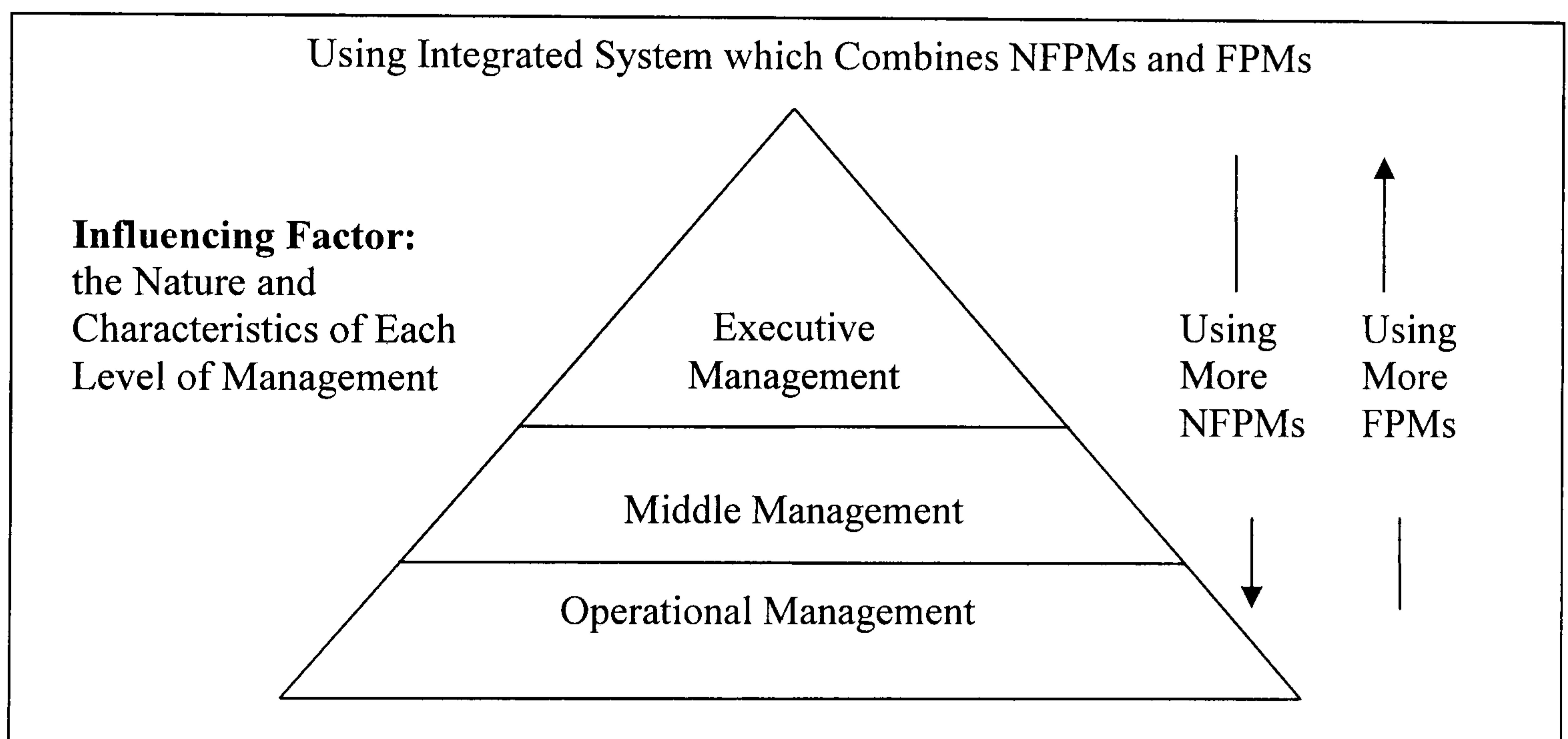
The CGM stated that there is a relationship between the management levels and the kind of PMs. He explained that operational management concentrates on non-financial information and measurements because this level is directly dealing with the introduction of services and communicates directly with customers. Middle level management uses more NFPMs than FPMs because of its work with operational units. The executive management uses an integrated PMS which combines NFPMs with more FPMs.

The DMAPD mentioned that each management level has its characteristics which influence the PMs. He said that although the NFPMs are used throughout all

management levels, they are particularly appropriate measurements for middle and operational levels.

The HAHA, HATB, MBMB, and HAABC who are managers of units, confirmed that the nature of management levels influences the kind of PMs which should be used. They confirmed that operational level management make great use of NFPMs, although the NFPMs are used throughout all Bank A's management levels. They confirmed that "NFPMs are better when evaluating operational divisions (banks units)." Figure 5-6 summarises the relationship between management levels and the kind of PMs and the influencing factors.

Figure 5-6: Management Levels and the Use of NFPMs



5.4.3 Top Management's Interference

The DMAPD mentioned that the Board of Directors used to consist of a Chairman and seven members. In 2003, the Shareholders' Meeting decided that the Board of Directors should consist of a Chairman and six members. He added that the Chairman is also the General Manager and the members are from a variety of backgrounds. The Bank has a Chairman/General Manager and executive management with long-term operational experience which has been an essential

ingredient for success. The Chairman/General Manager had not changed since the establishment of the bank. He also stated that the Chairman/General Manager is a very competent manager who has long-term operational experience with an accounting and management background. He was concerned with improving the bank's services and satisfying all stakeholders. He persisted in implementing NFPMs with the FPMs because he is very conscious of the positive impact of the NFPMs on FPMs. Moreover, the Chairman/General Manager's interference in daily processes was an influencing factor behind the implementation of NFPMs and the success of the Bank.

The HATB mentioned the same point that the Chairman/General Manager is managing the Bank with noticeable interference in the detailed day-by-day management of the Bank. He reported that the Chairman/General Manager is a driving force behind the Bank concentrating on non-financial activities and measuring them by using NFPMs. He also stated that the Chairman/General Manager's interference is inevitably behind the management succession. The HAFA mentioned the same point of the HATB and DMAPD that the Chairman/General Manager is very service oriented and he focuses mainly on the bank's long-term success factors (non-financial activities such as quality of service, on-time delivery and customer satisfaction). He added that the assignments are restricted and dependent on executive management even where there is good job description. However, the Chairman/General Manager's interference in operational processes in a direct or indirect way is a driving force behind the Bank adopting non-financial activities and measuring them by using NFPMs. The DMAPD, HATB, and HAFA confirmed the same point which is some decentralisation is a prerequisite for more successful implementation of a competent NFPM system.

5.4.4 Stability of Management

The MIA believed that management should be stable for the relatively long-term to work effectively. He suggested that a short-term approach could drive managers to concentrate mainly on financial factors to enhance their departments' financial figures and to show their capabilities to the Board of Directors and executive management. However, a long-term approach could enhance managers' desire to achieve long-term success by concentrating on the NFP and using NFPMs which in turn would enhance long-term profitability. He stated that:

“Management with short-term managers may concentrate on financial factors and pay less attention to quality of service and other non-financial factors which require more operational and capital expenditure. Conversely, management with long-term managers concentrate on non-financial factors which would necessitate more operational and capital expenditure and in turn would enhance long-term profitability.”

The CGM mentioned that the stability of management is one of the fundamental factors encouraging managers to adopt long-term vision and strategies which forces them to take account of non-financial activities and use the related measurements. Conversely, instability of management drives managers to concentrate on short-term objectives and strategies and ignore the non-financial activities. The HATB and EADHO pointed out that there is a relationship between the stability of management and the kind of PMS. The more stable management is, the more likely it is to concentrate on non-financial factors and measure them.

The DMAPD reported that Bank A was based on long-term contracts. All the managers and employees are of Libyan nationality. The executive management have been relatively stable during the life of the bank. The Board of Directors serve for a term of three years and it is permissible to reappoint the Chairman and members of the Board. In fact, the Chairman/General Manager and the majority of the Board of

Directors have remained unchanged since the establishment of the bank. DMAPD stated that:

“From the establishment of Bank A to the end of 2001, the staff consisted of A’s long-term contract staff and temporary staff from the public banks. Before the end of 2001, The Chairman/General Manager asked these temporary staff to choose between the two, to join Bank A’s staff or to end their temporary contract. They agreed to join the long-term contract staff because of the reward system. This process meant the Bank had stable staff with high capabilities and proved that A’s management loyalty is high which in turn influenced all strategies to be mainly long-term and concentrated on non-financial factors such as quality of service.”

The MBMB, HAFA, HAHA, HABA, and VCDGM pointed out that Bank A’s strategy of recruiting long-term staff would encourage them to focus on non-financial factors such as the improvement of the quality of service, customer satisfaction and employee satisfaction in the long-term. They added that the Bank was characterised by a stable Board of Directors which led to long-term objectives and strategies that focus on non-financial factors which in turn generate long-term profitability.

5.4.5 Collective Working Group

The HAHA reported that the Chairman/General Manager believed that Bank A’s objective is to be the leading bank in the Libyan banking market and this cannot be achieved just by individuals working harder, smarter and more informed, by themselves. He believed that employees should work together as a collective team in each unit of the Bank A and in the whole Bank to achieve important business objectives. He said that:

“Working as a concerted group under the top management was behind the bank’s success and achieving competitive advantage.”

The CGM mentioned that Bank A's training strategy focuses on training its staff as a collective team to make them behave more proactively which would positively affect the level of quality of services and customer satisfaction. He said that:

“Amongst our goals is the performance as one family in all our branches, agencies, and business centres under the guidance of the Bank's top management.”

The MIA mentioned that the objective for individuals to work effectively in a collective working group in different parts of the Bank is to provide mutual assistance and support to one another. The teamwork has created co-operation between the Bank's staff from different levels of management which in turn has led to support staff capabilities to understand the non-financial activities. The MBMB mentioned that the idea of collective teamwork might positively impact on employees' ability to understand the Bank's critical success factors (non-financial activities). The HABA mentioned that the idea of collective working group was not a driver for using NFPs, rather it was an influencing factor for creating a healthy organisational environment to use NFPs. He said that:

“I think that Bank A's management encouraged its staff to perform as a concerted team as a way of enhancing the implementation of NFPs.”

5.4.6 Flexible Organisational Structure

The organisational structure is a system that describes the functions, tasks and reporting and defines the authority and responsibility relationships for every job, division, department, and unit within the Bank context. The CGM mentioned that the main purpose of organisational structure is to order and co-ordinate the actions of staff and define the responsibility and level of authority of managers in a way that would collectively achieve the organisation's objectives. He also stated that “flexibility of organisational structure has helped the management in adopting non-

financial activities and using related measurements.” The DMAPD, DMIT and HAABC described the organisational structure as relatively flexible and harmonious with the Bank’s long-term objectives and all departments and divisions are coordinated together within the context of the Bank. They also mentioned that this organisational structure affects the effectiveness of using NFPMs. The DMAPD stated that the Board of Directors recently has decided to adjust the Bank’s organisational structure by adding new divisions and departments to be consistent with the competitive environment. The DMAPD said that:

“Even the organisational structure is relatively flexible; it needs to adjust to be consistent with new services and environment. Therefore, the executive management is going to modify it by adding new departments and division.”

The DMAPD and HABA reported that the co-ordination and co-operation of organisational structure between Bank A’s departments and divisions have led to better understanding and use of NFPMs. However, the Chairman/General Manager remains the main co-ordinator for these departments, divisions, and units with centralised decision-making and management functions. They confirmed that the Chairman/General Manager seems to guide and control even daily detailed transactions in a direct or indirect way.

The CGM and VCDGM reported that the organisational structure does not include a management accounting department. However, its tasks are performed by other departments such as accounting department, credit department, banking operations department, and Chairman/General Manager Office. Every unit has to collect and prepare specific data and send such data to a specific department in the management, then this data is analysed and the measurements are prepared for each unit to evaluate its performance and then for the whole Bank A as one unit in general. The CGM stated that:

“The Bank does not have in its organisational structure a management accounting department. However, it depends on its executive management experience in collecting the necessary data for decision-making process. They have the ability to report better-integrated information.”

5.4.7 Long-term Objectives

The MIA confirmed that Bank A’s goal to be the leading bank in the Libyan banking market encouraged management to adopt long-term strategies that focus on quality of service, customer satisfaction and other non-financial factors. The CGM revealed that the Bank’s long-term objectives aimed to serve its current and future customers anywhere. These long-term objectives have resulted in the introduction of the most advanced technologies and management practices including the use of NFPMs. The VCDGM asserted that Bank A’s long-term objectives called upon the management to identify, understand, and measure its critical success factors such as quality of service and on-time delivery which are important to improve its competitive position.

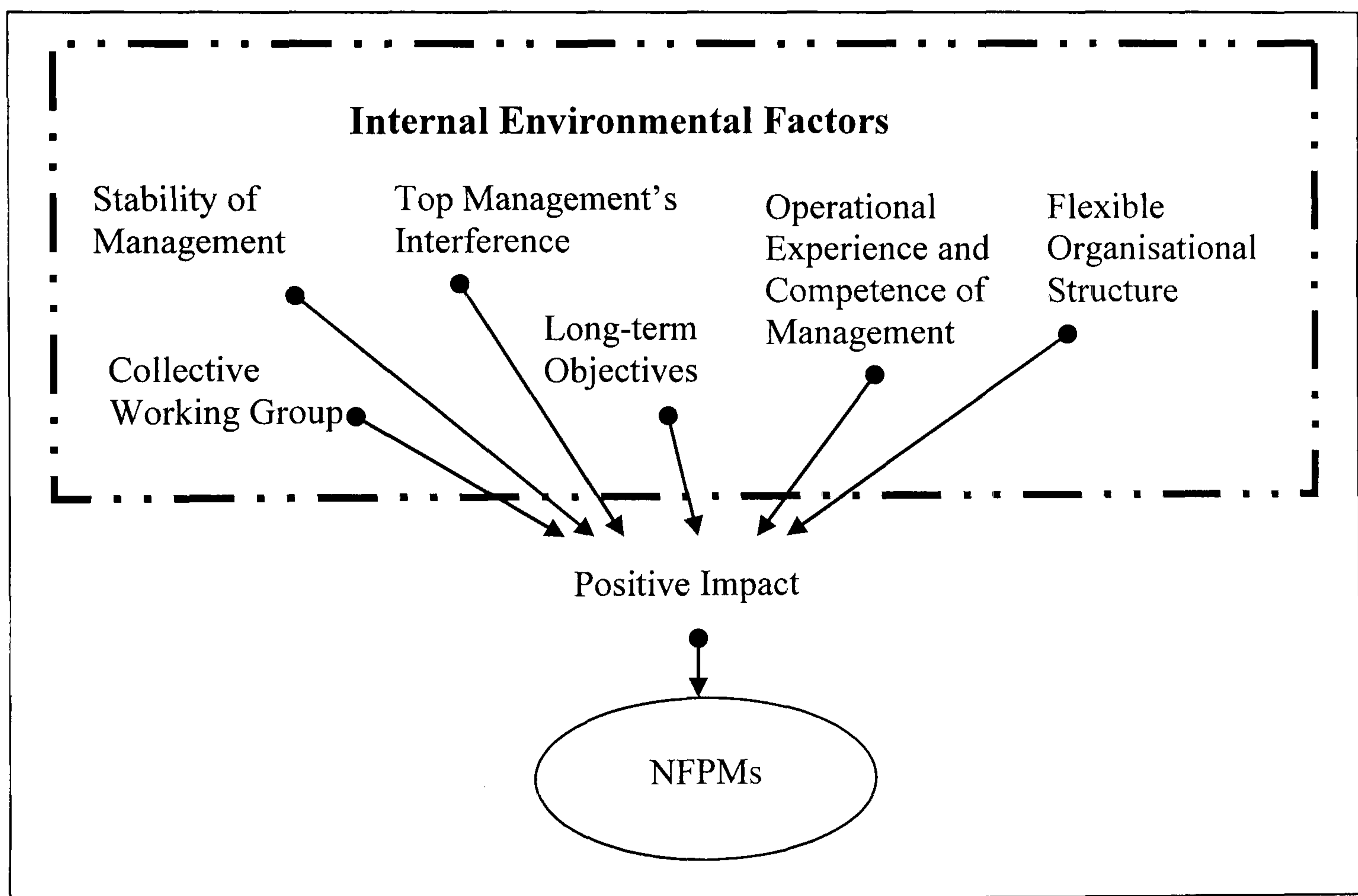
He said that:

“Bank A’s long-term objectives are to enlarge its market and to be the leading bank in the Libyan banking market. These objectives encouraged the management of the Bank to develop its services and adopt the newest services and techniques in the world.”

The DMAPD explained that Bank A is working in a competitive environment and is going through a period preparing for future competition, which in turn requires the management to adopt long-term objectives and strategies. These long-term objectives, strategies, and the existing and forthcoming competition encouraged the management of the Bank to focus on non-financial factors such as high quality of service, loyal customer, loyal employee, and community acceptance. He added that the Bank’s management was very aware about the importance of the role of these factors in achieving its objectives.

The MCD mentioned that the current offensive strategy is to grow, enlarge and spread the Bank by having many branches throughout Libya. Therefore, A's management decided to concentrate on high quality of services and on-line delivery. Figure 5-7 summarises the impact on NFPMs of the internal environmental factors which are operational experience and competence of management, interference of management, stability of management, collective working group, flexible organisational structure and long-term objectives.

Figure 5-7: Internal Environmental Factors' Impact on the Use of NFPMs



5.5 EXTERNAL ENVIRONMENTAL FACTORS INFLUENCING THE USE OF NFPMs

The environment, where Bank A works, influenced its selection of a particular set of measurements to assess and evaluate its performance. This environmental influence could either have a positive or negative impact on the phenomenon under investigation which is the use of NFPMs. During this section of this case study, the

researcher has defined several external environmental factors that have a direct relationship on the use of NFPMs. Table 5-5 summarises the external environmental labels which were mentioned by the interviewees. Each factor will be discussed in detail in the following subsections from 5.5.1 to 5.5.7.

Table 5-5: External Environmental Labels

Interviewees	CBLR	IS	WI	TES	GPLBK	UEE	FMS
CGM	√	√	√	√	√	√	
VCDGM	√		√		√	√	√
MIA	√						√
DMAPD	√	√	√	√		√	√
MCD	√	√	√			√	
DMIT	√	√	√	√	√		
HAHA	√			√	√		
HABA	√		√		√		
HAFA	√		√				
HATB	√	√	√	√	√	√	√
EADHO	√			√			√
MBMB	√	√	√		√	√	
HAABC	√			√	√		

CBLR: Central Bank of Libya's Regulations.

IS: Information Shortage.

WI: Weakness of Infrastructure.

TES: Traditional Educational System.

GPLBK: General Public's Lack of Banking Knowledge.

UEE: Uncertainty of Economic Environment.

FMS: Financial Mentality of Shareholders.

5.5.1 Central Bank of Libya's Regulations

The EADHO and DMIT pointed out that the State and the Central Bank have been supporting public banks and the banks were encouraged to use FPMs. The EADHO and DMIT added that this condition had recently been changed by the new legislation and strategies of the State and the Central Bank's new regulations such as Statute No (1)1993 and consequently Bank A and other private banks were established. Such banks created competition and gave the management of Bank A an urge to adopt advanced management practices and technologies such as NFPMs. The DMIT and MBMB mentioned the same point that since the 1990s, the changes in some of the State's legislation and the Central Bank's regulations and strategies and

the openness and development of a market economy have given Bank A's management a catalyst for adopting the latest management, accounting, and technological systems such as NFPMs. The EADHO, DMIT, DMIT and MBMB concluded that the new regulations and strategies of the Central Bank were most important factors influencing the adoption of NFPMs.

The MCD explained that one of the Central Bank's strategies is to define the price of banking services for all the public banks. He reported that this directed Bank A to study the cost of services and have nearly the same price and we concentrate efforts on competing for quality of services, delivery, customer satisfaction, and other non-financial factors. The price of services is no longer a very important issue for some customers. The MIA made the same point that the Central Bank's price fixing for the public banks had encouraged the management of Bank A to concentrate and improve the quality of service, delivery and customer satisfaction which in turn has encouraged the use of NFPMs. The CGM mentioned the same point as MCD and MIA that the price of services of public banks is defined by the Central Bank which encouraged Bank A's management to compete on non-financial factors such as quality of service, delivery, and customer satisfaction.

The VCDGM stated that the Central Bank's interference in directing banking transactions has led to changes in Bank A's policy and strategy which in turn hindered its ability to satisfy its customers. Therefore, this has negatively affected the use of NFPMs. He stated that:

“The interference of the CBL's management in the Bank's transactions has prevented Bank A from achieving customer satisfaction sometimes.”

The HABA and HATB stressed the same point and confirmed that the Central Bank interference has a negative impact on the development of the Bank's critical

success factors such as quality, delivery, and customer satisfaction. The CGM said that:

“Some public organisations wished to open accounts in our Bank. However, the Central Bank used its powers and ordered them to open accounts in the public banks. Therefore, the management of Bank A will lobby the Central Bank to adjust this statute in order to allow these organisations to open accounts with private banks.”

The DMAPD pointed out that the Board of Directors has to get acceptance from the CBL to introduce any new service or to discharge some banking transactions.

The DMAPD stated that:

“Bank A wished to make computer connections between Tripoli branches and agencies. Accordingly, the management of the Bank had to make a contract with a private company to achieve this work. However, the Central Bank refused it and asked the Bank’s management to rearrange it with the Public Company of Telecommunications.”

The DMAPD, HAHA, HAABC and HAFA mentioned that the Central Bank’s regulations have encouraged the use of NFPMs. However, several barriers have been established which have limited Bank A’s ability to satisfy customer needs. There was general agreement among the interviewees that regulations and publications of the Central Bank were vague and prevented Bank A from performing its tasks and from achieving customer satisfaction sometimes.

5.5.2 Information Shortage

The CGM indicated that information on customers, markets, quality of products and services and future State projects is very important for organisations to work effectively. The CGM said that “in my opinion, the lack of information is one of the impediments facing organisations in Libya and negatively impacts on the use of NFPMs and prevents organisations from obtaining the advantages of NFPMs.” The MCD pointed out that Bank A was suffering from a shortage of information because

of the lack of research on markets, customers and industries. Also, the Libyan stock market is still relatively new with limited information. The MCD mentioned that these circumstances obliged Bank A's management to use its own information by conducting its own research to build data warehousing. The CGM and MCD made the same point that:

“All Libyan organisations have faced a shortage of information which hinders their ability to work effectively. However, Bank A's management has tried to build its own information system to provide the required information.”

The HATB mentioned that the stock market started in Libya just this year, that is, there was a shortage of data, which impinged on management's ability to implement AMPs and use NFPs. The DMIT reported that the absence of the role of the stock market and of reliable information resources providing up-to-date and valid information faced Bank A's management and therefore it established its own information system to facilitate the use of NFPs. The DMAPD revealed that adoption of NFPs forced the Chairman/General Manager to develop his own information system to use NFPs effectively. He confirmed that the lack of information negatively affects the use of NFPs. The MBMB mentioned that limitations of information have hindered the management from adopting some AMPs such as forecasted budget. He also asserted that the lack of information is the main factor that negatively impacts on the use of NFPs.

5.5.3 Weakness of Infrastructure

Libya as a developing country is suffering from a weakness of infrastructure such as electricity and telecommunications system. There was a general agreement among the majority of interviewees about the weakness of infrastructure in the Libyan environment. The HABA, HATB, MBMB, MCD and DMIT thought that the

weakness of infrastructure such as telecommunications system is one of the influencing factors that impacts on the implementation of NFPMs. However, since the establishment of Bank A, the management realised that the implementation of NFPMs needs a suitable technological environment and it tried to adopt the latest international technology. The CGM stated that:

“In order to keep up with the development of the world banking industry in the field of information technology and electronic telecommunications through the use of modern banking systems, the Bank’s management took steps to obtain a modern system of the latest technologies used in international banks to improve the quality of customers’ services and satisfy our customers. Therefore, the bank’s management had investment in the best available infrastructure in order to support the Bank’s present and future objectives even although the Libyan environment is suffering from the weakness of infrastructure such as electricity and telecommunications system.”

The VCDGM reported that since Bank A was established, it suffered from a lot of complications and difficulties such as telecommunications problems inside and outside Libya and connecting its network with the telecommunications network. These problems hindered management in implementing and using non-financial measurements such as quality of service and delivery. However, the management of the Bank tried to overcome these problems by providing the best and fastest services and to satisfy its customers. The CGM gave an example of some technology adopted to facilitate the use of non-financial factors, he said that:

“Bank A achieved connection to the International SWIFT System in its quest to benefit from international development in the modern telecommunications and accelerating worldwide banking activities coupled with the ever-increasing rate of computer introduction in the execution of daily operations. Using SWIFT has many advantages among which are the fast service, reduced errors and instruction ambiguity, lower costs and safety security of process resulting in the confidentiality of information and cutting down on fraud.”

The DMAPD and HAFA mentioned that the weakness of infrastructure is one of the influencing factors that impacted on the use of NFPMs. They stated that when the

management of the Bank decided to adopt the advanced management and technological techniques implemented in the western countries, it faced the weakness of infrastructure such as telecommunications system problem. Nevertheless, the Bank by virtue of its senior management got over this problem and implemented the advanced management and accounting techniques such as NFPMs.

5.5.4 Traditional Educational System

The quality of the educational system has an important role in developing people, society and its organisations. The DMAPD and DMIT indicated that the financial and managerial educational system is very traditional and has not changed for a long time to suit the advanced management, accounting, and technological systems. Traditional financial and managerial educational system has created relatively poorly informed employees which is a difficult phenomenon for organisations because this level of knowledge negatively influences organisations' ability to satisfy their customers. Moreover, this level of knowledge has a negative impact on organisations' management, accounting, and technological developments.

The HATB confirmed that financial and managerial educational system was adversely affecting the use of NFPMs because it gave individuals a financial orientation. He confirmed that financial and managerial educational system had a direct relationship with the use of NFPMs. The HAABC, EADHO and HAHA mentioned that traditional educational system including the financial and managerial educational system did not assist organisations to develop their systems and techniques. Therefore, the weakness of educational system - specially the financial and managerial educational system - had a negative impact on using NFPMs. They suggested that any organisation adopting NFPMs should first prepare its employees

by running extensive training programmes about these measurements to familiarise them with these NFPMs.

The CGM confirmed that NFPMs need employees from a developed educational system to understand the advanced management and accounting practices such as NFPMs. He stated that:

“Therefore, A’s management pays a great deal of attention to practical as well as theoretical training both locally and abroad which enhances employees’ understanding of advanced management, accounting, and technological practices such as NFPMs. Extensive training for employees specially the new ones has been done day-by-day by the Bank’s own training centres and by the Bank’s units in order to enhance the work environment, to increase productivity and efficiency of employees, and to build a solid manpower structure that is compatible with the quality of the banking services.”

5.5.5 General Public’s Lack of Banking Knowledge

The HATB asserted that in the developing countries, the adoption of new techniques such as NFPMs needed effort and resources and an appropriate level of people awareness to work effectively. The HABA and DMIT pointed out that, on the one hand, openness and development of society were factors that impacted on the use of Western advanced techniques such as ATMs, mobile phone banking and NFPMs which have the ability to satisfy stakeholders’ needs (such as customers, employees, shareholders, and the community). On the other hand, the unawareness of some people (created by the traditional educational system) had negatively influenced the use of NFPMs. The HAABC, MBMB, and HAHA confirmed that the public’s lack of knowledge of the advanced techniques was a barrier to the implementation of NFPMs and has had a negative impact on the use of NFPMs. The VCDGM mentioned that people’s acceptance and understanding of the new techniques is an essential factor to allow these techniques to work effectively. He believed that

unawareness of the general public was an external environmental factor that negatively impacted the use of NFPMs.

The CGM pointed out that the people in Libya were considered to be in a period of development and had not realised what the Western world has achieved. He mentioned that the Western techniques were still not popular in the Libyan environment. Therefore, the adoption of NFPMs was not an easy task. The DMAPD stated that:

“NFPMs require a specific level of education and competency, effectiveness and consciousness of the General Public to prosper and progress.”

5.5.6 Uncertainty of Economic Environment

The VCDGM believed that the uncertainty of the economic environment which occurred because of the US sanctions had negatively affected organisations' profitability. The HATB and MBMB confirmed that the uncertainty of the economic environment is one of the factors that enhanced the implementation of NFPMs. On the other hand, they thought that FPMs are more suitable in a certain environment and these measurements cannot give a true image of how organisations are working in an uncertain environment. The MCD believed that organisations needed non-financial information when the economic position is uncertain. He asserted that in uncertainty, NFPMs are better than FPMs.

The CGM and DMAPD mentioned that the uncertain environment of Bank A encouraged its management to concentrate on non-financial factors and to use the related measurements namely NFPMs. The DMAPD reported that not just US sanctions and the competitive environment had made the business environment uncertain but there were several other causes such as the absence of a proper stock market, the State's new legislation and strategies, the Central Bank's regulations and

the Central Bank's interference in the banking sector and all this uncertainty encouraged the use of NFPMs.

5.5.7 Financial Mentality of Shareholders

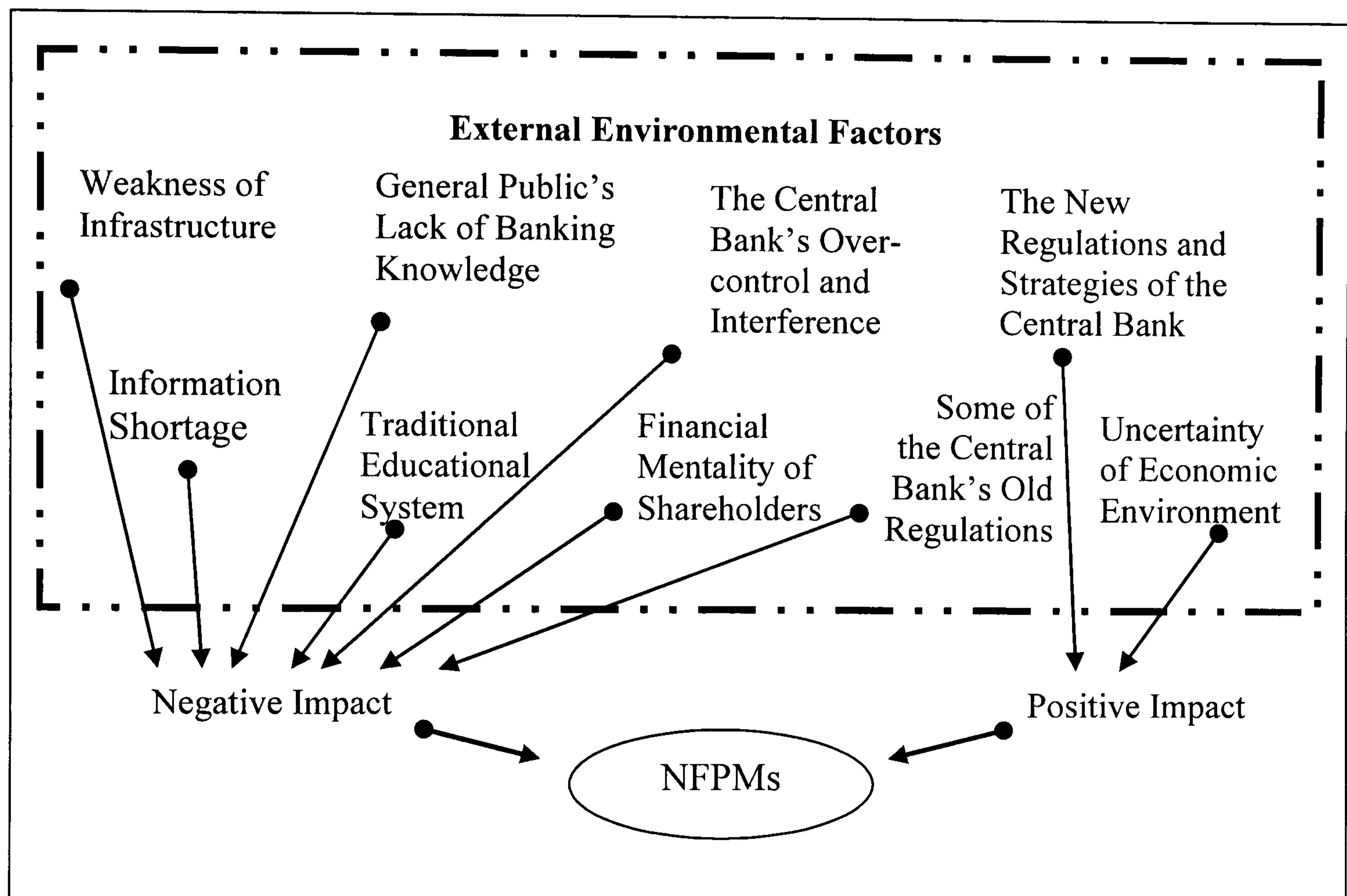
The Libyan economy is still dominated by the State public ownership with a financial oriented mentality. The DMAPD criticised shareholders' belief that the adoption of advanced management techniques and the use of NFPMs are a waste of money and effort. He added that this belief has a negative influence on the identification and development of organisations' critical success factors such as quality and customer satisfaction. The EADHO asserted that the financial mentality dominated the Bank's shareholders which negatively impacted on the development of the Bank's critical success factors such as quality and customer satisfaction. The HATB confirmed the same point that the shareholders are too financially oriented and that could negatively impact on Bank A's management concentration on non-financial factors and NFPMs.

The VCDGM mentioned that the goal of shareholders is to achieve as much profitability as possible in the shortest period. This goal made them always try to refuse any new development which in turn could have a negative impact on management concern for using NFPMs. However, Bank A has a Chairman/General Manager with long-term experience and competence who always persuades the Bank's shareholders of the benefits of the adoption of any new useful advanced technologies (ATs).

The MIA pointed out that shareholders have a financial orientation because of their kind and level of education, traditional financial perspective, and their unawareness of the nature of the banking work which is service oriented. He added that this financial orientation could affect negatively management's interest in

implementing NFPMs. However, the management of Bank A has a strong belief that NFPMs have long-term benefits, and are very important and necessary for the Bank's long-term growth and future success. Figure 5-8 summarises the influence of the external environmental factors on Bank A's use of NFPMs.

Figure 5-8: External Environmental Factors' Influence on the Use of NFPMs



5.6 STRATEGIES THAT MANAGEMENT ADOPTED IN CONJUNCTION WITH NFPMs

In order to keep up with the development and implementation of NFPMs Bank A's management has followed a specific set of strategies focused on supporting the use of NFPMs to realise its objectives. Table 5-6 summarises the labels which indicate the main strategies that have been implemented in conjunction with using NFPMs. These strategies are listed against the interviewees who mentioned them. A detailed discussion of each factor follows in the subsections from 5.6.1 to 5.6.6.

Table 5-6: Actions/Interaction Strategies Labels

Interviewees	DHR	PRS	DBS	DOS	AAMP	AIC
CGM	√	√	√	√	√	√
VCDGM	√	√	√	√		
MIA	√	√				√
DMAPD	√	√		√	√	√
MCD					√	
DMIT	√	√	√	√	√	
HAHA	√	√	√			√
HABA	√	√	√		√	√
HAFA	√	√	√		√	√
HATB	√	√	√			√
EADHO	√					√
MBMB						√
HAABC	√		√			√

DHR: Development of Human Resources.

PRS: Performance Reward System.

DBS: Development of Banking System (Bank's Operating, Information and Reporting System).

DOS: Development of Organisational Structure.

AAMP: Adoption of Advanced Management Practices.

AIC: Adoption of Internal Competition.

5.6.1 Development of Human Resources

The DMAPD and VCDGM mentioned that qualified and competent human resources are important to improve the Bank's service quality and customer satisfaction and all other critical success factors. Therefore, the Bank adopts an employment policy that emphasises building a solid manpower structure that is compatible with quality of banking services and experience in the banking practices. The DMAPD stated that:

“Activities such as quality are performed by human resources. Therefore, the adoption of successful human resources strategies will enhance the development of non-financial measurements.”

The CGM confirmed that investment in human resources is one of the most important critical success factors for organisations specially these which work in the field of services such as the banking industry. With the realisation that banking capabilities and skills are the most important factors in providing banking services, the Bank's management has made extensive efforts aiming at offering internal and

external training opportunities to develop its employees to be consistent with the nature of its industry based on its firm belief in the importance of training in achieving success in the performance of the Bank. He said that:

“Training and development of staff takes paramount importance and is implemented through a large number of in-house or external training programmes, these programmes are related to the banking activities in order to improve productivity, quality of service and to obtain customer satisfaction.”

The DMAPD, DMIT and VCDGM mentioned that the Bank’s management pays a great deal of attention to practical as well as theoretical training. Managerial and human resources development is a continuous process to improve the efficiency of its employees which will influence the quality of service and customer satisfaction. The DMAPD, VCDGM, HATB, EADHO, and HAABC reveal that the adoption of non-financial factors and the use of NFPMs required regular advanced training programmes. The training centres provide on-the-job training as well as hands on training to employees under the supervision of department and branch managers and the section heads in the Bank. They confirmed that the current training programmes that are provided by the training centres focus on providing the highest quality service. The MIA mentioned that the training programmes that are provided by the training centres have focused on improving service and ensuring customer satisfaction. He added that the training methods and techniques have also become more advanced and practical such as seminars, practical training, trial and error exercises and lectures.

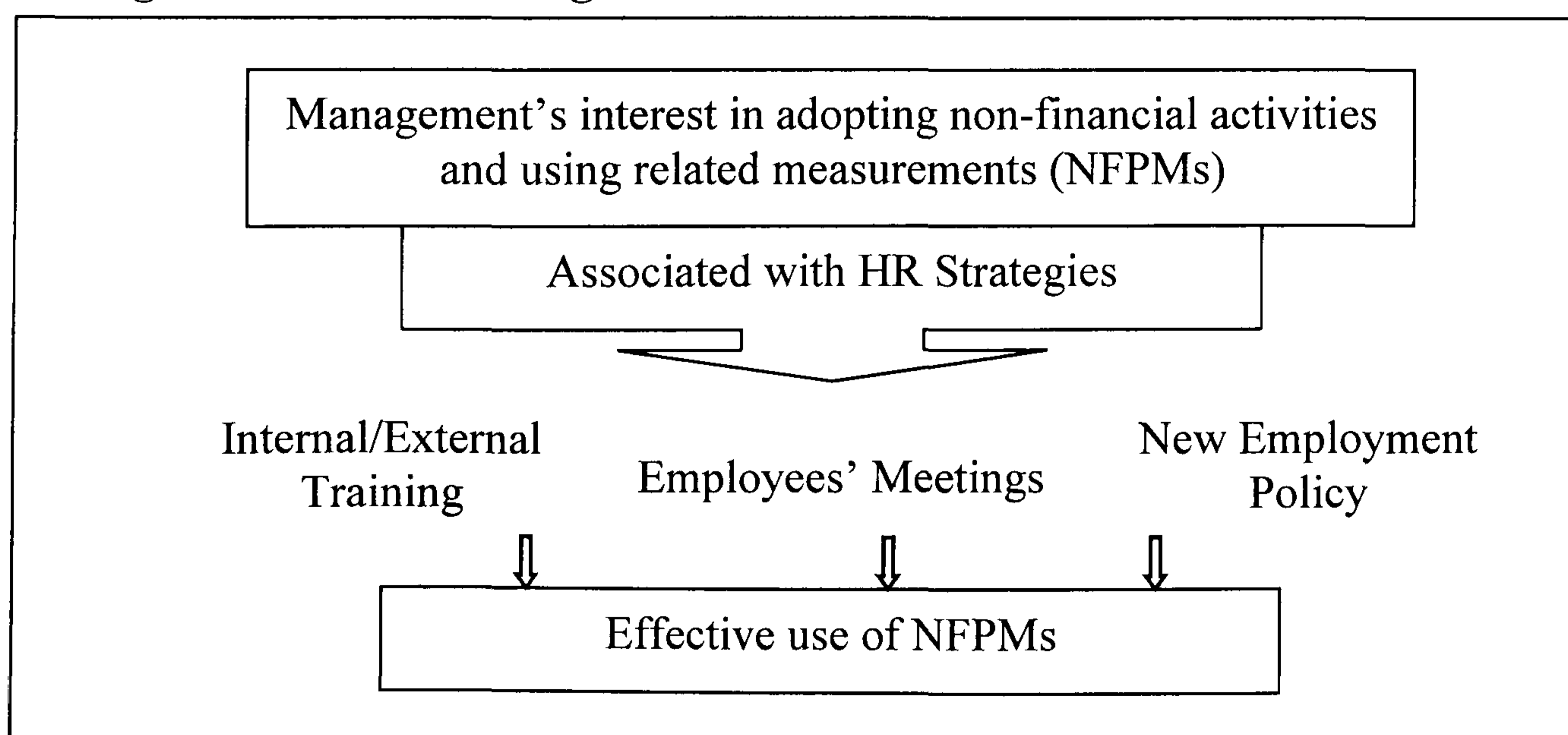
The DMAPD and VCDGM mentioned that the management’s interest in non-financial factors and related measurements had influenced training programmes provided by the training centres. These training programmes are directed at developing the skills and ability of employees to improve the services and to achieve

the highest possible customer satisfaction. The DMAPD and VCDGM added that these training programmes have resulted in developing the professional capabilities and effectiveness of employees.

The HABA and EADHO believed that the local training programmes which were organised by the CBL's Training Centre were irrelevant in such a competitive environment and were focusing on areas such as traditional banking transactions, internal transactions, and others. However, after the establishment of Bank A's training centres the training requirements and techniques had completely changed to become more service-oriented.

The HAFA and HAHA pointed out that the executive management had taken effective steps to evaluate employee satisfaction. They mentioned that executive management has held "employee meetings" and every unit's employees meet four times a year with their manager and the entire Bank's staff meets once a year with the Chairman/General Manager with an opportunity for freedom of expression about any problem. Figure 5-9 demonstrates HR strategies that management adopted in conjunction with the use of NFPMs

Figure 5-9: HR Strategies and the Use of NFPMs



5.6.2 Performance Reward System

The CGM and DMAPD believed that the reward system has to be associated with the organisation's objectives to encourage employees to achieve the organisation's objectives and create a strong relationship between employees' objectives and organisation's objectives. The Bank's top management paid a great deal of attention to developing the employees' reward system which motivated them to provide better banking services. The Bank's management had created a link between performance appraisal and the reward system. The CGM commented that:

“The policy of this Bank is to encourage and enhance the staff to do their best and to contribute to building their loyalty to the Bank which influences their performance to achieve balance between their objectives and the Bank's objectives equally.”

The HAFA, HAHA, HABA, HATB, MIA and DMIT mentioned that the Bank's management used an integrated annual efficiency and performance appraisal report that was designed to reward employees by also assessing non-financial aspects of their performance. This report is completed by the employee's direct manager and then a top manager has to give her/his opinion on it and sign it and, finally, the Chairman/General Manager has to give his decision and sign it as well. They added that the Bank pays an annual bonus to each employee according to their “output” as stated by their manager in their annual efficiency and performance appraisal report. Additionally, the Bank uses the Model Employee award in each branch, agency, business centre, and the department managers in the Head Office. The selection of all the Model Employees is based on NFP. The winners will get rewards and they will also receive valuable presents.

The VCDGM revealed that the Bank's management recognises the importance of non-financial factors in achieving its future success and has linked employees'

promotion system with NFP. He added that employees are rewarded following annual efficiency and performance appraisal reports which are based on service quality, on-time delivery, flexibility, teamwork, customer satisfaction and others. The DMAPD mentioned that the reward system had developed to become more oriented toward NFP and efficiency. He said that:

“We reward employees by assessing their NFP, level of service quality, delivery, flexibility, innovation and creation, and others. The Bank pays to its employees a reward which is at least a three months salary bonus. The bonus depends on the result that an employee got in the annual efficiency and performance appraisal report. If an employee gets 90% or more she/he will get the highest level of bonus.”

5.6.3 Development of Banking System (Bank’s Operating, Information and Reporting System)

The DMIT revealed that the Bank’s management has persuaded its units to concentrate on non-financial factors and the use of related measurements and it has encouraged its units also to report both financial and non-financial information. He asserted that there was a need to build and use an advanced information system in order to provide up-to-date information for the executive management. Therefore, the management imported an integrated system of the latest technologies used in international banks which is an advanced comprehensive banking system. He described it:

“This banking system covers all services we provide in the present, as well as any we contemplate in the future. This banking system enables the users to design and prepare any type of report they need, in addition to the standard reports already contained in it. This system has been designed to provide the periodic reports required by the CBL on their requirements and in their format. This integrated banking system has been designed to produce the data and information in graphic format and statistics which give an indication of future performance and it connected the Bank by its correspondences through the SWIFT system. He added that this system can also be connected to the international financial market, to the local and international banks, and it will be used in the e-commerce.”

The VCDGM pointed out that there were many reasons that had caused the executive management to sign a contract to update the Bank's information system and build a specialised system by purchasing a new advanced banking system which linked directly all the Bank's units with the IT department to provide the management with daily updated financial and non-financial information. These reasons were to harness the modern information technology to increase the efficiency of the services provided to customers, to maintain the leading role in the Libyan banking sector by improving the quality of services offered to customers, and to develop the Bank network and its administration in order to support the Bank's present and future objectives and enhance the Bank's critical success factors. The CGM mentioned that such an advanced banking system supplied on-line information on units' performance which enables management to assess and evaluate units' performance which makes it a high level monitoring system for the Bank's critical success factors. He stated that:

“Control facilities are available, which allow management to control the units (branches, agencies, and business centres), either through direct access to the unit accounts or through the various available reports.”

The DMIT mentioned that this system was designed to provide the executive management and IT department with daily financial and non-financial information which would facilitate effective executive management decision-making and other functions. He added that this system is a high performance information system that could give management the ability to better assess and evaluate the progress of its service quality, customer satisfaction, and delivery. It provides management with daily details on units' progress or deterioration in the units' activities and the development of the Bank's competitive factors. The DMIT believed that this system gives managers the ability to take a long-term view and make effective and timely

decisions. The HABA, HAHA, HAFA, HAABC, and HATB (who are the managers of the units) reported that the new banking system facilitated daily work specially as it is an advanced up-to-date and on-line communication between operational units and the executive management through the IT department. They stressed that this banking system and related reporting and information system is a logical consequence associated with the adoption and the use of NFPMs.

5.6.4 Development of Organisational Structure

The CGM mentioned that at the end of 2004, the Board of Directors had taken a decision about the development of its organisational structure. It decided to add a new department which is the “banking services and systems” and a new division which is “banking service marketing.” The banking services and systems will be under the direct supervision of the Chairman/General Manager. It will consist of experienced individuals in different fields with professional information systems, information technology, management, accounting, and computer technology. The DMIT pointed out that the banking services and systems department will provide support to the units’ operating system and will report to the executive management about the operating system, information system, and other important aspects that related to the banking system and banking services which will support the executive management’s decision-making. He added that this new department was created to support the banking system and to ensure that the banking system is working effectively.

The DMAPD and VCDGM stated that the banking services and systems department was designed to provide important and useful information to the executive management to guide its decision-making function and to support the banking system. They confirmed that it was also designed to assist the Bank’s

management to deal with the future services that Bank A hopes to provide such as e-commerce. They added that it will provide direct support to all the banking units and will provide indirect support to all the present and future banking services that are provided to customers.

The DMAPD stated that the banking service marketing division will serve the operational units and the executive management. He mentioned that it is a service oriented division that will support management by reporting on quality of service, new services, customer studies, media services, customer satisfaction, and other important aspects that relate to service quality and customer satisfaction which in turn would assist the management in the decision-making function. The DMAPD added that the banking service marketing division's tasks are to assess, evaluate, and report on the degree of service quality and customer satisfaction and therefore, it will use more NFPMs to evaluate the quality of service and customer satisfaction. The CGM believed that the banking service marketing division will provide effective performance evaluation of service quality and degree of customer satisfaction. He confirmed that it will measure and evaluate them by using mostly NFPMs.

5.6.5 Adoption of Advanced Management Practices

Bank A's management has adopted a number of AMPs related to its strategies that tried to advance management effectiveness and Bank productivity. The MCD indicated that AMPs included strategies that aimed to support quality of service, customer satisfaction, on-time delivery and employee satisfaction. He mentioned that one of the management accounting techniques that A's management has implemented is TQM. He clarified that the implementation of TQM was a result of its relation with improving service quality and it endeavours to assess and evaluate the compatibility between the optimal degree of quality and cost.

The CGM mentioned that Benchmarking is a technique that has been used to encourage the implementation of non-financial measurements such as quality of service. It encourages the management of any organisation to assess and evaluate its performance and then benchmark its performance against the best organisation in its industry or economy. He believed that benchmarking is an approach that assists organisations to adopt the world's best techniques and methods which can enhance organisations' performance. The CGM and HABA confirmed that benchmarking has been an important driving force behind the advances of the Bank which had been benchmarked against the best international banks. They added that a number of A's advanced strategies were adopted by imitating the best foreign banks such as banking system, business centres and young people's agency. They indicated that all these advanced practices were on account of the Bank's strategy of benchmarking against the best banks which in turn had previously adopted such practices. The CGM said that:

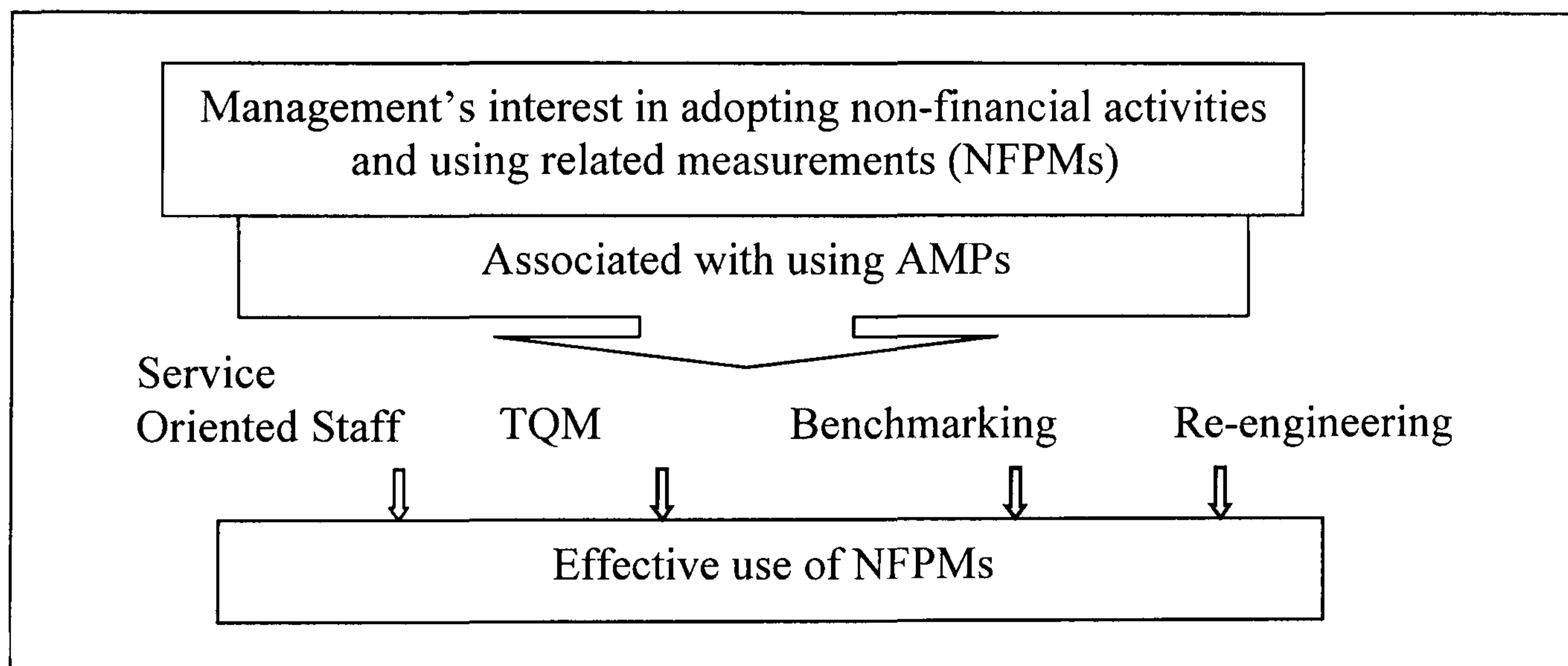
“The management of Bank A has benchmarked against the best international practices and then imitated them because many of the Libyan banks' practices were outdated or still in introductory stages.”

The DMAPD mentioned that A's management has realised the importance of service oriented staff to assist the management of the Bank to achieve its objectives of improving the quality of the Bank's services and to obtain customer satisfaction. Therefore Bank A's management had established training centres. He said the training programmes were introduced to enhance employees' ability to be proactive and to perform their tasks effectively. The programmes were practical rather than theoretical and aimed to teach employee behaviour - especially how employees should deal with customers in an ideal way such as smiling and friendliness, greeting, responsiveness, transaction performance and speed, explanation and

recommendations. He added that this is one of the executive management strategies used in conjunction with the implementation of NFPMs.

The DMIT and HAFA mentioned that the management of Bank A had redesigned the processes and procedures of its banking services in a way that reached the highest quality in terms of time and simplicity and subsequently assisted employees to perform their tasks at a level that could be described as the best in the Libyan banking sector. They confirmed that such re-engineering procedures enhanced the level of customer satisfaction. The CGM mentioned that Bank A's management had signed a contract with an international consultant to assess and evaluate the Bank's performance. Figure 5-10 shows the Advanced Management Practices that management adopted in conjunction with the use of NFPMs.

Figure 5-10: AMPs and the Use of NFPMs



5.6.6 Adoption of Internal Competition

Bank A's units are considered as smaller banks performing their work in an internally competitive business environment. The HABA and HAHA conceded that internal competition is an influential factor that drives units' staff to focus on quality of services, on-time delivery, and customer satisfaction. On the other hand it drives the management of Bank A to obtain employee loyalty by using the Model Employee

System. The HAFA, MBMB, and EADHO reported that the Model Employee System – selecting the best staff to be honoured – was chosen to enhance the internal competition and to get employees motivated to work effectively. The HAFA confirmed that it encouraged employees to improve the quality of service and on-time delivery. They also asserted that it is a very useful tool in improving management and employees' effectiveness.

The HAABC stated that internal competition is a practical tactic that has been used to improve the Bank's units through managers and employees providing services at a high level of quality and on-time delivery which in turn led to an increase in their market share and customers' deposits. He added that this policy has encouraged the staff to do their best building good and strong relations with their Bank. The CGM mentioned that Bank A created internal competition to motivate its managers and employees to develop their operational style and it also established the Model Employee award to encourage employees to respect their work and take pride in it. He stated that:

“The Bank policy of internal competition and related action (which is Model Employee in each branch, agency, business centre, and department managers in the head office) has proved to be a worthwhile and effective means of enhancing Bank A's critical success factors and creating a competitive spirit and increasing productivity, proficiency, and dedication amongst the Bank's employees.”

The DMAPD pointed out that the creation of internal competition has some advantages for Bank A, namely, to motivate its units to work effectively to improve service quality and to get as many customers as possible to increase the Bank's market share, to accustom its employees to work in a competitive environment for future competition, and finally to be the leader of the LBS.

The HATB mentioned that since the opening of Bank A, it works in a competitive environment with the local banks and is preparing for future competition with international banks. This situation has let Bank A's management define its critical success factors and forced it to evaluate and improve these factors for its future success. Therefore, the management decided to adopt internal competition as an effective tool to force units' staff to focus on quality of services, on-time delivery, and customer satisfaction. The MIA believed that internal competition has driven A's management to improve its critical success factors, and to increase the use of NFPMs. He said that:

“The policy of internal competition has driven Bank A to reinforce its service quality, customer satisfaction, employee satisfaction and loyalty, and other critical success factors and to use related measurements (NFPMs) for coming competition and future success.”

5.7 CONSEQUENCES OF IMPLEMENTATION AND USE OF NFPMs

Bank A's adoption of NFPMs and the related management strategies have generated a number of consequences. Some are accounting consequences such as improvement of profitability and increased capital expenditure. Others such as variety and improvement of services, advanced management technology and effective management decisions are management and technological consequences. Table 5-7 summarises the labels which represent the main consequences that have stemmed from using NFPMs. These consequences are listed against the interviewees who mentioned them. A detailed discussion of each factor will follow in subsections from 5.7.1 to 5.7.5.

Table 5-7: Labels for Consequences of Implementation and Use of NFPMs

Interviewees	VIS	IAT	PEFPMs	CE	EMD
CGM	√	√	√	√	
VCDGM	√	√			
MIA	√		√	√	√
DMAPD	√	√	√	√	√
MCD			√		
DMIT	√	√	√	√	√
HAHA	√	√	√		√
HABA	√	√	√		
HAFA	√	√	√		
HATB	√	√		√	√
EADHO		√	√	√	
MBMB		√	√	√	√
HAABC		√	√	√	√

- VIS: Variety and Improvement of Services.
IAT: Introduction of Advanced Technology.
PEFPMs: Positive Effects on FPMs.
CE: Capital Expenditure.
EMD: Effectiveness of Management Decisions.

5.7.1 Variety and Improvement of Services

The HABA, HATB, HAHA, HAFA, DMIT, and DMAPD revealed that the Bank always aspires to provide the latest in the world of banking services in addition to the conventional banking services. The Bank provided a variety of new services in the Libyan banking market such as: travellers' cheques in Libyan Dinars; touch-screen services; international currency deposits; various credit card and cash machines; telephone banking; handicapped, ladies, and older customers' agency (Drive-in banking); young people's banking agency; businessmen branches and complementary services to the regular service for the business centres' customers. They suggested that the concentration on non-financial factors and the use of related measurements had driven the Bank's management to provide all these differentiated and diversified services which reflect new directions in the Libyan banking world and express a strategy which aspires to increase the Bank's share in the market through enhancing quality of service, delivery, customer satisfaction, and community satisfaction.

The CGM clarified that there is a direct relationship between NFPMs (such as quality of service and customer satisfaction) and the diversification of service range. This relationship was attributed to the nature of NFPMs. They are outward looking indicators and have the ability to associate the organisation with its environment which in turn encourages the management of the organisation to focus on stakeholders' needs and meet such needs. He added that the diversity of the service range is a result of the Bank's adoption of non-financial measurements. The VCDGM pointed out that the Bank's management diversified its services as a consequence of the adoption of non-financial factors. He added that service mixture had developed as a result of the Bank's policy which aimed to improve its quality of service, customer satisfaction, delivery, and community acceptance. The MIA said that:

“The use of service quality and customer satisfaction had encouraged the development of services and the creation of new ones. The Bank's management has introduced new services which aim to satisfy its customers.”

5.7.2 Introduction of Advanced Technology

Bank A employed continuous development as a strategic choice in order to adapt to international and local changes in the banking industry and to increase its effectiveness and efficiency. Advanced Technology (AT) is a strategy that the Bank's management adopted as a result of its concentration on quality of service, on-time delivery and customer satisfaction. The CGM mentioned that Bank A implemented AT that related to software and hardware to increase the efficiency of the services provided to customers and in the meantime to maintain its leading role in the Libyan banking sector by improving the quality of customer service. He also confirmed that ATs such as internet banking, home banking, ATMs, mobile phone banking and other advances were, at least partly, the consequences of using non-

financial measurements. The HATB clarified that the implementation of non-financial measurements has supported the adoption of the latest and the most ATs.

The DMIT and VCDGM pointed out that the adoption of the banking system which allows branches, agencies, and business centres to operate as one bank, where, for example, a customer's account in one branch is an account in the whole bank, while at the same time the branch operates as an independent unit, has contributed to improving the quality of service and on-time delivery. They asserted that this system was installed on account of the adoption of NFPMs. The DMIT stated that:

“In the advanced comprehensive banking system, all the Bank's units were connected on-line with the result that all the branches, agencies, and business centres appear to the Bank's customers as a single branch regardless of which unit they are dealing with. This system was a consequence of management's strategy associated with the adoption of NFPMs.”

The HAFA, HAHA, EADHO, MBMB, and HAABC mentioned that the Bank's premises are modern and up-to-date and equipped with the latest telecommunications technology and instrumentation and international banking system to enhance the level of service quality and on-time delivery and then to increase customer satisfaction. They confirmed that the AT enabled customers to view their accounts, to get information on Libyan Dinar exchange rate against various other currencies and other services which serve them when they wanted and where they wanted. The HABA said that:

“By adoption of the AT, the Bank has got an opportunity to expand and improve communication with its customers much more than conventional banking systems can provide.”

The majority of interviewees agreed that the AT has improved service quality, on-time delivery and customer satisfaction. They added that adoption of AT was an outcome of the Bank's concentration on the use of NFPMs.

5.7.3 Positive Effects on FPMs

The MIA, HAFA, and HAABC confirmed that the management's focus on NFP and using NFPMs has helped to improve profitability in the long-term because it is confident that this higher profitability could not be achieved without a concentration on these factors. The HAFA stated that:

“Since the establishment of the Bank, the Chairman/General Manager has accepted that quality of service, on-time delivery, and customer satisfaction and the use of NFPMs have a positive effect on the Bank's long-term profitability and other FPMs.”

The DMIT and MBMB mentioned the same point that the executive management encourages the Bank's units to focus on NFP and use NFPMs because these measurements are the main drivers of continuous long-term profitability, customers' deposits, and other FPMs. The MCD stated that:

“The final result of NFP and related measurements will improve the FPMs which evaluate what we have done during a period of time. Therefore, NFPMs are the first measurements we have to use to evaluate the performance and, after that, FPMs show the final result of the organisation's success.”

The EADHO mentioned that since the adoption of NFPMs, Bank A's management has achieved an increase in its year-to-year profitability, customers' deposits and other FPMs. He added that the important element behind the success of Bank A was the management which believes that NFPMs have a direct cause-effect relationship with FPMs.

The HABA pointed out that the Bank's management objective in a competitive environment dominated by five State banks is to continue to survive and then to achieve higher profitability. Therefore, it has dedicated its resources to achieve customer satisfaction and community acceptance by providing a high level of service quality and on-time delivery. The HABA clarified that if any organisation considers

seriously its critical success factors then it will improve its profitability. He reported that according to his operational experience, there is a direct strong relationship between the improvement of the organisation's critical success factors and the FPMs such as profitability. For example, the enhancement in quality of services or products will directly reinforce customer satisfaction which in turn will enhance the organisation's reputation and cause an increase in the number of customers. Finally, this will lead the organisation to achieve better results on FPMs.

The management believes that NFPMs are the main drivers improving the Bank's FP and achieving long-term survival. The DMAPD confirmed that the higher quality of service will lead to an increase in customer satisfaction and loyalty which in turn will surely deliver better future profitability.

The CGM was convinced that the enhancement in quality of service, customer satisfaction, on-time delivery, and employee satisfaction will be reflected in financial achievement in terms of profitability. He stated that:

“Quality of service, on-time delivery, customer satisfaction and loyalty, employee satisfaction and loyalty, and community are influencing factors which affect long-term profitability and success. Quality of service, on-time delivery and employee satisfaction and loyalty will ensure customer satisfaction which will lead to good reputation of the organisation and community acceptance which in turn helps the continuity of profit in the long-term.”

5.7.4 Capital Expenditure

The MIA asserted that investment in the quality of service, customer satisfaction, and employee satisfaction had led the Bank to provide the best services. The management's interest in service quality, on-time delivery and customer satisfaction had caused an increase in its capital expenditure. He said that:

“The adoption of improved service has cost the Bank a relatively large amount of capital expenditure in implementing the latest advanced technologies and practices, which will improve the Bank's long-term profitability.”

The HATB, MBMB, HAABC, EADHO, and DMIT mentioned that the Bank's management incurred capital expenditure for adopting advanced technologies and practices required for the implementation of improved quality of service, customer satisfaction, employee satisfaction, and community acceptance. The CGM and DMAPD mentioned that when Bank A's management adopted the non-financial measurements, it knew this policy would cost it more capital expenditure to work effectively.

5.7.5 Effectiveness of Management Decisions

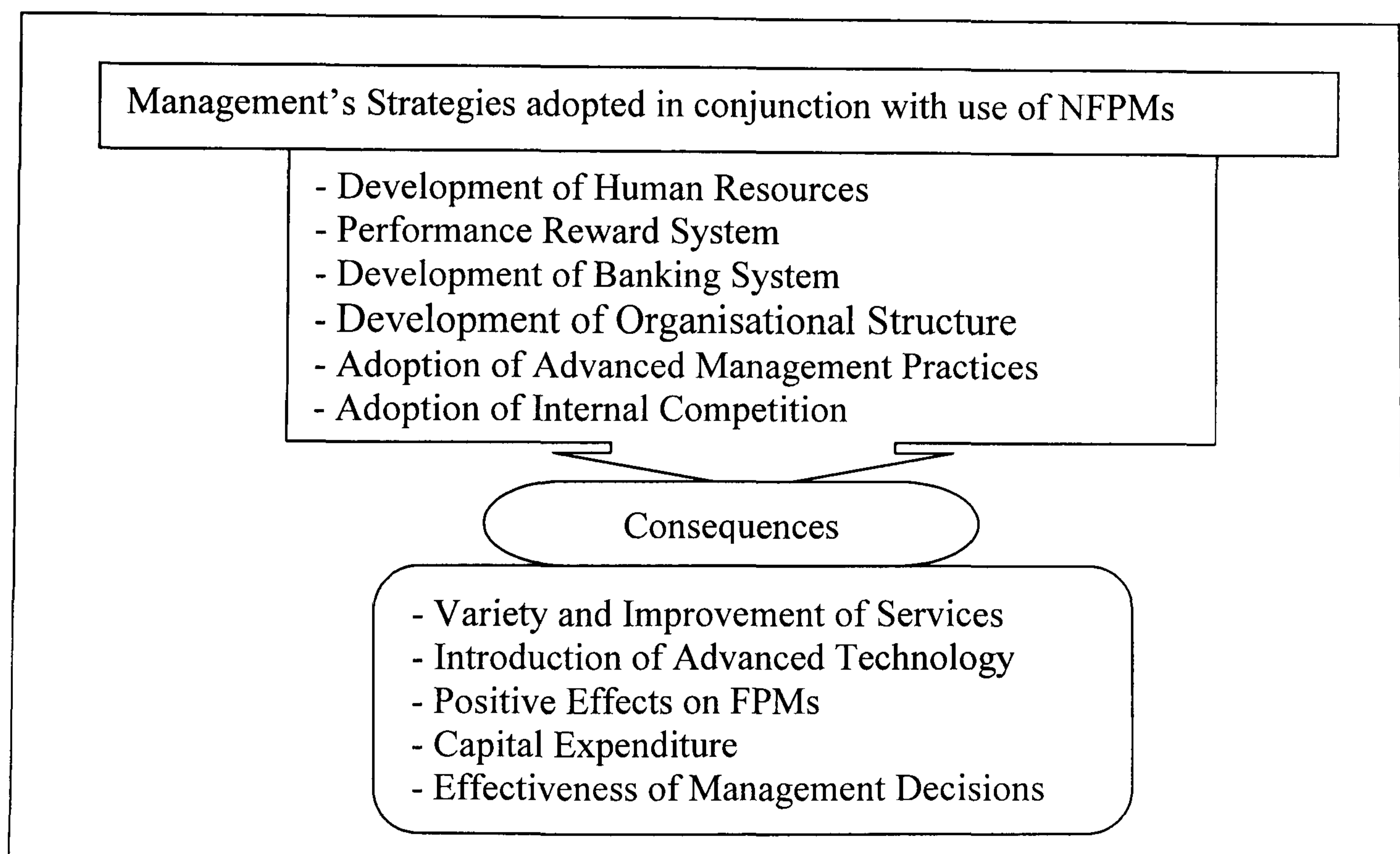
The MIA confirmed that NFPMs have the ability to drive management's decision making process. The DMIT, HATB, HAABC, and HAHA pointed out that the executive management uses performance appraisal outcomes (financial and non-financial information), its accounting and management background and long-term experience in the decision making process. These factors provide management with an ability to make effective decisions at the right time. The DMAPD described management decisions as more rational, effective, and successful using NFPMs. He gave some examples of these decisions. The policy of caution in granting different credit facilities, loans and advances was one of these decisions. Another such decision was the avoidance of marginal customers by applying strict conditions to the applicants. Finally there was the contribution to charitable societies by providing cash donations which was motivated by the belief that the Bank's role is not merely providing banking services to its customers and making profit. The Bank's management firmly believes and realises that its social role dictates that it should contribute and participate in alleviating the burdens of the needy and providing a helping hand to those who require assistance. The DMAPD concluded that the use of non-financial measurements has guided management's decisions.

The MBMB stated that the use of outcomes (such as better quality of service, on-time delivery and customer satisfaction) assist management in the planning process. Consequently, management decisions are more effective, objective, and reasonable. He reported that:

“There is a relationship between the use of NFPMs and the quality of the decision making process. The more management concentrates on and uses the results of NFPMs, the more effective, objective, and rational its decisions will be.”

Figure 5-11 shows the management strategies adopted in conjunction with the use of NFPMs and the related consequences.

Figure 5-11: Consequences of Management Strategies Adopted in Conjunction with Use of NFPMs



5.8 RESEARCHER'S MODEL FOR Bank A

As mentioned earlier, Strauss and Corbin's paradigm (1990, 1998) model was used in analysing the data of this case study. The model assists the researcher to develop and relate the categories to the main phenomenon under investigation, which is the use of NFPMs. According to this model, labels are grouped and related to the

phenomenon under investigation in terms of causal conditions, context, intervening conditions, action/interaction strategies, and consequences. Then the researcher was able to generate hypotheses as a consequence of specifying the relationship between the emerging categories by using Strauss and Corbin's paradigm. The researcher will discuss the model components in detail in the following subsections from 5.8.1 to 5.8.5. Figure 5-12 shows the researcher model for Bank A.

5.8.1 Causal Conditions

The term "causal conditions" is used to refer to the events or happenings that make the phenomenon take place. In this case study a number of events have caused the occurrence of the phenomenon under investigation (NFPMs). These causal conditions which have driven Bank A's management to adopt and use the NFPMs were explained in section three of this case study. These causal conditions included the following:

- Limitations of FPMs.
- Existing and Future Competition.
- Management's Knowledge of the Relationship between NFPMs and FPMs.
- Demanding Customers.
- Nature of Banking Industry.
- Offensive Strategy.

5.8.2 Context

The term "context" is used to refer to a particular set of characteristics in which the phenomenon has occurred. The researcher has made adjustment for the context to include mainly internal organisational influences that surround the phenomenon within the Bank. The researcher named the contextual conditions as internal environmental factors. In section four, the researcher has specified Bank A's internal

environmental factors that relate to the use of NFPMs. These internal environmental factors included the following:

- Operational Experience and Competence of Management.
- Level of Management.
- Top Management's Interference.
- Stability of Management.
- Collective Working Group.
- Flexible Organisational Structure.
- Long-term Objectives.

The internal environmental factors may have a positive or negative effect on the phenomenon. However, in this case the researcher has specified that the Bank's internal environmental factors positively influenced management's interest in using NFPMs. Moreover, the internal environmental factors have their effects also in causal conditions such as management operational experience and competence which might facilitate management's knowledge of the relationship between NFPMs and FPMs. They also may enhance Bank A's management strategies, for example the internal environmental factors such as Bank A's long-term objectives and stability of management may be behind the strategies that management adopted such as the adoption of advanced management practices and technologies.

5.8.3 Intervening Conditions

Intervening conditions are general conditions that impact on the phenomenon and the strategies that an organisation could implement. The researcher defined intervening conditions as environmental conditions that surround the phenomenon and have an impact on the phenomenon and organisation strategies. The researcher named intervening conditions as external environmental factors. In section five, the researcher has specified several labels representing the external environmental

factors that influenced the implementation of NFPMs. These external environmental factors are:

- Central Bank of Libya's Regulations.
- Information Shortage.
- Weakness of Infrastructure.
- Traditional Educational System.
- General Public's Lack of Banking Knowledge.
- Uncertainty of Economic Environment.
- Financial Mentality of Shareholders.

The external environmental factors may have a positive or a negative impact on the phenomenon and the Bank's strategies.

5.8.4 Action/Interaction Strategies

These include strategies in managing the phenomenon under investigation. Bank A's management generated and used a number of strategies in conjunction with NFPMs. In section six, the researcher has specified the action/interaction strategies that Bank A's management has used in conjunction with the use of NFPMs. Bank A's management strategies included the following:

- Development of Human Resources.
- Performance Reward System.
- Development of Banking System (Bank's Operating, Information and Reporting System).
- Development of Organisational Structure.
- Adoption of Advanced Management Practices.
- Adoption of Internal Competition.

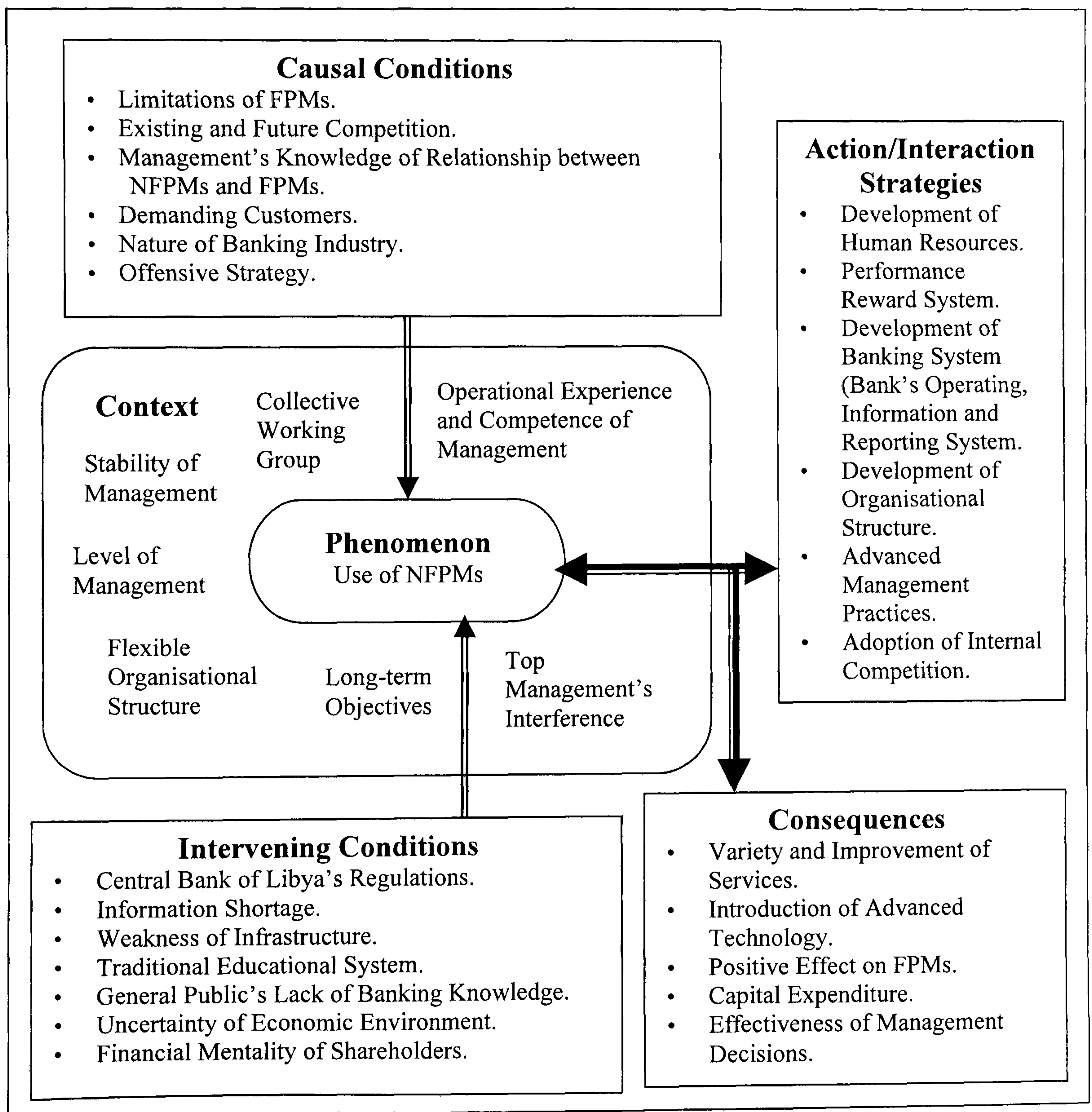
5.8.5 Consequences

Consequences are the outcomes of action/interaction strategies that have been implemented to manage the phenomenon under investigation. In section seven, the researcher has specified a number of consequences stemming from Bank A's

management strategies concerning the use of NFPMs. These consequences included the following:

- Variety and Improvement of Services.
- Introduction of Advanced Technology.
- Positive Effects on FPMs.
- Capital Expenditure.
- Effectiveness of Management Decisions.

Figure 5- 12: Researcher's Model for Bank A.



5.9 HYPOTHESES

This case study was conducted in a private commercial bank. This Chapter started with the background of the Bank and discussed in-depth the use of NFPMs in the LCBS. The motives for using NFPMs, internal and external environmental factors, action/interaction strategies and related consequences have been discussed in the preceding sections. The researcher used the grounded theory approach developed by Strauss and Corbin (1990 and 1998) during the case analysis. The in-depth analysis processes resulted in an identification of the major relationships between the categories that emerged and the phenomenon under investigation. Hypotheses are generated from these relationships between the categories that emerged (see figure 5-12). The substantive hypotheses that emerged from the analysis are listed below:

- 1) The limitations of FPMs are one of the major motives leading to a bank's use of NFPMs (see subsection 5.3.1 and figure 5-1).
- 2) The competitive environment is one of the main motives for managers in a bank using NFPMs (see subsection 5.3.2 and figure 5-2).
- 3) Management's knowledge of the relationship between NFPMs and FPMs is one of the major motives leading to a bank's use of NFPMs (see subsection 5.3.3 and figure 5-3).
- 4) Demanding customers are one of the major motives leading to a bank's use of NFPMs (see subsection 5.3.4 and figure 5-4).
- 5) The nature of the banking industry as a service oriented industry is one of the major motives leading to a bank's use of NFPMs (see subsection 5.3.5).
- 6) The adoption of offensive market strategies in a competitive environment is one of the major motives leading to a bank's use of NFPMs (see subsection 5.3.6 and figure 5-5).
- 7) Operational experience of management, competence of management, top management's interference, stability of management, collective working group, flexible organisational structure and long-term objectives positively affect a bank's use of NFPMs (see subsections 5.4.1, 5.4.3, 5.4.4, 5.4.5, 5.4.6 and 5.4.7 and figure 5-7).
- 8) Lower level managers in a bank tend to use NFPMs more than middle and higher level managers do (see subsection 5.4.2 and figure 5-6).

- 9) New regulations and strategies of the Central Bank and the uncertainty of the economic environment positively influence a bank's use of NFPMs (see subsection 5.5.1 and 5.5.6 and figure 5-8).
- 10) Some of the Central Bank's old regulations, over-control and interference of the Central Bank in a bank's management, information shortage, weakness of infrastructure, traditional educational system, the general public's lack of banking knowledge and financial mentality of shareholders negatively influence a bank's use of NFPMs (see subsections 5.5.1, 5.5.2, 5.5.3, 5.5.4, 5.5.5 and 5.5.7 and figure 5-8).
- 11) The development of human resource strategies to be more service-oriented is associated with a bank's use of NFPMs (see subsection 5.6.1 and figure 5-9).
- 12) The development of the reward system to be linked with non-financial performance is associated with a bank's use of NFPMs (see subsection 5.6.2).
- 13) The development of the banking system (operating, information and reporting system) is associated with a bank's use of NFPMs (see subsection 5.6.3).
- 14) The development of a bank's organisational structure is associated with its use of NFPMs (see subsection 5.6.4).
- 15) The adoption of advanced management practices is associated with a bank's use of NFPMs (see subsection 5.6.5 and figure 5-10).
- 16) The adoption of internal competition within a bank's environment is associated with its use of NFPMs (see subsection 5.6.6).
- 17) Use of NFPMs encourages a bank to diversify and improve its range of services (see subsection 5.7.1 and figure 5-11).
- 18) Use of NFPMs encourages a bank to adopt advanced technology (see subsection 5.7.2 and figure 5-11).
- 19) Use of NFPMs improves a bank's profitability, customers' deposits and other FPMs in the long-term (see subsection 5.7.3 and figure 5-11).
- 20) Use of NFPMs leads to an increase in a bank's capital expenditure (see subsection 5.7.4 and figure 5-11).
- 21) Use of NFPMs improves a bank's management decision-making process (see subsection 5.7.5 and figure 5-11).

CHAPTER 6

BANK B

6.0 INTRODUCTION

This case study is conducted in Bank B which is one of the SCBs in the LCBS. The case study is divided into nine sections. Section one gives details about interviewees and the background of the Bank. Section two is concerned with data analysis. The motives for using NFPMs are explored in section three. Section four discusses the internal environmental factors that affect the use of NFPMs. Section five clarifies the external environmental factors that influence the use of NFPMs. The strategies adopted by Bank B's management in conjunction with the implementation of NFPMs are outlined in section six. Section seven examines the consequences of the implementation of NFPMs. Section eight deals with the findings of this case study in terms of Strauss and Corbin's paradigm model. Finally, the hypotheses emerging from this case study are listed in section nine.

6.1 INTERVIEWEES' AND BANK'S BACKGROUND

6.1.1 Interviewees

The interviews were conducted over a period of seven weeks, during which eighteen semi-structured interviews were completed. During the first visit to the Bank the researcher met the Vice-Chairman of Bank B who gave the researcher an overview of all the Bank's strategies, units and products and the researcher then conducted the case study by interviewing, observing, and inspecting documents. Most interviews lasted two hours although one lasted one and half hours and some lasted more than two hours. One of the interviewees was interviewed twice (see Table 6-1) because he was very busy. The interviews were conducted during the working day at the

interviewees' offices in the Bank's premises. Table 6-1 shows some details about the interviewees who participated in this case study such as job title, interviewees' experience and qualifications and the number of interviews.

Table 6-1: Profile of Interviewees and Number of Interviews Conducted

Job Title	Symbol	Number of Years with Banking Sector	Number of Years with This Bank	Number of Years in Current Job	Qualification	Number of Interviews
Vice Chairman/Deputy General Manager	VCDGM	5	5	5	MSC in Accounting	2
Manager of Planning and Audit Department	MPAD	39	39	5	High School Certificate	1
Assistant Manager of Administration and Personnel Department	AMAPD	12	12	5	BSC in Accounting	1
Assistant Manager of Operations Department	AMOD	14	14	2	Bachelor of Law	1
Employee in Audit Department	EAD	8	8	8	MSC in Accounting	1
Manager of Audit Division in Audit Department	MAD	8	8	8	MSC in Accounting	1
Manager of Statistics Division in Branches and Credit Department	MSD	17	17	14	Intermediate Diploma in Accounting	1
Employee in Statistics and Budget Division in Accounting Department	ESBD	3	3	3	MSC in Finance	1
Employee in Branches Settlements Division in Accounting Department	EBSD	20	20	20	MSC in Accounting	1
Manager of Inspection of Benghazi Branches	MIBB	41	35	2	Secondary School Certificate	1
Manager of a Branch	MBMB	35	35	2	Intermediate Diploma in Accounting	1
Assistant Manager of a Branch	AM1	32	32	8	BSC in Accounting	1
Manager of the Current Accounts Division in a Branch	MCAD	3	3	1	BSC in Accounting	1
Deputy Manager of a Branch	DMBMB	38	38	2	High School Certificate	1
Manager of Administration and Personnel Division in a Branch	MAPD	10	10	1	BSC in Accounting	1
Assistant Manager of a Branch	AM2	35	35	1	BSC in Accounting	1
Assistant Manager of a Branch	AMTMB	35	35	14	BSC in Accounting	1
Total						18

The researcher followed the same steps and conditions that were used in the previous case study (see Chapter 4 for more details). During the interviews, the

researcher asked open and broad questions which concentrated on the research objectives (see Chapter 4 for research questions). She also tried to ask for more explanation and examples which assisted her to investigate the research problem in depth which is the use of NFPMs in the LCBS.

6.1.2 Bank¹

Bank B is one of the five SCBs in the structure of the financial and banking system of the State and is a subsidiary of and controlled by the CBL. Bank B was established at the beginning of the 1970s. Bank B's business covers different areas in the Libyan banking market. Since Bank B was established, it has built up its position in the Libyan banking market as a commercial bank with its Head Office and over 50 branches and agencies with plans for opening others in the future. The Bank is a member of the Union of Arab Banks and the Association of Libyan Banks.

The Bank was established with a capital of under LD 3 million. The Bank's capital was under LD 50 million in 2004 and it was completely paid up. Moreover, according to the CBL's decree number (1)2005 and the Shareholders' Meeting, the Bank's capital was increased by capitalising the Bank's revenue reserves of LD 100 million to meet the Basle II conditions which are concerned with capital adequacy, specially, after the devaluation of the Libyan Dinar in 2002. Bank B has invested in a number of private and public national companies and in international companies to reach under LD 30 million as shown in the annual report of 2001. Bank B has a good reputation in the Libyan market and is highly regarded by many international financial correspondents. The staff of Bank B increased to reach more than 2000 employees in 2004. This increase in the number of employees resulted from covering

¹The information in this section is taken from Bank B's annual reports (1997-2001), interviews with Bank B's employees and the CBL's publications. The 2001 annual report was the latest report approved by the Ministry of Finance.

the decline in the number of employees in the Head Office and branches with an increase in employees in new branches that the Bank decided to open. In addition, employees are of Libyan nationality.

6.1.2.1 Bank's Ownership and Management

Bank B is completely owned by the Libyan State with the CBL owning a substantial controlling interest in the Bank. The Bank is managed by a Board of Directors which consists of a Chairman, Vice-Chairman, and three members. The Chairman of the Board of Directors also performs the function of the General Manager of the Bank. The CBL has the authority to appoint the Chairman, Vice-Chairman, and one of the members of the Board. The other two Board members are selected by the Bank's employees. A Board member serves an average term of three years. The majority of managers have been developed from within the Bank. The Bank has a large number of capable senior managers who have been with the Bank for a long time. The Chairman/General Manager has been in place for more 13 years and the rest of the Board of Directors have been in place since 2000. The Chairman is not from the banking sector but, now he has good experience in banking and more importantly there has been no evidence that the Bank's Board of Directors have tried to interfere with its day-to-day management. However, the CBL has overall control of Bank B which is unusual for a central bank.

6.1.2.2 Bank's Organisational Structure

Bank B's organisational structure has not changed for a long time. Managers believe that the current organisational structure is too rigid and needs to be developed to be consistent with the new competitive environment, with current management strategies and to provide co-ordination between the Bank's units. A senior personnel manager pointed out that the organisational structure suffered from a loss in posts for

some departments and divisions. He confirmed that the Bank's management is reorganising and rebuilding a new organisational structure.

6.1.2.3 Bank's Management Objectives and Strategy

Bank B works in a competitive environment instead of a monopolistic one because of the new economic situation where competition has increased and the conditions have changed from the past. This circumstance has encouraged the Board of Directors of Bank B to modify its strategies. During 2003 the Bank management has adopted defensive market strategies and adjusted its strategies from being financially oriented to becoming more customer focused to protect and maintain its market share. The management is focusing on identifying and enhancing the Bank's critical success factors. The Bank's new strategies are directed towards developing its service quality, delivery of services and gaining customer satisfaction and community acceptance that are being realised through the recent investments in a number of major technological developments. Bank B is establishing a new training centre for developing its employees to be more service-oriented. It has invested in ATMs, internet banking, and credit cards. The Bank's management is keen to upgrade its operating procedures and it has also made investments in upgrading and installing the Bank's banking system and computing equipment to provide daily and on time reports on the Bank's performance to provide a reliable basis for management decision-making.

6.1.2.4 Employees' Benefits and Incentives

Bank B used to pay annual bonuses to the employees in accordance with an annual report of employee's efficiency until 1982 when the labour law (15)1982 was established which prevented employees from gaining bonuses and other rewards. The Bank provides free medical care to employees and their families and pays for the

medications. The Bank also provides opportunities for overseas medical treatment for some cases that could not be treated locally. The Bank grants to employees social loans and housing loans without interest and it provides a small financial incentive for employees who achieve a very high level of work. Recently, the new regulations and instructions of the CBL have excused banking employees from the labour law (15)1982.

6.1.2.5 Bank's Environment

Bank B used to work in a monopolistic environment with the rest of the SCBs until the mid 1990s when the private commercial banks were established according to the decree number (1)1993 which has made the Libyan banking industry more competitive. A monopolistic position encouraged management strategies to be financially oriented, focusing on the improvement of the Bank's profitability. Moreover, the SCBs are guaranteed and protected against unexpected financial disaster or international crisis by the CBL. However, this long-term protection will disappear following the WTO agreement and the law number (1)1993. Bank B currently operates in a competitive environment with the State and private commercial banks which have taken part of its market share. In addition, Bank B will face international competition by 2007 from international banks which are considering entering the local market and competing with local banks for their market share which is of concern to the CBL and commercial banks' management.

6.1.2.6 Bank's Information Technology

Bank B had developed and updated its banking system and its database to cope with the changes in the banking environment. The Bank's management is going to connect on-line all the Bank's units (branches and agencies) to appear to the Bank's customers as a single branch regardless of which unit they are dealing with.

6.1.2.7 Bank's Performance System

6.1.2.7.1 Financial Performance

Bank B's performance history from 1997 to 2001 has shown a year-on-year increase in profits. The Bank's annual report of 2001 reflected an increase of total assets to over LD 2000 million. The deposits have risen to over LD 1500 million being an increase of 20% over the previous year. The loans and credit facilities amounted over LD 1000 million being an increase of 18% over previous year. Shareholders' equity was above LD 100 million. The Bank increased its capital adequacy rate to reach over 12%. Finally, Bank B has had outstanding achievements in comparison with other local banks.

6.1.2.7.2 Non-financial Performance Measurements

Recently, considerable attention has been paid by the Board of Directors to the need to concentrate on quality of service, on-time delivery, customer satisfaction, and internal processing. It has concentrated on non-financial activities and measured them as main factors for ensuring successful implementation of the Bank's strategies and achieving future success. The Board of Directors has registered its commitment to improving quality of service and customer satisfaction in its published annual financial reports. Quality of products or service, on-time delivery, and customer satisfaction are activities and measurements which have been used at the operational level (branches and agencies) but previously as unsystematic measurements.

The managers of financial accounts divisions and accounting department and operational managers mentioned that Bank B suffered from the lack of an integrated performance appraisal model and the management measures the FP of each unit and the FP of the Bank as whole unit according to the indicators that are requested by the CBL and it measures the employees' performance by using their NFP. They stated

that they report some NFPMs which are requested by the Central Bank such as the number of accounts opened, number of accounts closed, and number and volume of transactions processed (monthly, three monthly, six monthly, and yearly) to the executive management - namely the banking operations department. Operational units (branches and agencies) have introduced a number of NFPMs to assess and evaluate the quality of service to satisfy their customers and to use the results in daily decision making such as:

- Number of accounts opened by different types of customers.
- Number of accounts closed and why.
- Number and volume of transactions processed.
- Fault and error duration.
- Employees' responsiveness, competence and courtesy.
- Number of successful transactions for every employee.

Bank B's management has also introduced NFPMs that relate to employee satisfaction because of its belief that employees are one of the main critical success factors. The following are examples of measurements that are used in relation to Bank B's employees:

- Employee's degree of cooperation and participation with others.
- Employee's ability to be pro-active to customer needs.
- Employee's appearance, cleanliness and tidiness.
- Employee's creativeness and effectiveness.
- Employee's responsiveness.
- Employee's courtesy.
- Employee productivity rate.
- Employee's punctuality and working time.
- Relevance of training programmes to employee duties.
- Employee medical absentee rate.
- Employee absentee rate.
- Knowledge and competence of employee.
- Employee's ability to accept criticisms.

- Employee's ability to understand instructions.
- Employee's ability to control and manage.
- Friendliness (smiling and greetings).
- Employee's innovation and behaviour and adaptation.
- Employee's ability to create and guide customer needs.

The administration and personnel department uses these measurements that relate to employees. These measurements are then reported to the executive management to be assessed and used in the decision making process.

The above measurements are examples of what Bank B is using to evaluate its performance. These measurements are analysed periodically. The managers of banking operations department, Credit and branches department and accounting department meet regularly to evaluate the results of these measurements and then they report these results to the Board of Directors to be used in the decision making process.

6.2 DATA ANALYSIS

The researcher analysed the primary data collected at the research site in the light of the grounded theory approach informed by Strauss and Corbin. The approach's analytical procedures of coding permitted the researcher to specify key points (concepts) that were raised by the interviewees. These points were listed and checked to make sure all the points have been considered. Table 6-2 lists these points, which were raised by the interviewees.

Table 6-2: Main Points Raised by Interviewees

No	Points
1	<p>Limitations of FPMs</p> <ul style="list-style-type: none"> i. FPMs are indicators for short-term, historical, internal looking and sometimes reward wrong performance. These deficiencies are motives for using NFPMs. ii. FPMs do not have ability to predict what the future performance is likely to be. They are insufficient to judge Bank's performance because of their deficiencies.
2	<p>Existing and Future Competition</p> <ul style="list-style-type: none"> i. The State's new economic policies such as decree (1)1993 were behind the change of environment from monopolistic to competitive one which is a motive for using NFPMs.

	<ul style="list-style-type: none"> ii. From 1996, the environment had changed to competitive and it will be more aggressive in the future. iii. The competition is still low. However, it will be more aggressive in the future. iv. The affiliation to WTO and Basle II will make the environment more aggressive. v. The fear of globalisation and local and international competition drove Bank's management to improve its quality of service and customer satisfaction. vi. Globalisation suggests impacts, which will impinge on Bank's survival.
3	<p>Management's Knowledge of the Relationship between NFPMs and FPMs</p> <ul style="list-style-type: none"> i. Management's perception of the positive relationship between NFPMs and FPMs was behind the use of NFPMs.
4	<p>Demanding Customers</p> <ul style="list-style-type: none"> i. Since the late 1990s, the customers seem to be more demanding. ii. The openness and development of society made demanding customers. iii. Demanding customers ask for special level of service quality and type of service which in turn drive the Bank's management to use NFPMs.
5	<p>Nature of Banking Industry</p> <ul style="list-style-type: none"> i. Banking industry is service-oriented and depends on competent employees and a high level of customer loyalty. This nature is a motive for using NFPMs ii. Banking industry nature which is service-oriented and relies on human beings required using NFPMs.
6	<p>Operational Experience and Competence and Authority of Management</p> <ul style="list-style-type: none"> i. The Bank managers' operational experience and competence led them to use NFPMs in daily decision making. ii. The Bank did not suffer from the shortage of possibilities but it suffered from the limitation of authority which impacted on the use of NFPMs.
7	<p>Level of Management</p> <ul style="list-style-type: none"> i. The kind of PMs depends on the level of management, the lower-level (operational management) used more NFPMs. ii. NFPMs are operational performance measurements. iii. NFPMs are better when evaluating operational divisions.
8	<p>Stability of Management</p> <ul style="list-style-type: none"> i. Long-term recruiting strategy behind the managers' use of NFPMs to evaluate the real performance of their units.
9	<p>Central Bank of Libya's Regulations</p> <ul style="list-style-type: none"> i. The old regulations of the CBL had prevented the Bank from achieving customer satisfaction sometimes. ii. The interference of the CBL in Bank's management was a driving force behind the Bank using FPMs. iii. Financial mentality of shareholders (the CBL) has impacted on the implementation of NFPMs. iv. The State ownership has impacted on the implementation of NFPMs. v. The decree (15)1982 and the State ownership has limited personal creativeness and initiative. vi. The decree (15)1982 deprived employees from gaining bonuses and other rewards which in turn impacted on the use of NFPMs. vii. The new legislation and strategies of the State and the CBL's new regulations encouraged the implementation and use of NFPMs. viii. The new regulations and strategies of the CBL have influenced the Bank's management to adopt long-term strategies.
10	<p>Information Shortage</p> <ul style="list-style-type: none"> i. Although there is a stock exchange in Libya, there is shortage of data and information, which has impeded the management from implementing AMPs. ii. Information limitations have stopped management from adopting some AMPs. iii. Information shortages have affected management's attitudes to the implementation and use of NFPMs.
11	<p>Traditional Educational System</p> <ul style="list-style-type: none"> i. Weakness of educational system negatively impacts on the implementation of NFPMs. ii. Traditional education does not encourage the implementation of NFPMs.

12	Development of Human Resources i. Management adopted new human resource strategies (related to employment and training employees) in conjunction with the use of NFPMs.
13	Performance Reward System i. The new regulations and strategies of the CBL have influenced the Bank's management to concentrate on NFP and to adopt long-term strategies. Therefore, studies are under way to prepare a new reward system.
14	Development of Banking System (Bank's Operating, Information and Reporting System) i. The new regulations and strategies of the CBL have influenced the Bank's management to concentrate on non-financial factors and to adopt long-term strategies and as a result it adopted a strategy to develop the Bank's system.
15	Development of Management Accounting Information i. Budgeting and cost accounting are means for adopting NFPMs which in turn would lead to the development of MAI.
16	Development of Organisational Structure i. The organisational structure is solid and it needs to adjust to be consistent with new environment and services. The adoption of NFPMs encourages management to develop it.
17	Variety and improvement of services. i. The adoption of NFPMs encourages management to improve and diversify the bank's range of services.
18	Introduction of advanced technology. i. The adoption of NFPMs encouraged the adoption of AT.
19	Positive Effects on FPMs i. NFPMs take priority over FPMs and the outcomes of NFPMs will reflect positively on FPMs (such as profitability and customer's deposits). ii. The fundamental goal of the Bank is to obtain customer satisfaction, which will then be reflected positively in financial indicators. iii. The use of NFPMs (service quality and customer satisfaction) leads to an increase in the results of FPMs, because of the positive impact of NFPMs in the FPMs.
20	Capital Expenditure i. The adoption of NFPMs leads to an increase in capital expenditure.

These points (concepts) were grouped and given labels. As in the previous case study, the researcher combined the labels together in compatible ways by specifying the type of association of these labels with the phenomenon under investigation (see Chapter 4 for more details, p. 162). Tables 6-3 to 6-7 show the labels emerging after analysing the data and organising them in categories according to their association with the phenomenon.

In the next sections, the researcher will discuss the labels and specify relationships between category labels and the main category of this study, which is the use of NFPMs. This process will provide the basis for organising and developing the ideas that emerged from the analysis. Accordingly, the researcher will be able to generate a number of hypotheses based on these relationships between the main

category and the other categories. By using Strauss and Corbin's paradigm model a clear understanding of these relationships will be provided in the researcher's model (Figure 6- 10).

6.3 MOTIVES FOR USING NFPMs

As mentioned in section 6.1.7.2 Bank B recently has re-adopted measurements that relate to quality of service, on-time delivery, and customer satisfaction. However, it has used NFPMs that relate to employees' performance appraisal for a long time. Management adoption of NFPMs was attributed to several motives that related to the Bank's environment and activities. Table 6-3 lists the labels that represent the main motives for using NFPMs, and shows which interviewees stated them. Every motive will be discussed in more detail in the following subsections from 6.3.1 to 6.3.5.

Table 6-3: Motives for Using NFPMs (Labels of Causal Conditions)

Interviews	LFPMs	EFC	MKR	DCs	NBI
VCDGM	√	√	√	√	
MPAD		√	√	√	
AMAPD	√	√			√
AMOD		√		√	
EAD	√	√			√
MAD	√	√			√
MSD	√	√	√	√	
ESBD	√				
EBSB	√				
MIBB	√	√	√		
MBMB	√				√
AM1	√	√			
MCAD	√	√	√	√	
DMBMB					√
MAPD		√	√		
AM2			√	√	
AMTMB	√	√		√	√

LFPMs: Limitations of FPMs.

EFC: Existing and Future Competition.

MKR: Management's Knowledge of Relationship between NFPMs and FPM.

DCs: Demanding Customers.

NBI: Nature of Banking Industry.

6.3.1 Limitations of FPMs

The current technology and new economic environment have highlighted that FPMs are insufficient and have many deficiencies. These deficiencies are the major factor behind their failure to measure the true performance of any organisation. The EBSD, ESBD, MAD and EAD mentioned that FPMs concentrate on financial aspects of performance and neglect the important factors behind this performance such as quality of service, on-time delivery and other critical success factors. The MIBB and AM1 confirmed that the FPMs reward wrong performance. They reported that:

“The top management of the Bank had changed the manager of one of its branches that had made a big loss for several years. At the same time the top management opened a new division in this branch which was exchange division. The branch then started achieving a high level of profitability. The management was appreciative and consequently rewarded this manager. However, later the management found out that the high profit was not because of the new management performance but because of the new division.”

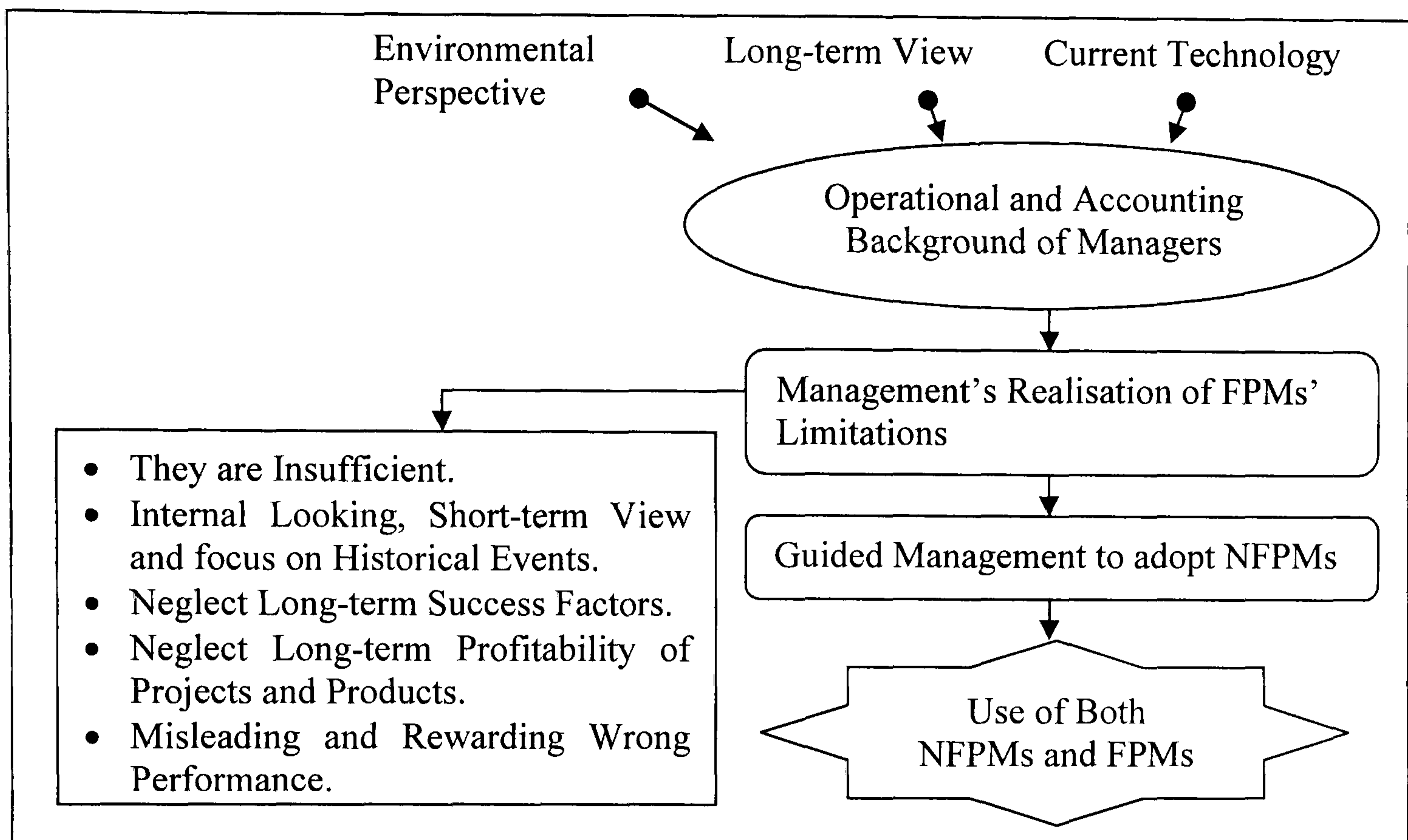
They added that this situation gave all managers a capability to understand the limitations of FPMs. The MBMB and AMTMB focused on the operational managers' experience. They mentioned that they deal with the daily business and they use non-financial information in daily decision-making. Therefore, these managers found out that the FPMs depend mainly on historical facts, are internal looking and do not focus on the future success factors which provide a clear picture of how operational units are operating for the long-term. In addition they added that FPMs neglect to take account of the surrounding environment when they measure organisation performance and they mainly look to short-term performance. The MSD stated that:

“These FPMs such as ROI encourage managers when they are in front of making investment decisions to focus on projects and products that request lower expenditure and achieve high income and neglect the organisational survival and long-term success which could guide them to the wrong investment.”

The MCAD stated that FPMs do not have the ability to explain and measure organisational behaviour and non-financial activities such as quality of service, on-time delivery, customer satisfaction and community acceptance. He added that they do not reflect the true organisational performance. The AMTMB and AMAPD described the FPMs as indicators which measure the final result of progress and deterioration in profitability that the management achieved in the short-term period without mentioning any factors behind this level of progress or deterioration. They mentioned that in the new competitive environment FPMs are insufficient to assess and evaluate the Bank's performance. They added that the executive management had lately realised the limitations of FPMs and had begun to concentrate on non-financial measurements. The VCDGM mentioned that the Bank is going to compete with other financial and banking organisations by concentrating on quality of services, on-time delivery, employee satisfaction, customer satisfaction, and community acceptance. These types of activities cannot be measured by FPMs because they are internal looking and short-term indicators. Such activities need more long-term and forward looking measurements such as a customer survey which will provide a true picture of the Bank's performance and the degree of community acceptance. The AMTMB stated that:

“Financial measurements do not show the true performance because they are too internal looking, using historical value and sometimes are misleading and rewarding wrong performance. Conversely, NFPMs help organisation's management to find about its progress or failure and how to rectify any limitations. In fact, NFPMs are fundamental underpinning for enhancing FPMs.”

Figure 6-1 illustrates managers' understanding of the limitations of FPMs and the need to use NFPMs.

Figure 6-1: Limitations of FPMs and the Use of NFPMs

6.3.2 Existing and Future Competition

The AMTMB, MPAD, EAD and MAD reported that competition is one of the major factors that had influenced Bank B's management to improve its performance. The VCDGM mentioned that public banks are protected by the CBL. However, this protection is being eroded for a number of reasons. The WTO agreement and Basle II will increase competition in the Libyan market. The State current economic policies such as the decree number (1)1993 which will reduce State involvement in business by transferring the public banks to become private ones. The VCDGM believed that these agreements, laws and policies have forced Bank B to improve its performance by concentrating on non-financial activities and measurements. These circumstances changed the Libyan banking market from a monopolistic to competitive market and it will become more competitive in the future. He added that:

“Service quality and customer satisfaction used to be neglected because Bank B is a public bank which relies on State decrees and strategies which were unclear. Now in the new competitive environment the Bank pays attention to supporting such activities and

tries to find appropriate measurements for these critical success factors.”

The AMOD mentioned that the fear of globalisation and local and international competition are the principal motives behind encouraging Bank B’s management to adopt NFPMs. He said that:

“Future competition drove Bank B to adopt the advanced management, accounting and technological techniques and develop its strategies to be able to face and compete with the local and international future competitors.”

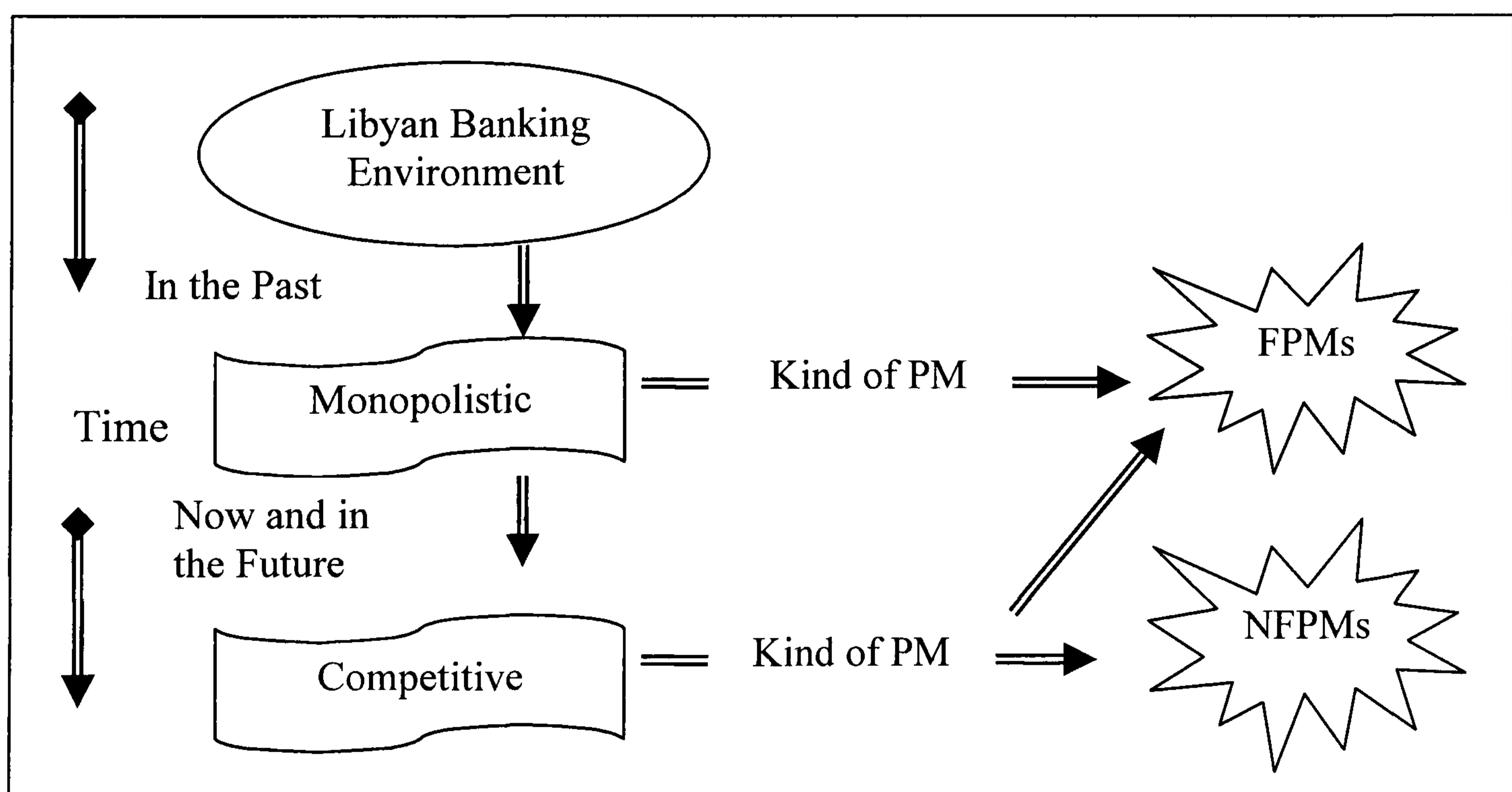
The MSD stated that competition is the major motive influencing Bank B to use operational measurements to increase quality of service and to achieve future success. He added that the fear of future competition forced Bank B to adopt the latest advanced management techniques to improve its quality of service and customer satisfaction. The AMAPD said that:

“Bank B used to work within a monopolistic or simple competitive environment with the State banks which were the sons of the CBL until the mid-1990s. During this period the Bank focused on FPMs such as profitability in evaluation of its units’ performance. From the mid-1990s the environment became more competitive with the first private commercial bank entering into the Libyan banking market. However, it did not largely impact on the Bank activity. The environment will be more aggressive by 2007 because of the entrance of foreign banks to the Libyan market according to the affiliation of Libya to the WTO and applying decree number (1)1993. Therefore, the Central Bank adopted several processes aimed at assisting commercial banks’ management to improve the quality of service, on-time delivery, customer satisfaction and community acceptance by establishing new regulations and policies which allowed banks’ management to adopt advanced management technologies.”

The MBMB mentioned that Bank B used to work within a monopolistic environment until the mid-1990s. During this period Bank B’s management focused on profitability. Moreover Bank B used to use NFPMs such as customer complaints boxes before 1983. The Bank stopped using them because of labour law number

(15)1982 which prevented Bank B from paying bonuses and other rewards to its employees. These circumstances led to the weakening of the Bank's critical success factors such as its quality of service and customer satisfaction and its performance appraisal which was mainly financial. The MIBB confirmed that it was not only Bank B that had turned again to the use of NFPMs, but all the State banks have readopted NFPMs because of the fear of globalisation and the local and international competition which forced the SCBs to improve their performance to survive in the future when competition will be more aggressive. The MCAD, AMI and MAPD stated that although the environment became a more competitive one, it has not yet reached its peak. However, the Bank's management found out that it has to adopt and use NFPMs such as quality of service and customer satisfaction to maintain its market share and to prepare the Bank to meet the competition when foreign banks enter the Libyan market. Figure 6-2 outlines the relationship between the kind of environment and the use of NFPMs.

Figure 6-2: Kind of Environment and Performance Measurements



6.3.3 Management's Knowledge of Relationship between NFPMs and FPMs

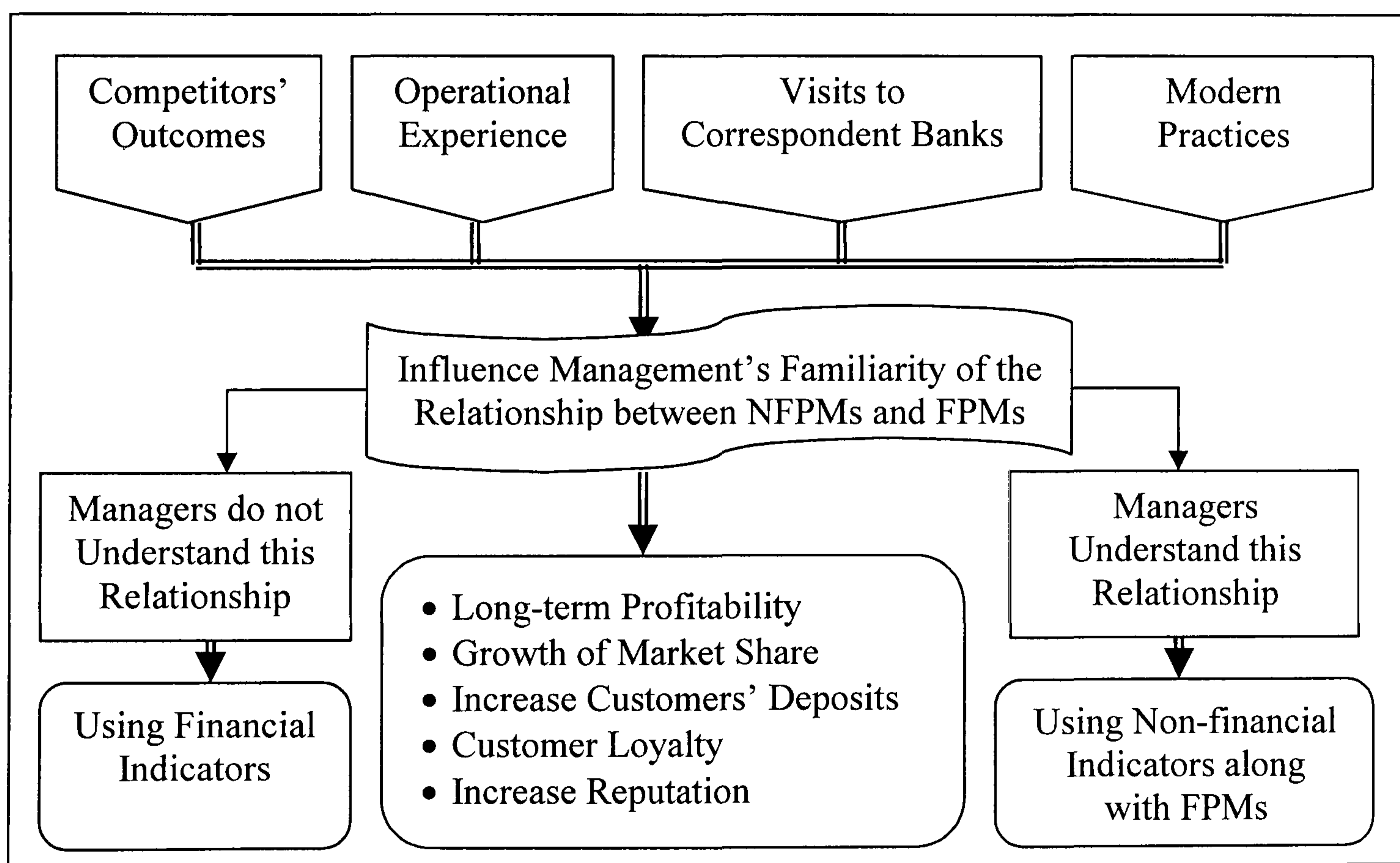
The MPAD stated that, recently, the Board of Directors understood and absorbed the positive relationship between NFPMs and FPMs. This understanding convinced top management of the importance of adopting non-financial activities and related measurements. He stated that the top management tasks might impact on their ability to understand and absorb the relationship between NFPMs and FPMs. These tasks could prevent them from dealing with detailed processes and activities and then may encourage them to concentrate on and use FPMs to assess and evaluate the Bank units' performance. The AM2 mentioned that management knowledge of the relationship between NFPMs and FPMs was attributed to its competitors who use such measurements. He added that the Bank's competitors have been using NFPMs for several years and have achieved outstanding financial outcomes.

The VCDGM pointed out that visits to correspondent banks and modern practices are influencing factors on management's understanding of the relationship between NFPMs and FPMs. This means that there is a direct relationship between the management learning curve concerning the relationship and management adoption and use of NFPMs. The MIBB reported that management inability to understand the relationship between NFPMs and FPMs at an early stage was attributed to its limited operational experience. The majority of the Board Directors came from outside the banking sector and did not have sufficient operational experience to understand such a relationship easily. The VCDGM stated that:

“Bank B is in the public sector which means that it depends on laws and does not rely on the fundamentals and scientific principles. This condition has encouraged management to depend totally on FPMs. However, the new laws and strategies in the Libyan environment and the Bank's management understanding of the relationship between NFPMs and FPMs have forced it to use NFPMs such as quality of service and customer satisfaction which will reflect on profitability. Therefore, the relationship was the main motive that has driven management to focus on NFPMs.”

The MSD pointed out that the understanding of the positive relationship between NFPMs and FPMs was the important factor in adopting NFPMs. He added that if management understood this relationship it would adopt and use such measurements immediately. The MBMB and AM2 mentioned that the operational managers have long-term operational experience. They had worked in different operational divisions and they understood such relationships and they believed that NFPMs are the main driver for FPMs (long-term profitability). Therefore, they used some non-financial indicators in daily decision making. Figure 6-3 illustrates management's understanding of the relationship between NFPMs and FPMs and influencing factors.

Figure 6-3: Management's Appreciation of the Relationship between NFPMs and FPMs



6.3.4 Demanding Customers

The AM2 clarified that nowadays the long-term success of any organisation depends basically on satisfying its customers. Since the late 1990s, there was changed customer behaviour which has resulted in the appearance of demanding customers

who are influenced by a western lifestyle. This type of customer motivated the Bank's management to develop and assess its quality of services and customer satisfaction. Therefore, customer satisfaction is one of the most important factors in adopting and using NFPMs. The MSD and MCAD confirmed that customers changed significantly from being undemanding to demanding and requiring a specific level of service quality and diversity of service. This forced management to provide a high level of quality of service. The MCAD said that:

“Bank's customers became demanding which is one of the most important factors encouraging the management of the Bank to concentrate on non-financial activities such as quality of service and customer satisfaction and to use NFPMs.”

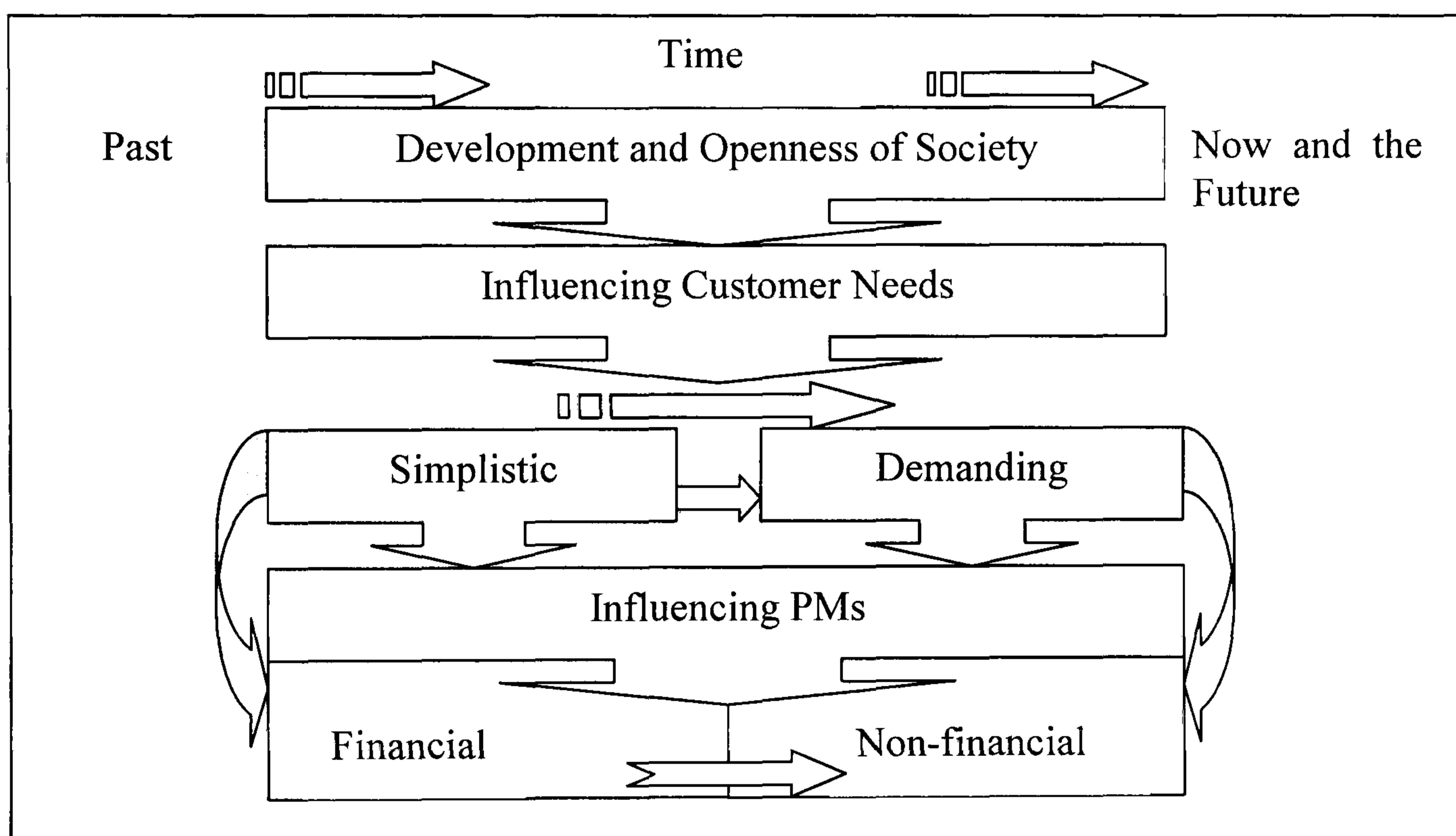
The AMOD pointed out that the development and openness of society have generated demanding customers who require the latest international banking services such as home banking, internet banking, credit cards and others. These requirements have caused the Bank to adopt and use advanced technological practices. He stressed that this is one of the most important motives for adopting NFPMs. The AMTMB mentioned that the openness of society and the international TV channels have changed customers' behaviour and created demanding customers. This trend encouraged management to adopt new strategies directed to customers' needs and to develop and evaluate its quality of service and customer satisfaction to achieve their satisfaction and loyalty which in turn would protect its profitability. The VCDGM explained that the traditional banking system was designed a long time ago without any care for customers' needs and, therefore, was financially oriented. However, the new laws and strategies of the CBL have encouraged the management of the Bank to update its banking system to provide the latest banking services in the world and to be able to achieve customer satisfaction because customers no longer are simple and

customer satisfaction is a critical factor for long-term success. The MPAD stated that:

“The development and openness of society created demanding customers. From early 2000 the Bank’s management realised that so it decided to direct its new strategies towards customers’ needs. Therefore, the use of NFPMs is an appropriate technique for dealing with these customers.”

Figure 6-4 outlines the relationship between demanding customers and the use of NFPMs.

Figure 6-4: Customers’ Needs and the Use of NFPMs.



6.3.5 Nature of Banking Industry

The DMBMB, AMTMB and AMAPD asserted that the banking industry is service-oriented and depends on human beings (employees and customers). The AMTMB stated that:

“Banking industry is one of the industries that depends on the services that are provided by human being to human being. Therefore, its success or failure mainly depends on the level of customer satisfaction and loyalty as well as on the level of employee satisfaction and loyalty. Then, the nature of the banking industry which is service oriented demands both non-financial and financial measurements for performance appraisal.”

The MBMB mentioned that the operational managers of the Bank's units used the NFPMs in evaluating the performance of their units and divisions until 1983. However, some of them continued to use the NFPMs after 1983 to evaluate their divisions' quality of service, delivery, customer satisfaction and employee satisfaction. These divisions are cashier and current accounts division and exchange division because they communicated directly with customers during the time of providing the service. He added that non-financial information is very important and necessary for the daily decision making process. The EAD and MAD confirmed that the nature of the banking industry required using more NFPMs because of the presence of customers during the processing time.

6.4 INTERNAL ENVIRONMENTAL FACTORS THAT INFLUENCE THE USE OF NFPMs

Internal environmental factors are the contextual conditions that surround the phenomenon in an organisational context and have impacted positively or negatively on the management use of NFPMs. In this section, the researcher identified Bank B's internal environmental factors that influenced management's interest in using NFPMs. Table 6-4 outlines the labels that represent the main internal environmental factors influencing the use of NFPMs. These labels are listed against the interviewees who mentioned them. Following Table 6-4 there is a detailed discussion of each label in the subsequent subsections from 6.4.1 to 6.4.3.

Table 6-4: Internal Environmental Labels

Interviews	OECAM	LM	SM
VCDGM	√		
MPAD	√		√
AMAPD	√		
AMOD	√		√
EAD	√		
MAD	√		
MSD	√	√	√

ESBD		√	
EBSD		√	
MIBB	√	√	√
MBMB	√		√
AM1			
MCAD	√		√
DMBMB		√	√
MAPD	√		
AM2	√	√	
AMTMB	√		√

OECAM: Operational Experience and Competence and Authority of Management.

LM: Level of Management.

SM: Stability of Management.

6.4.1 Operational Experience and Competence and Authority of Management

The VCDGM indicated that Bank B's management is recently interested in adopting modern technology in the banking industry to improve and develop the quality of service and customer satisfaction which in turn would encourage the Bank's units to use systematically more NFPMs. He ascribed management's new interest to several reasons which were the latest international advances, visits to correspondent banks and their practices, attendance at conferences and the CBL's new regulations and strategies which gave the Board of Directors more authority to manage and develop the Bank. He said that:

“The major characteristic of Bank B is that it is owned by the State which forced it to follow the State's strategies which were unclear. Moreover, this subordination meant that the management did not have sufficient authority to develop and improve the Bank's critical success factors. Therefore, the absence of a clear strategy of the Bank and limited authority negatively affected top management use of NFPMs and obliged it to use FPMs. However, the new regulations and strategies of the CBL gave management more authority and encouraged it to improve and develop the Bank's services and customer satisfaction.”

The AMAPD, MSD and MCAD mentioned that middle and operational managers' operational experience and competence led them to use NFPMs to

evaluate their units' performance and in daily decision making. However, this use was unsystematic and just within their units. The MSD said that:

“The majority of Bank B's middle and operational management held both operational experience and competence which drove them to use NFPMs along with FPMs in their units.”

The Directors' operational background is a controversial subject among interviewees. The MBMB, EAD and MAD mentioned that there is a direct relationship between management operational experience and competence and level of authority and the use of NFPMs. They added that the majority of the Board of Directors of Bank B had limited operational experience and this had a negative effect on using NFPMs and drove it to depend mainly on FPMs. The MAD added that the absence of an integrated performance appraisal system was attributed to several reasons. Two of these reasons are management not having sufficient operational experience to understand the detailed procedures of the Bank and management's limited authority.

The AMOD and MIBB reported that at the beginning, the majority of the Board of Directors had limited operational experience in the Bank because they were introduced from outside the banking sector. They added that the Board of Directors was also suffering from limited authority. These circumstances negatively affected the Bank's use of operational measurements. However, the MPAD and MIBB reported that the Chairman/General Manager has been in post more than 13 year which had developed his operational experience and competence in the Bank.

The AMTMB and MSD agreed that the Directors' competence is a major factor behind the new interest in using NFPMs. They reported that management competence had a direct relationship with the recent use of NFPMs. Management competence played an essential role in the adoption of NFPMs especially after the

Central Bank's new laws and strategies which gave it more authority to manage the Bank and to improve and develop the Bank's services. The AM1 said that:

“The level of management competence and knowledge of operational procedures and the level of authority have a direct effect on management use of NFPMs, the more competent management becomes and the more authority management has, the more management will use NFPMs.”

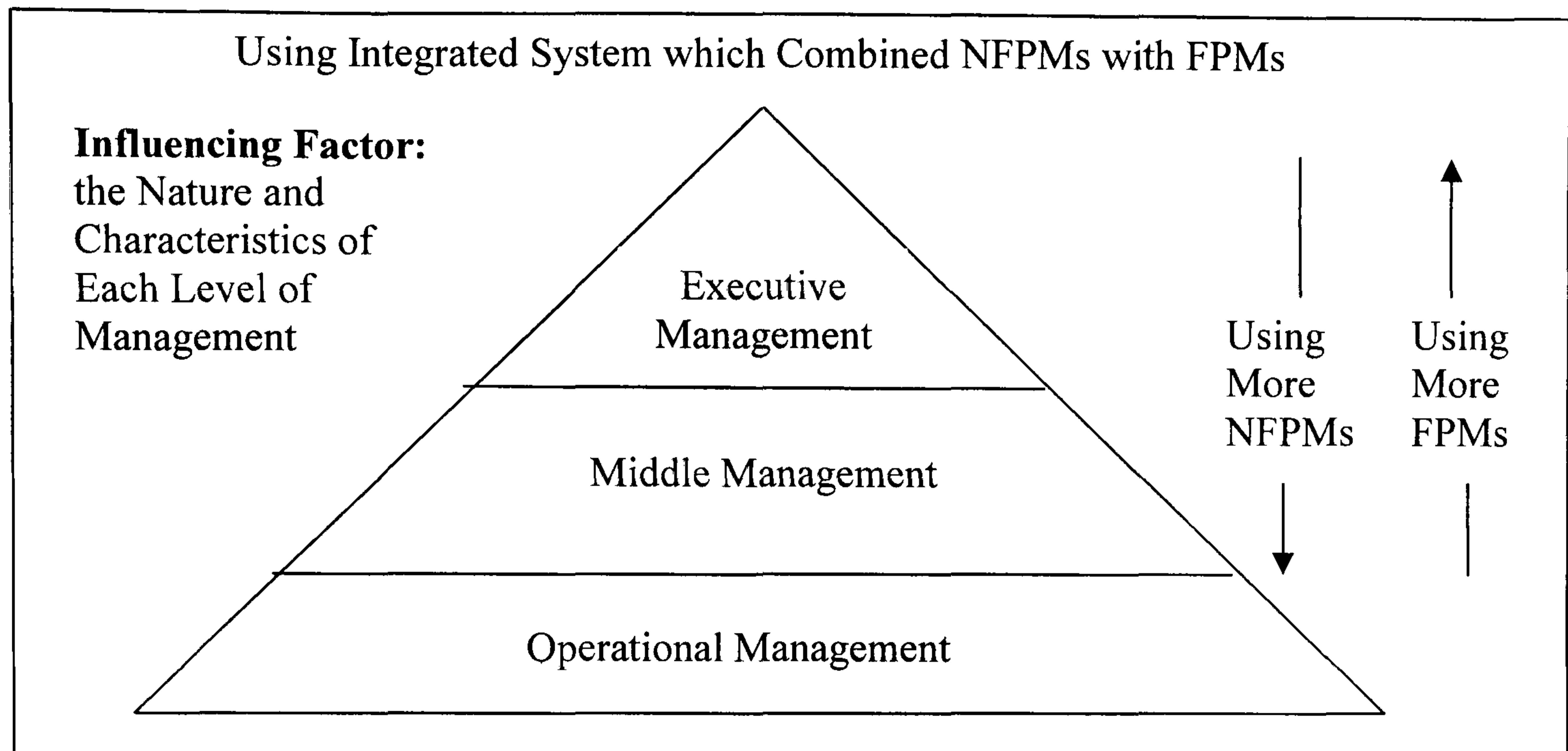
6.4.2 Level of Management

The ESBD and EBSD mentioned that the type of PM to be used depends on the management level because each level has its characteristics. They argued that there is a relationship between the management levels and the type of PM. They asserted that generally the middle and operational levels of management should use more NFPMs than FPMs and executive management should use an integrated PMS balanced between NFPMs and FPMs. The DMBMB and MIBB pointed out that the administrative levels of Bank B are executive level, middle level and operational level. The operational and middle management deal with non-financial performance information and measurements when they perform their daily operational tasks. However, when they report to the executive management they tend to use financial performance information and measurement and some non-financial measurements that were requested by the executive management. The executive management used to focus mainly on FPMs according to the requirements of the CBL. Recently it tends to have a broad view and focus on both NFPMs and FPMs. This is because of the new strategies which aim to improve quality of service and to satisfy its customers.

The MSD and AM2 clarified that the management levels influence the kind of PMs which should be used. They confirmed that operational level managers make more users of NFPMs. They said that “NFPMs are appropriate measurements for

middle and operational levels.” Figure 6-5 illustrates the relationship between management levels and the kind of PMs and the influencing factors.

Figure 6-5: Management Levels and Use of NFPMs



6.4.3 Stability of Management

The MBMB and AMTMB stated that Bank B’s recruiting policy for employees is appointments for the long-term. Bank B adopted a training strategy based on training for all its employees in several different operational divisions. These policies generated competent managers with wide operational experience. Therefore, the majority of executive management, middle management and operational management were qualified with long-term professional experience that led them to use some operational measurements to evaluate the real performance of their units. The MBMB and AMTMB believed that the stability of operational managers was one of the main drivers for their use of NFPMs.

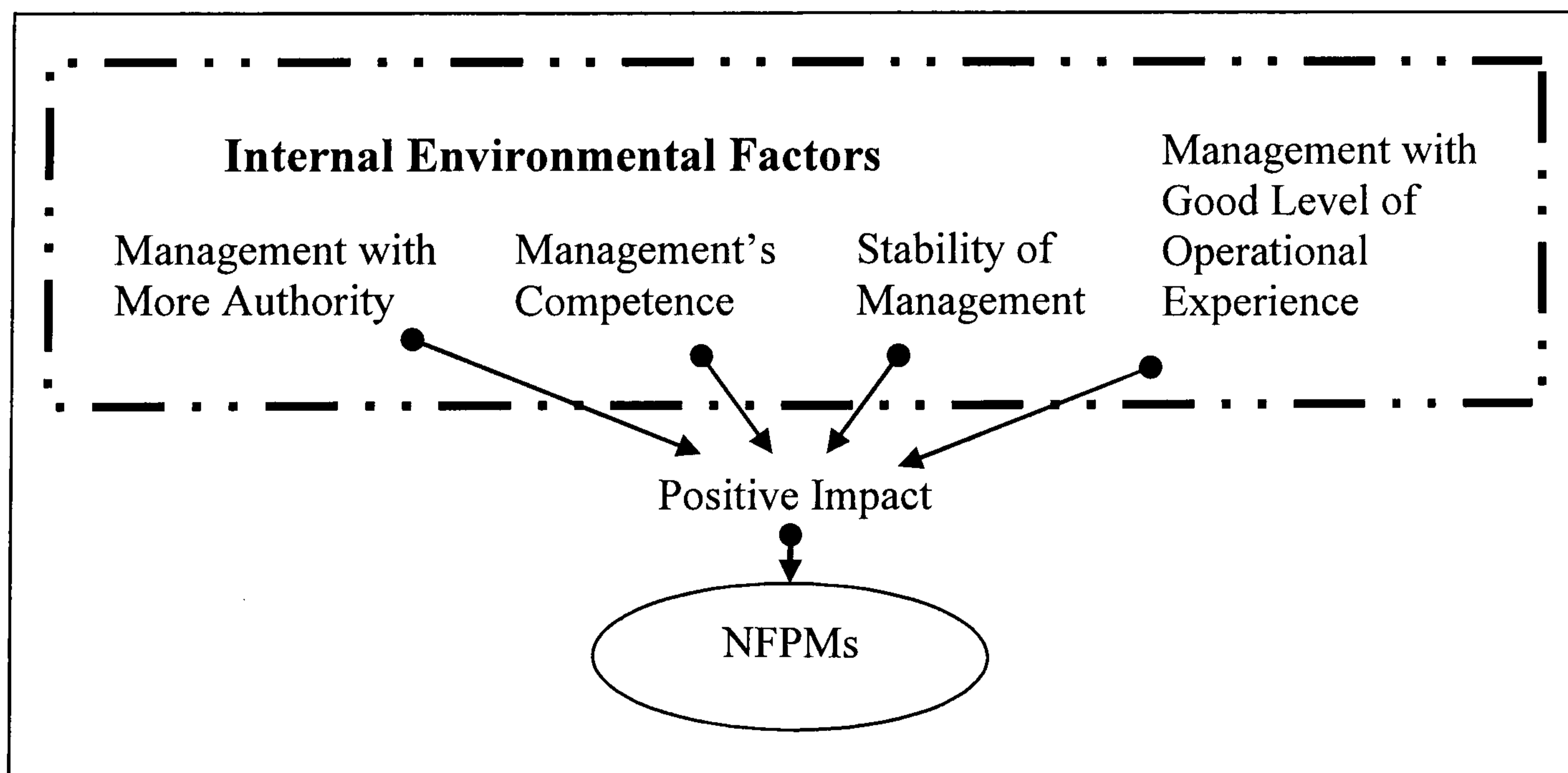
The MIBB, MSD and MPAD mentioned that the recruiting policy for the Board of Directors is for three years and Directors can be reappointed. They added that the Chairman/General Manager has been in place for more than 13 years but his limited authority and the subordination of the Bank to the public sector affected top

management from using NFPMs and obliged it to use short-term FPMs. However, recently the new economic strategies and laws of the State and the Central Bank which gave management more authority, the adoption of the new long-term strategies and long-term Chairman/General Manager being in place had recently driven management to adopt and use NFPMs such as quality of service and customer satisfaction to enhance the Bank's position in the market. The AMOD, MCAD and DMBMB mentioned that the stability of management is a fundamental factor influencing managers to adopt long-term vision and strategies which encourages them to concentrate on NFPMs. The AMTMB stated that:

“Management, with long-term managers and more authority from the shareholders, would concentrate on non-financial measurements which would require more capital expenditure and in turn would enhance an organisation's long-term profitability and position in the market. In fact, the more stable management is, the more likely it is to use non-financial measurements.”

Figure 6-6 summarises the impact on the use of NFPMs of the internal environmental factors which are operational experience, competence and authority of management and stability of management.

Figure 6-6: Internal Environmental Factors' Impact on the Use of NFPMs



6.5 EXTERNAL ENVIRONMENTAL FACTORS INFLUENCING THE USE OF NFPMs

The environment that surrounds an organisation has a strong impact on its objectives, strategies, systems and products. Therefore, Bank B's environment has affected its selection of a specific set of PMs to appraise its performance. In this section, the researcher discusses some external environmental factors that have a relationship with the phenomenon under investigation. These external environmental factors could either have a positive or negative impact on the phenomenon. Table 6-5 summarises the external environmental labels that were cited by the interviewees. Following Table 6-5 there is a detailed discussion of each label in the subsequent subsections from 6.5.1 to 6.5.3.

Table 6-5: External Environmental Labels

Interviews	CBLR	IS	TES
VCDGM	√	√	
MPAD	√		√
AMAPD	√	√	√
AMOD	√	√	√
EAD	√	√	√
MAD	√	√	√
MSD	√	√	√
ESBD			
EBSD			
MIBB	√	√	√
MBMB	√		
AM1	√		√
MCAD	√	√	√
DMBMB	√		√
MAPD	√	√	√
AM2	√	√	√
AMTMB	√	√	√

CBLR: Central Bank of Libya's Regulations.

IS: Information Shortage.

TES: Traditional Educational System.

6.5.1 Central Bank of Libya's Regulations

The EAD and MAD asserted that the Libyan economy was dominated by public sector organisations with a financially oriented mentality which affected negatively management's interest in implementing and using NFPMs. The AMOD believed that the old management of the Central Bank was conservative with a conventional financial perspective which had negatively impacted on the use of NFPMs. The AMTMB pointed out that:

“The main problem with the Central Bank's old management was its traditional mentality which refuses any new developments and they believed that FPMs are the only indicators to measure performance. The majority of the Central Bank's old management have a high financial orientation because their studies were from the sixties and seventies when financial thinking dominated the educational system which has affected their outlook on NFPMs.”

The MBMB pointed out that Bank B used to use some NFPMs until 1982 when the State issued new labour law number (15)1982 which deprived employees from gaining bonuses and other rewards.

The AMOD and AMTMB asserted that the public ownership of this Bank limited personal creativeness and initiative and the issue of law (15)1982 made the situation worse. They added that these circumstances destroyed the public banks' ability to develop themselves. Therefore, some of the State's laws and the Central Bank's regulations had a negative impact on management concern for using NFPMs at an early stage. The MIBB mentioned that Bank B is completely owned by the State via the CBL which gives the CBL the right to choose the majority of the Bank's Board of Directors (Chairman/General Manager, Vice Chairman/Deputy General Manager and one member of the other three members). He added that such Directors came from outside the banking sector with a financially oriented mentality and they manage the Bank by using the State strategies which were unclear and look

at the Bank's short-term FP rather than its long-term success. He confirmed that such orientation had a negative impact on the improvement and development of the Bank and its critical success factors such as quality of service and customer satisfaction. The MAPD pointed out that the State's ownership and support of public commercial banks had sheltered them from competition. He added that these conditions encouraged the Bank's management to use FPMs.

The MCAD, MAPD, DMBMB, MSD and MPAD pointed out that the Central Bank's over-control and interference in the management of Bank B has impeded management's ability to satisfy its customers (such as its interference in specifying the price of banking services). They confirmed that the Central Bank constraints and interference have negatively influenced the development of the Bank's critical success factors and in turn the use of NFPMs. The MIBB, MBMB and AM2 mentioned that the interference of the CBL and the absence of long range planning had negatively affected the use of NFPMs and forced the management to focus on achieving a higher level of customers' deposits and better profitability. The AM1 stressed the same point and added:

“The CBL's interference as shareholders with a financial orientation has a negative influence on the development of the Bank's critical success factors such as quality of service and customer satisfaction.”

The AMAPD and MIBB mentioned that the situation recently changed because of the new management of the CBL and the State's new legislation and strategies such as discharging the Bank's employees from decree (15)1982 and the issue of the decree (1)1993 which aimed to decrease State ownership and support for the banking sector. They added that in the near future international banks would be able to enter the Libyan market which will increase the competition and the use of NFPMs. The VCDGM focused on the State's new legislation and strategies and the CBL's

regulations in enhancing competition and encouraging banks to adopt advanced management practises and technologies. The MIBB stated that:

“State ownership and support has been a significant factor in encouraging banks to adopt traditional performance evaluation. However, since 1993 many laws have changed and some development of the market economy has motivated Bank’s management to change and develop their system. Therefore, the State’s new legislation and strategies and the new regulations of the Central Bank are important factors in the trend towards adopting NFPMs.”

6.5.2 Information Shortage

The AM2 and MAPD pointed out that lack of information and the absence of the role of the stock market are important factors that hamper Libyan organisations from working effectively and efficiently especially as the environment becomes a more competitive one with demanding customers. The MCAD, EAD and MAD said that Libya as a developing country suffers from a lack of studies on the domestic economy, businesses and customers. They confirmed that this shortage of information had a negative impact on using advanced practices such as NFPMs. The AMAPD stated the same point and added that in fact, the new laws, policies and strategies in the Libyan economic environment have encouraged economic and scientific institutions, universities and State agencies to run many conferences and make studies to provide up-to-date and reliable information. The AMTMB said that:

“In the Libyan economic environment, there is a shortage of information which negatively impacts on organisations implementing NFPMs. Recently, the new laws, policies and strategies of the State have encouraged organisations to adopt advanced management technology and build and develop the related systems such as information systems.”

The MSD clarified that the lack of information has prevented the Bank from satisfying its customers specially those who ask for credit facilities. This lack of information negatively impacted on the management use of NFPMs and encouraged

it to depend on the FPMs. The AMOD and MIBB mentioned that Bank B's research and statistics unit, planning and inspection department and banking operations department held all the internal information and collected the data that related to NFPMs from the Bank's branches and agencies and prepared reports for the Bank management and the research and statistics unit in the CBL. They confirmed that the lack of market, customer, economic and political information is the main hindrance facing organisations in the Libyan environment and limits management's ability to use NFPMs. The VCDGM stated that the CBL has signed a contract with an international company to establish a large information and banking system which will link all the Libyan banks together with the Central Bank and stock market to provide information which would enhance the implementation of NFPMs.

6.5.3 Traditional Educational System

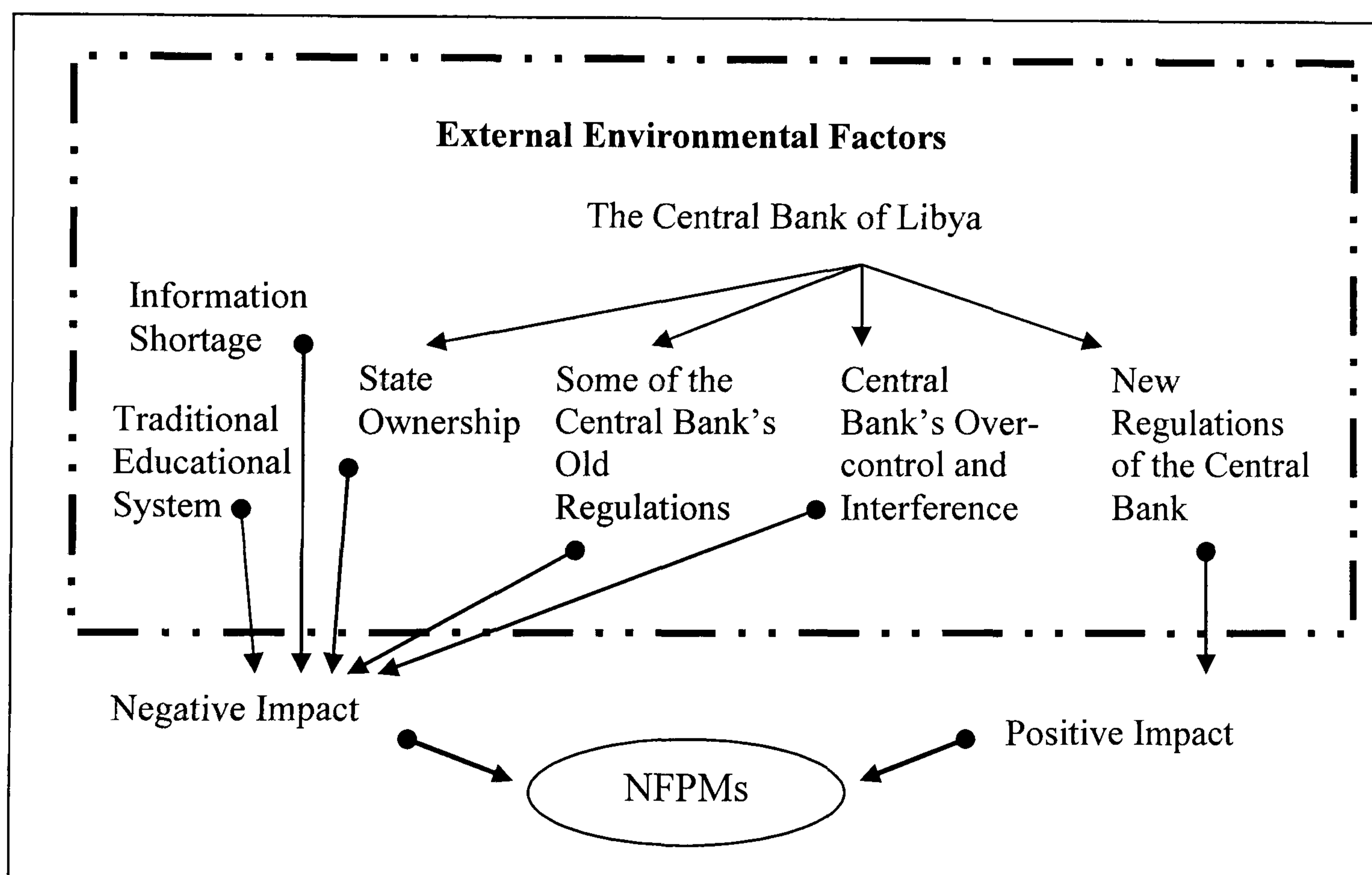
The development of society is measured by its development and quality of its educational system. The AM1, DMBMB, MSD and AMOD asserted that the educational system in Libya is still traditional and was not harmonious with the development of life in the world. The MCAD and MAPD pointed out that this traditional educational system has created undemanding customers and this had negatively influenced the adoption of AT and NFPMs. The AMTMB and AM2 mentioned that the openness and development of society and the traditional educational system have created a group of customers who are more demanding with less controlled behaviour which is a difficult phenomenon for the Bank because such customers request special services. They added that the Bank could not provide some of these services because of the instructions of the CBL which in turn negatively influenced the Bank's ability to satisfy its customers' needs. The MPAD, EAD and MAD mentioned that this educational system was one of the factors behind

stakeholders' financial oriented perspective. They confirmed that the educational system has a direct relationship to the use of NFPMs. The AMAPD stressed that:

“The openness and development of society, the State’s new legislation and strategies and the CBL’s new regulations encouraged the Bank’s management to adopt ATs. However, the level of education had caused several obstacles in adopting and implementing of these techniques. In fact, the educational system has a negative impact on using NFPMs.”

The majority of interviewees argued that the traditional educational system was an impediment to adopting non-financial measurements. Figure 6-7 recaps the influence of the external environmental factors on Bank B using NFPMs.

Figure 6-7: External Environmental Factors’ Influence on the Use of NFPMs



6.6 STRATEGIES THAT MANAGEMENT ADOPTED IN CONJUNCTION WITH NFPMs

Bank B's management has decided to use NFPMs. Therefore, it adopted a specific set of strategies to strengthen the adoption and use of these measurements. In this section, the researcher discusses these strategies. Table 6-6 lists the labels that

represent the main strategies associated with the adoption and use of NFPMs. These strategies are listed against the interviewees who stated them. Following Table 6-6 there is a detailed discussion of each label in the subsequent subsections from 6.6.1 to 6.6.5.

Table 6-6: Actions/Interaction Strategies Labels

Interviews	DHR	DRS	DBS	DMAI	DOS
VCDGM	√		√	√	
MPAD	√	√			√
AMAPD	√	√	√	√	√
AMOD	√	√	√	√	
EAD					√
MAD					√
MSD	√		√	√	√
ESBD	√	√		√	√
EBSD	√	√		√	√
MIBB	√	√	√	√	√
MBMB	√	√	√		
AM1	√			√	
MCAD	√				
DMBMB	√		√		
MAPD	√			√	
AM2	√			√	
AMTMB	√	√	√		√

DHR: Development of Human Resources.

DRS: Development of Reward System.

DBS: Development of the Banking System (Bank's Operating, Information and Reporting System).

DMAI: Development of Management Accounting Information.

DOS: Development of Organisational Structure.

6.6.1 Development of Human Resources

The fundamental role of any bank is to act as mediator between a creditor and a debtor. That means the Bank is producing services and this production basically depends on human beings. Therefore, employees are considered to be the most important critical success factor. The MCAD, MAPD, AM2, DMBMB and MBMB suggested that the use and application of non-financial activities and related measurements required regular advanced training programmes. The VCDGM, AMAPD, MPAD, MSD and MIBB stressed that the Bank's management has made

extensive efforts to develop and improve its employees. It has adopted internal training programmes that were conducted by the Training Centre run by the CBL and Association of Libya Banks and external training programmes that were offered by the Union of Arab Banks in Jordan and Egypt and by correspondent banks. Additionally, on the job training was carried out during working hours. The VCDGM mentioned that:

“The Bank’s management has concentrated on internal and external training and study programmes for improving the level of its human resource to be consistent with the new advances and developments in the banking industry such as Basel II and e-commerce.”

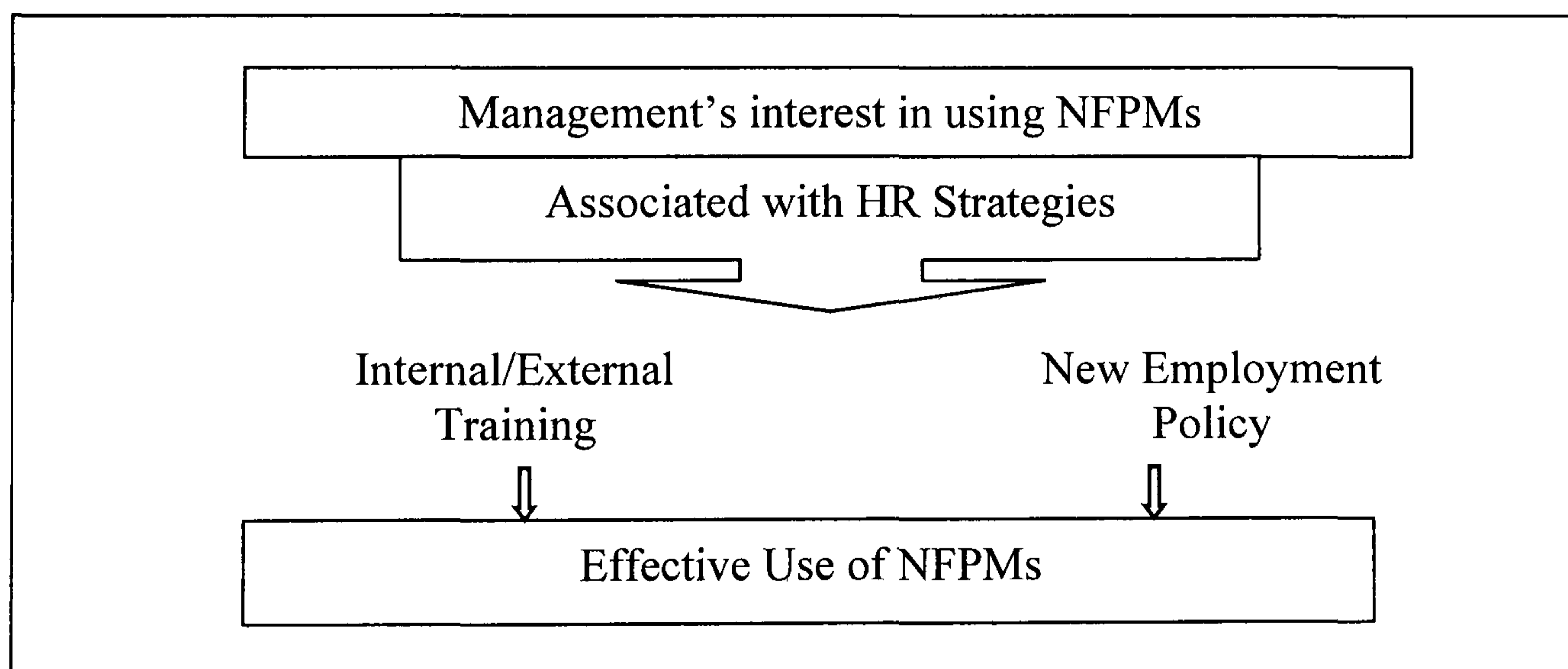
The AMOD, AM1, EBSD and EBSD believed that the training programmes that were run by the CBL were theoretical rather than practical, focusing on areas such as transaction speed, traditional banking transaction skills, and internal transactions. They confirmed that employees have requested specific types of programmes that aim to familiarise them with service development and enhance their abilities to improve service quality and obtain the highest possible customer satisfaction. Therefore, the Board of Directors has recently established a training centre in the head office for providing practical and theoretical training to the Bank’s staff. The MSD clarified that the training centre will provide programmes that aim to develop staff skills to perform their functions accurately, correctly and effectively. The AMAPD, MPAD and AMOD added that this training centre was introduced to support the Bank’s new strategies that aim to enhance the use of NFPMs - particularly those related to quality of service and customer satisfaction. The AMAPD said that:

“The new training centre will work toward developing employees’ skills and abilities and creating professional and effective staff. It will provide intensive courses that aim to convert training programmes from traditional ones that were totally financially oriented to service oriented ones which will focus on providing the highest quality

service which in turn would achieve the highest level of customer satisfaction and loyalty.”

The AMTMB pointed out that qualified and competent employees were important to improve the Bank’s quality of service, customer satisfaction and other critical success factors. He added that in the light of new developments in the Libyan economic environment the executive management adopted new recruiting policies which would be an important step in enhancing NFPM results concerning service quality and customer satisfaction. He confirmed that the Bank added a new requirement that placed each new employee on a probation period before the management decision is made to accept this employee or not. Figure 6-8 illustrates the HR strategies that management adopted in conjunction with the use of NFPMs.

Figure 6-8: HR Strategies and the Use of NFPMs



6.6.2 Development of Reward System

The AMAPD mentioned that, on the one hand, the Bank’s management assesses and evaluates its units’ performance using the FPMs required by the CBL. However, this performance does not connect with the reward system. On the other hand, Bank B assesses and evaluates each employee’s performance using an annual report of that employee’s efficiency based on that employee’s NFP. The MIBB confirmed that the

Bank used to have a good reward system giving employee bonuses and other rewards according to the result of each employee's annual report until 1982. He added that from 1983 until today the management still uses the same annual report of each employee's efficiency only for each employee's promotion and annual premium according to the labour law number (15)1982 which stopped the employee from gaining the bonuses and other rewards. The MBMB made the same point and added that consequently the use of NFPMs started to decrease because of the absence of the motive which was the bonuses. He clarified that the managers of the Bank compensated the limitation of the reward system by paying employees for overtime to motivate them to work effectively and realise the Bank's objectives. He said that:

“Bank B used to use NFPMs such as customer satisfaction (customer complaint boxes) until 1982 when the new labour law number (15)1982 which deprived employees from getting bonuses and other kinds of rewards.”

The AMOD pointed out that Bank B is a public bank that means it is owned by the State and its management has to follow the State laws. He added that the current reward system is a fixed salary income. He thought that such a system is incompatible with the Bank's new strategies which aim to enhance non-financial activities and use of the related measurements such as quality of service and customer satisfaction. The AMOD and AMAPD asserted that it needs a major change which can be done only by the highest authority of the State. The ESBD and EBSD criticised the Bank's reward system as encouraging the wrong behaviour. They added that it does not encourage employees to work effectively. They said that “in this system every employee will get his/her salary whether he/she works or not.” They thought that the provision of a new reward system based on financial and non-financial measurements was essential. The MPAD and AMTMB asserted that the

current reward system suffers from some limitations and does not fit with the new competitive banking environment and it needs to be developed.

The MIBB confirmed that the new management strategies have encouraged employees to focus on NFPMs but the Bank needs to create a link between performance evaluation and the reward system to encourage employees to do their best and achieve the Bank's objectives. He added that the reward system should be re-created and should be based on the level of service quality and customer satisfaction that employees generate. The AMAPD confirmed that recently and in light of the State's new legislation and strategies and new economic environment, the management of the CBL stated that banking employees were exempted from the clause of the labour law (15)1982. He added that studies are under way to prepare a new reward system compatible with the new strategies of the banking sector which aim to improve quality of service, customer satisfaction and employee satisfaction.

6.6.3 Development of Banking System (Bank's Operating, Information and Reporting System)

The MIBB revealed that the new strategies of the CBL have encouraged the public commercial banks to concentrate on NFPMs. This trend led the management to develop the Bank's operating, information and reporting system (the banking system). The MBMB mentioned that the majority of managers of operational units (branches and agencies) use unsystematic non-financial measurements in daily decision making. He added that they report regularly to the executive management on both financial and non-financial information and measurements which are requested by the CBL. The AMAPD and DMBMB pointed out that the appearance of competition had caused the executive management to sign a contract with a local company to update the Bank's banking system and build specialised systems to

provide units' management with daily updated information. The MSD, AMOD and MBMB reported that this system was created to assist the Bank's management and employees to perform their job effectively and to enhance quality of service. They added that this system has a database for every customer and it also provides management with all reports that contain financial and non-financial information which in turn give managers an indication of performance and help them to make effective and timely decisions.

The AMAPD and MSD stated that the executive management is working to link all the Bank's branches, agencies and head office together to produce on-line information on operational performance which in turn would enable management to assess and evaluate units' performance. They confirmed that this system will make management monitor the Bank's critical success factors. The VCDGM and AMAPD confirmed that the management of the Central Bank had signed a contract with an international organisation to study the CBL's and commercial banks' systems and to provide an advanced banking system (National Payment System) which will connect the Central Bank on-line with all the commercial banks and each bank with its branches and agencies using ATs. The AMAPD said that:

“This banking system will cover all services that banks provide now and they will provide in the future. It will connect the CBL with all local commercial banks and their branches and agencies. It can be expanded to include any new banks and new branches resulting from the geographical spread of the banking sector. It will connect the banks with the stock market and it can be connected with international banks. This system will enhance the quality of service, on-time delivery and customer satisfaction and the output of this system will give management the ability to better assess and evaluate the progress of its critical success factors.”

6.6.4 Development of Management Accounting Information (MAI)

The MAPD, EBSD and ESBD reported that the majority of Libyan organisations consider MA as tasks related to the accounting department. The MIBB mentioned

that Bank B does not have a separate management accounting department like the majority of Libyan organisations. However, the tasks of this department are performed by executive management in the planning and inspection department, banking operations department, credit facilities department, accounting department and the Board of Directors. The MIBB and AM2 pointed out that these departments produced a monthly, three monthly, six monthly and yearly reports that are aimed to direct and guide the management decision making process. They mentioned that these reports are also sent to the research and statistics unit in the CBL. They also added that these reports have a financial orientation with notes on NFPMs. Moreover, all the information in these reports is prepared by the operational units.

The VCDGM clarified that Bank B's management accounting methods are traditional and include budgeting, financial comparisons, ratio analysis, FPMs and some non-financial indicators at the unit level. The VCDGM stated that the executive management started preparing budgets based on variances in 2002 according to the CBL regulations and instructions. Since then budgeting has been in a developmental stage. He asserted that:

“The preparation of budgeting is the first stage for the Bank to build a strong basis for developing its performance evaluation.”

The AMAPD stated that in the past, the cost and price of banking services provided by the public banks were calculated and defined by the CBL. However, this year the CBL left this task to the commercial banks. Therefore, the management of the Bank introduced a cost accounting system to calculate the cost and define the price of the banking services. He thought the use of the management accounting tools (such as budgeting and NFPMs) and the adoption of cost accounting were a step to develop the MAI. He said that:

“The implementation of cost accounting will encourage accountants to focus on analysing the cost of every single activity and in turn they will use more non-financial information.”

The MSD, AM1 and AMOD pointed out that the NFPMs have been used by operational management for a long time but recently the top management was attracted by these operational measurements and it has encouraged all the Bank's units to use them systematically. Therefore, the MSD believed that the concentration on the use of NFPMs encouraged the management to develop its MAI. The MAPD, ESBD and EBSD stated that the Bank's new developments need an effective and efficient evaluation system. The MAPD, EBSD and ESBD suggested that the provision of a management accounting department and system will strengthen the implementation of NFPMs and will develop the MAI which in turn would encourage the management to develop the Bank's performance appraisal system.

6.6.5 Development of Organisational Structure

The AMTMB clarified that the major characteristic of any bank is speed of decision making, so to reach such speedy decisions any bank has to have a functional organisational structure which defines the different levels of authorities and responsibilities of each level of management. The functional organisational structure differs according to the nature of the bank and its activity. The objective of a functional organisational structure is to increase any bank's effectiveness and that cannot be achieved without an organisational structure which clarifies the relationships and defines the levels of authority and responsibility.

The AMTMB, AMAPD and MIBB mentioned that the organisational structure of Bank B is rigid, lacking compatibility with the Bank's objectives and new competitive environment and does not reflect the real picture of the Bank. They added that the Bank's management has not altered its organisational structure for a

long time. The AMTMB mentioned that Bank B does not have detailed, accurate and effective job descriptions. He added that the Bank had established some jobs and activities without having a description of these jobs and activities. The ESBD and EBSD stated that the current organisational structure could influence management's interest in adopting and using NFPMs because the responsibility and level of authority are not defined carefully for each management level. They confirmed that the management of Bank B was required to develop its organisational structure to be consistent with its objectives and competitive environment. The MIBB said that:

“The current organisational structure is solid and has deficiencies, so it could affect the management's new interest in concentrating on non-financial activities and using the related measurements (NFPMs).”

The AMAPD and MSD stated that the management decided to create an appropriate organisational structure which will assist it to achieve its objectives for future success. The AMAPD asserted that:

“The development of Bank B's organisational structure is under way by adding new departments and divisions such as e-telecommunication department, risk department, credit cards division and budgeting division and a detailed job description to be in line with the new advancements that Bank B adopted.”

The MSD and MPAD thought that the new organisational structure will provide a compatible organisational environment for non-financial measurements such as service quality and customer satisfaction.

6.7 CONSEQUENCES OF IMPLEMENTATION AND USE OF NFPMs

A number of consequences followed from the action/interaction strategies that Bank B's management adopted in conjunction with the use of NFPMs. Some of them are accounting consequences such as improvement of profitability and increased capital

expenditure. Others are management and technological consequences such as variety and improvement of services and advanced technology. Table 6-7 lists the labels which are the main consequences that have emerged from using NFPMs. These consequences are listed against the interviewees who cited them. Following Table 6-7 there is a detailed discussion of each label in the subsequent subsections from 6.7.1 to 6.7.4.

Table 6-7: Labels for Consequences of Implementation and Use of NFPMs

Interviews	VIS	IAT	PEFPMs	CE
VCDGM	√	√		
MPAD		√	√	√
AMAPD	√	√	√	√
AMOD	√	√	√	√
EAD				√
MAD				√
MSD	√	√	√	√
ESBD			√	
EBSB			√	
MIBB	√	√	√	√
MBMB		√		√
AM1	√			
MCAD	√		√	
DMBMB				
MAPD				
AM2		√	√	√
AMTMB	√	√	√	√

VIS: Variety and Improvement of Services.
 IAT: Introduction of Advanced Technology.
 PEFPMs: Positive Effects on FPMs.
 CE: Capital Expenditure.

6.7.1 Variety and Improvement of Services

The VCDGM and AMAPD mentioned that Bank B's new strategies that aimed to enhance the Bank's service quality and customer satisfaction have a positive impact on improvement and development of new products. The MIBB, AM1, MCAD and AMTMB clarified that there was a direct relationship between the NFPMs and the development of the Bank's products. They asserted that management's interest in

developing its service quality and customer satisfaction have directed and guided it to improving and adding new products that customers needed to its product range.

The AMTMB said that:

“The adoption of customer behaviour studies and their needs and local market study and knowing the needs for new services had encouraged the Bank’s management to develop its existing services and introduce new ones such as credit cards.”

The MSD and AMOD pointed out that the Bank’s management expanded its product range with the purpose of enhancing service and customer satisfaction. They gave these examples of new products that have been introduced to the Bank’s product range: international currency deposits; various credit card and cash machines; free consultation services for customer and internet banking.

6.7.2 Introduction of Advanced Technology

The MBMB pointed out that Bank B implemented AT related to software and hardware to improve the quality of customer service. The AMOD, MSD and MPAD mentioned that management’s desire to improve its service quality and retain its customers in the new economic environment encouraged it to adopt the latest ATs. They confirmed that these technologies were aimed at enhancing the effectiveness of the Bank’s management performance in the local market. They added that the ATs that Bank B’s management has adopted were SWIFT, internet banking, and ATMs. The VCDGM pointed out that the ATs were installed as a result of advances in the Libyan economic environment which in turn has made Bank B’s management focus on non-financial measurements such as quality of service, on-time delivery and customer satisfaction. The MSD pointed out that Bank B’s management rebuilt some banking premises and equipped them with modern equipment to enhance the level of service and customer satisfaction.

The AMAPD and MSD clarified that the aim of connecting the Bank's units on-line was to give customers the ability to deal with their accounts through any unit of Bank B in any place in Libya. The AMAPD added that the Bank's contribution on the National Payment System that the CBL adopted was also to give customers the ability to manage their accounts from any place in the world. The AM2 and AMTMB agreed that the technological improvements were a result of the NFPMs such as improving quality of service and obtaining customer satisfaction. The MIBB stated that:

“The organisation's adoption of the latest ATs was a prerequisite for enhancing service quality and for survival and success in the new economic environment. Otherwise, the local organisations will die when the foreign organisations enter the local market.”

6.7.3 Positive Effects on FPMs

The AMAPD clarified that in light of the new strategies of the CBL and the new economic environment which is more competitive, Bank B will be more aggressive in the near future. The executive management's new objectives are not only to accomplish higher profitability but also continued survival with expansion to obtain the highest level of customer satisfaction and community acceptance. He confirmed that the aim of adopting NFPMs is to improve quality of service and customer satisfaction which in turn would increase profitability. He said that:

“The changing economic environment had encouraged management of the Bank to improve service quality and customer satisfaction which will positively impact on the Bank's long-term profitability. I confirm that there is a direct relationship between NFPMs and FPMs. NFPMs are the main motives behind the organisation's financial success and long-term survival.”

The MCAD and MPAD pointed out that the concentration on non-financial measurements will lead to improved quality of service, customer satisfaction, on-

time delivery and employee satisfaction which in turn will directly impact on financial indicators (such as profitability). The MCAD stated that:

“The financial report and related financial measurements are used to preview the outcome of the project activity and to give a judgement of what the project’s management has achieved. In fact, the project activity is composed of non-financial activities. Therefore, the effective use of non-financial measurements will lead to better profitability.”

The AMTMB and AM2 mentioned that the improvement in quality of service and employee satisfaction will result in enhancing customer satisfaction which will lead to an increase in profitability. They emphasised that such NFPMs have a positive relationship with FPMs. They added that however, these measurements require higher capital expenditure from the organisation and need a reasonable period of time before an organisation can realise an increase in its profitability. The AM2 and MIBB reported that if management would like to increase its profitability then it should first enhance its quality of products and service and employee satisfaction. They believed that NFPMs are the main drivers of continuous long-term profitability. They confirmed that NFPMs take priority over FPMs and the outcomes of NFPMs will appear in FPMs. The ESBD, EBSD, AMOD and MSD contended that the main objective of using NFPMs was the positive influence on enhancing the Bank’s long-term profitability.

6.7.4 Capital Expenditure

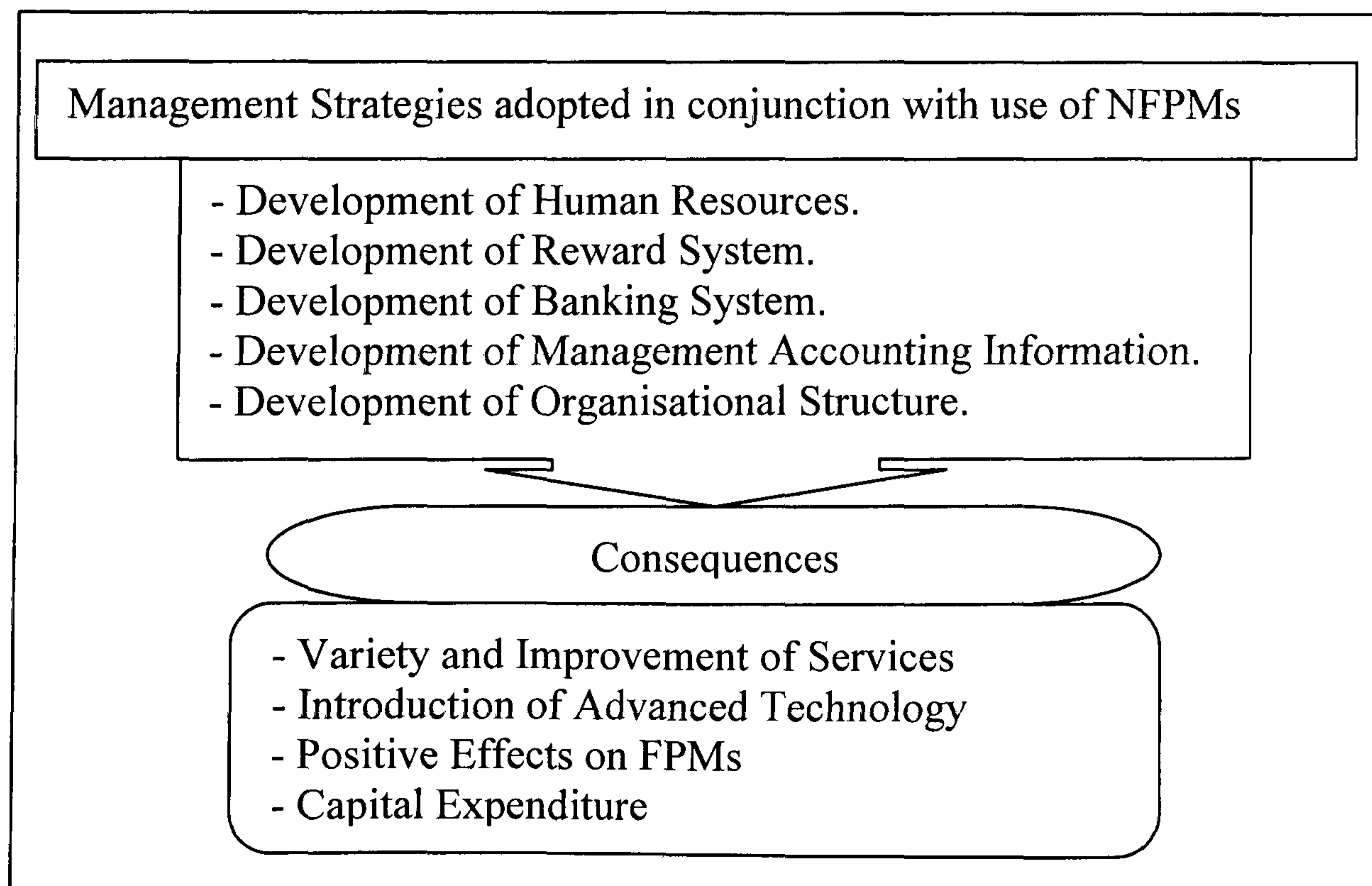
The AMAPD, MSD, AMOD and MIBB mentioned that the new strategies of the CBL and new economic environment had encouraged Bank B’s management to concentrate on building its service quality and customer satisfaction which needed a high degree of capital expenditure. They explained that these trends had made management incur huge capital expenditure for adopting ATs such as internet,

establishing the training centre, developing organisational structure, re-establishing and redesigning new buildings for some of the Bank's branches and head office and other developments. The AMTMB stated that:

“The concentration on non-financial measurements cost the Bank B additional capital expenditure. This capital expenditure was spent on redesigning organisational structure, establishing the Bank's training centre to qualify and develop the staff and adopting the latest ATs. This capital expenditure was necessary to develop service quality and customer satisfaction which will contribute to increasing the Bank's market share, enhancing the Bank's reputation and achieving a long-term profitability for the Bank.”

The EAD and MAD asserted that the latest improvements in the Bank cost its management additional capital expenditure for enhancing its services, attracting customers and gaining community acceptance. The MPAD, MBMB and AM2 pointed out that since the Bank's management adopted NFPMs, it had spent substantial capital expenditure investing in the latest technology that would enhance the Bank's service quality and customer satisfaction and increase long-term profitability. Figure 6-9 shows the management strategies adopted in conjunction with the use of NFPMs and their consequences.

Figure 6-9: Consequences of Management Strategies Adopted in Conjunction with the Use of NFPMs



6.8 RESEARCHER'S MODEL FOR BANK B

Strauss and Corbin's paradigm (1990, 1998) model was used in analysing the data of this case study. The model assists the researcher to develop and relate the categories to the main phenomenon under investigation, which is the use of NFPMs. According to this model, labels are grouped and related to the phenomenon under investigation in terms of causal conditions, context, intervening conditions, action/interaction strategies, and consequences. The researcher was able to generate hypotheses as a consequence of specifying the relationship between the emerging categories by using the Strauss and Corbin paradigm. The researcher will discuss the model components in detail in the following subsections from 6.8.1 to 6.8.5. Figure 6-10 shows the researcher's model for Bank B.

6.8.1 Causal Conditions

The term "causal conditions" is used to refer to the events or happenings that make the phenomenon take place. In this case study a number of events have caused the occurrence of the phenomenon under investigation (NFPMs). These causal conditions which have driven Bank B's management to adopt and use the NFPMs were explained in section three of this case study. These causal conditions included the following:

- Limitations of FPMs.
- Existing and Future Competition.
- Management's Knowledge of the Relationship between NFPMs and FPMs.
- Demanding Customers.
- Nature of Banking Industry.

6.8.2 Context

The term "context" is used to refer to a particular set of characteristics in which the phenomenon has occurred. The researcher has made adjustment for the context to

include mainly internal organisational influences that surround the phenomenon within the Bank. The researcher named the contextual conditions as internal environmental factors. In section four, the researcher has specified Bank B's internal environmental factors that relate to the use of NFPMs. These internal environmental factors included the following:

- Operational Experience and Competence and Authority of Management.
- Level of Management.
- Stability of Management.

Internal environmental factors may have a positive or negative effect on the phenomenon. The Bank's management stability, management competence with more authority and management with a good level of operational experience positively influenced management's interest in using NFPMs. The internal environmental factors have their effects also on causal conditions such as the improvement of management operational experience and management competence which might facilitate management's understanding of the relationship between NFPMs and FPMs. They also may enhance Bank B's management strategies, for example the internal environmental factors such as Bank B's stability of management may influence the strategies that management adopted such as the development of the Bank's banking system.

6.8.3 Intervening Conditions

Intervening conditions are general conditions that impact on the phenomenon and the strategies that an organisation could implement. The researcher identified intervening conditions as environmental conditions that surround the phenomenon and have an impact on the phenomenon and organisation strategies. The researcher named intervening conditions as external environmental factors. The external environmental factors may have a positive or a negative impact on the phenomenon and the Bank's

strategies. In section five, the researcher has specified several labels representing the external environmental factors that influenced the implementation of NFPMs. These external environmental factors are:

- Central Bank of Libya's Regulations.
- Information Shortage.
- Traditional Educational System.

6.8.4 Action/Interaction Strategies

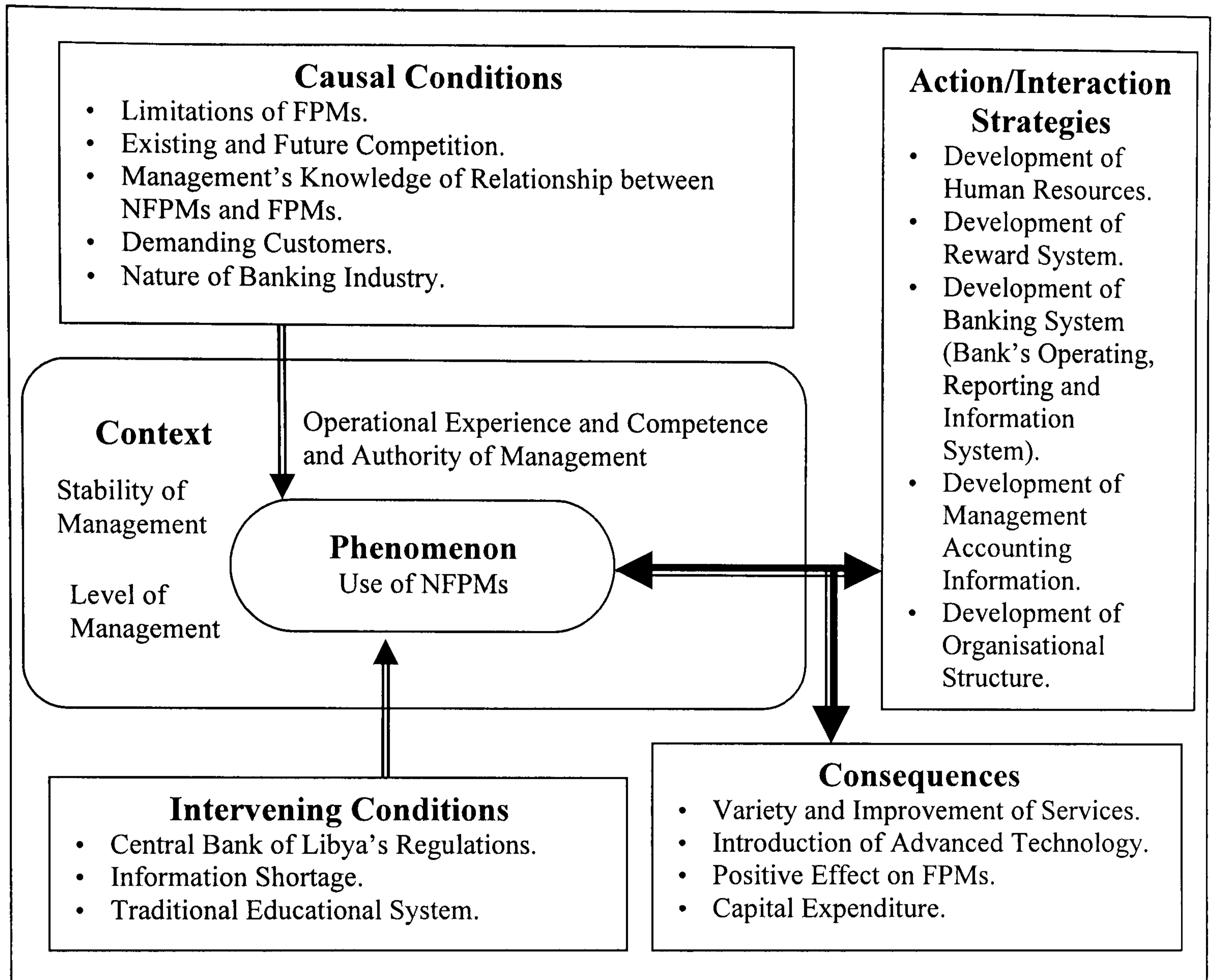
These include strategies in managing the phenomenon under investigation. Bank B's management generated and used a number of strategies that enhanced the use of NFPMs. In section six, the researcher has specified the action/interaction strategies that Bank B's management has used in conjunction with the use of NFPMs. Bank B's management strategies included the following:

- Development of Human Resources.
- Development of Reward System.
- Development of Banking System (Bank's Operating, Information and Reporting System).
- Development of Management Accounting Information.
- Development of Organisational Structure.

6.8.5 Consequences

In fact, consequences are the outcomes of action/interaction strategies that have been implemented to manage the phenomenon under investigation. In section seven, the researcher has specified a number of consequences stemming from Bank B's management strategies concerning the use of NFPMs. These consequences included the following:

- Variety and Improvement of Services.
- Introduction of Advanced Technology.
- Positive Effects on FPMs.
- Capital Expenditure.

Figure 6-10: Researcher's Model for Bank B.

6.9 HYPOTHESES

This case study was conducted in a public commercial bank. This Chapter started with the background of Bank B and discussed in-depth the use of NFPMs in the LCBS. The motives for using NFPMs, internal and external environmental factors, action/interaction strategies and related consequences have been discussed in the preceding sections. The researcher used the grounded theory approach developed by Strauss and Corbin (1990 and 1998) during the case analysis. The in-depth analysis processes resulted in an identification of the major relationships between the emerging categories and the phenomenon under investigation. Hypotheses are generated from these relationships between the emerging categories (see figure 6-10). The substantive hypotheses that emerged from the analysis are listed below:

- 1) The limitations of FPMs are one of the major motives leading to a bank's use of NFPMs (see subsection 6.3.1 and figure 6-1).
- 2) The competitive environment is one of the main motives for managers in a bank using NFPMs (see subsection 6.3.2 and figure 6-2).
- 3) Management's knowledge of the relationship between NFPMs and FPMs is one of the major motives leading to a bank's use of NFPMs (see subsection 6.3.3 and figure 6-3).
- 4) Demanding customers are one of the major motives leading to a bank's use of NFPMs (see subsection 6.3.4 and figure 6-4).
- 5) The nature of the banking industry as a service oriented industry is one of the major motives leading to a bank's use of NFPMs (see subsection 6.3.5).
- 6) Management competence, management with more authority, management with a good level of operational experience and management stability positively affect a bank's use of NFPMs (see subsections 6.4.1, 6.4.3 and figure 6-6).
- 7) Lower level managers in a bank tend to use NFPMs more than middle and higher level managers do (see subsection 6.4.2 and figure 6-5).
- 8) New regulations of the Central Bank positively influence a bank's use of NFPMs (see subsection 6.5.1 and figure 6-7).
- 9) State ownership, some of the Central Bank's old regulations, over-control and interference of Central Bank in a bank's management, information shortage and traditional educational system negatively influence a bank's use of NFPMs (see subsections 6.5.1, 6.5.2, 6.5.3, and figure 6-7).
- 10) The development of human resource strategies to be more service-oriented is associated with a bank's use of NFPMs (see subsection 6.6.1 and figure 6-8).
- 11) The development of the reward system to be linked with non-financial performance is associated with a bank's use of NFPMs (see subsection 6.6.2).
- 12) The development of the banking system (operating, information and reporting system) is associated with a bank's use of NFPMs (see subsection 6.6.3).
- 13) The development of a bank's management accounting information is associated with its use of NFPMs (see subsection 6.6.4).
- 14) The development of a bank's organisational structure is associated with its use of NFPMs (see subsection 6.6.5).

- 15) Use of NFPMs encourages a bank to diversify and improve its range of services (see subsection 6.7.1 and figure 6-9).
- 16) Use of NFPMs encourages a bank to adopt advanced technology (see subsection 6.7.2 and figure 6-9).
- 17) Use of NFPMs improves a bank's profitability and other FPMs in the long-term (see subsection 6.7.3 and figure 6-9).
- 18) Use of NFPMs leads to an increase in a bank's capital expenditure in the short-term (see subsection 6.7.4 and figure 6-9).

CHAPTER 7

BANK C

7.0 INTRODUCTION

Bank C is one of the biggest SCBs in the LCBS. This case study is divided into nine sections. Section one summarises details about interviewees and the background information about the Bank. The data analysis is carried out in section two. The motives for adopting and using NFPMs by the Bank are researched in section three. Internal environmental factors that affect the use of NFPMs are discussed in section four. Section five outlines the external environmental factors affecting the use of NFPMs. The strategies adopted by Bank C's management in conjunction with the use of NFPMs are summarised in section six. The consequences of the use of NFPMs are discussed in section seven. Section eight outlines the findings of this case study in terms of Strauss and Corbin's paradigm model. Section nine reports the substantive hypotheses emerging from this case study.

7.1 INTERVIEWEES' AND BANK'S BACKGROUND

7.1.1 Interviewees

The interviews were conducted over a period of six weeks, during which twenty semi-structured interviews were completed. During the first week of the visit to the Bank the researcher met the Chairman/General Manager, Vice-Chairman, the Manager of the marketing department and the Manager of the branches department who gave the researcher an overview of all the Bank's business, objectives, strategies, systems, units and products and the researcher then conducted the case study by interviewing, observing, and inspecting documents. Most interviews lasted one and half hours and some lasted more than two hours and three interviewees were

interviewed twice (see Table 7-1) because the interview time was insufficient for them to complete their discussion. The interviews were conducted during the working day at the interviewees' offices in the Bank's premises. Table 7-1 shows some details about the interviewees who participated in this case study such as job title, interviewees' experience and qualifications and the number of interviews.

Table 7-1: Profile of Interviewees and Number of Interviews Conducted

Job Title	Symbol	Number of Years with Banking Sector	Number of Years with this Bank	Number of Years in Current Job	Qualification	Number of Interviews
Vice Chairman/Deputy General Manager	VCDG	46	46	7	High School Certificate	2
Manager of Marketing Department	MBMD	9	9	3	MSC in Business Management	2
Manager of Branches Department	MBD	14	14	2	Intermediate Diploma in Accounting	2
Manager of Audit Department	MAD	32	32	10	High School Certificate	1
Manager of Electronic Banking Services Department	MEBS	19	19	4	BSC in Computing	1
Manager of Inspection Department	MID	13	13	2	MSC in Business Management	1
Deputy Manager of Training Centre	DMTC	19	19	2	BSC in Economics	1
Manager of Personnel Division	MPD	22	13	11	Intermediate Diploma in Accounting and High Diploma in Business Management	1
Manager of Allocations Committee	MAC	41	41	4	High School Certificate	1
Employee in Branches Department, Monitoring Division	EBD	31	31	11	High School Certificate	1
Employee in Accounting Department	EAD	5	5	5	BSC in Accounting	1
Deputy Manager of a Branch	DMTM	37	37	8	High School Certificate	1
Assistant Manager for Accounting Affairs of a Branch	AMAA	31	31	20	High School Certificate	1
Manager of a Branch	MAFB	34	34	13	Intermediate Diploma in Accounting	1
Deputy Manager of a Branch	DMAB	27	27	2	Commercial Diploma and High School Certificate	1
Manager of a Branch	MBMB	34	34	5	BSC in Accounting	1
Deputy Manager of a Branch	DMGB	26	26	6	BSC in Economics	1
Total						20

The researcher followed the same steps and conditions that were used in the previous case studies (see Chapter 4 for more details). During the interviews, the

researcher asked open and broad questions which concentrated on the research objectives (see Chapter 4 for research questions). She also tried to ask for more explanation and examples which assisted her to investigate the research problem in depth which is the use of NFPMs in the LCBS.

7.1.2 Bank¹

Bank C was founded in the late 1960s and is one of the five SCBs in the structure of the financial and banking system of the State. It is a subsidiary of and controlled by the CBL. Bank C was established as a Libyan joint stock company according to the decree of the Libyanisation of all the commercial banks which were in Libya at that time (that is, 51% of the capital has to be owned by Libyans). Bank C's business is in several areas in the Libyan banking market. Since Bank C was established, it has set up in the Libyan banking market as a commercial bank with its Head Office and over 50 branches and agencies with plans for opening others that attract high net worth individuals.

The Bank is known in the Libyan banking market for its capability, efficiency and effectiveness in developing the national economy by providing the most developed banking services as mentioned by some of the interviewees. It has a strong market share which is greater than 30%. Bank C has a good reputation in the Libyan market and is highly accepted by many international financial correspondents. The Bank is a member of the Union of Arab Banks, the Association of Libyan Banks and the Union of Al Magreib Banks.

The Bank was founded with a capital of under LD 3 million which was completely paid up and was owned by the CBL. The Bank's capital was under LD 50 million in 2004 and it was completely paid up. Furthermore, according to the CBL's

¹ The information in this section is taken from Bank C's annual report (1994-2004), the Basic Regulations of the Bank, Bank's publications, interviews with Bank C's employees and the CBL's publications.

decree number (1) 2005 and the Shareholders' Meeting, the Bank's capital was augmented by capitalising the Bank's revenue reserves of LD 100 million to satisfy the Basle II conditions which are concerned with capital adequacy, especially, after the devaluation of the Libyan Dinar in 2002. Bank C has concentrated on direct investments in a number of private and public companies to reach under LD 30 million as shown in the annual report of 2004. The number of employees in Bank C were over 2000 in 2004. This increase in the number of employees resulted from an increase in employees in new branches and agencies. In addition, all employees are of Libyan extraction.

7.1.2.1 Bank's Ownership and Management

When the Bank was established, the State owned 51% of the capital and after the nationalisation of all foreign allotments in the commercial banks, the Bank's ownership became 100% public Libyan ownership held by the CBL. The Bank is managed by a Board of Directors which consists of a Chairman, Vice-Chairman, and three members. The Chairman of the Board of Directors also performs the function of the General Manager of the Bank. The CBL has the right to appoint the Chairman, Vice-Chairman, and one of the members of the Board. The other two Board members are chosen by the Bank's personnel. A Board member serves an average term of three years, starting from the date of appointment. If this term expires before approving the final year's balance sheet, the Board remains until the balance sheet is approved. It is permissible to reappoint the Board's members. The Bank has a large number of capable and experienced managers who have been developed from within the Bank over a number of years. The Chairman/General Manager has been in place from 1998 and the rest of the Board have been in place since 2000.

The Chairman has long experience in the banking sector. He worked as a senior manager for more than 15 years with banks inside and outside Libya before he came to this Bank. He is considered to be among the most prominent bankers in the LBS. Therefore, most interviewees consider that the Chairman is a critical factor behind the Bank's succession. Bank C's lower and middle level management have a good working relationship with its senior management and they work as one family which has been an essential factor of success.

7.1.2.2 Bank's Organisational Structure

The Bank's organisational structure is meant to encourage co-ordination and cooperation between the Bank's departments and divisions. Each department and division has its own detailed functional guidelines. However, recently, the Bank's organisational structure has faced a challenge that it is inconsistent with the new objectives, strategies and competitive environment. These circumstances forced the management to expand banking activities and improve management, accounting and technological techniques which in turn required the management to consider their impacts on the Bank's organisational structure. For example, the management introduced new departments and divisions into the old organisational structure without considering their potential impact on other departments, divisions and activities. Therefore, many managers believe that the current organisational structure needs some adjustments in order to be consistent with the new environment and strategies.

7.1.2.3 Bank's Management Objectives and Strategy

The Libyan banking market has passed through a transition period from a monopolistic or semi-competitive market (which was dominated by five SCBs) to a competitive market which has driven the Bank's management to adopt a defensive

strategy to protect its market share. The management has adopted a customer-oriented strategy focusing on enhancing the Bank's critical success factors such as service quality, on-time delivery, customer satisfaction and community acceptance. The management has changed some units' managers to a more service oriented perspective.

The Bank's strategies are aimed at strengthening its position as the leading bank in the Libyan market through continuous development of its services in order to remain the number one commercial bank in the Libyan market. Therefore, the Bank has invested in technology and human resources and it has developed its services to provide better services to its customers and then to obtain significant customer satisfaction and loyalty and community acceptance. It has made significant investments in upgrading its information system, advanced management and accounting techniques. Computer systems have been installed in all the Bank's units to provide daily and online reports on the Bank's performance and a reliable basis for management decision making.

Bank C has extensive local and foreign training programmes in theory as well as practice. It opened a training centre to train the employees locally. The Bank's training centre provides extensive training programmes which aim to increase quality of service and to enhance delivery on-time and customer satisfaction and loyalty. A comprehensive marketing campaign is planned for the Bank's services to ensure that the Bank is building good relationships with the community. The Bank established the customer's award which means the best ten customers are rewarded according to their transactions with the Bank every year by receiving valuable presents.

Bank C's vision is to be the friendly bank for everyone and its objectives are to meet its customers' expectations and gain their satisfaction and then increase the Bank's business, profits and return on shareholders' equity. Amongst its goals is the

aim to be one family in all its units. The manager of the branches department mentioned that the benchmarking method is used in Bank C, and the management compares the Bank's performance and technology with other banks' performance and technology and then it uses the results to improve the Bank's performance and make effective managerial decisions.

All these advances have been part of the Bank's strategy (which aims to increase capacity, to enhance service quality and secure customer satisfaction and loyalty) in anticipation of incoming competition. In addition phone banking and internet banking have recently been introduced throughout the entire Bank's network.

7.1.2.4 Employees' Benefits and Incentives

Bank C used to pay annual bonuses to its employees in accordance with an annual report of employee's efficiency until 1982 when the labour law (15)1982 was implemented in Libyan environment which stopped employees from gaining bonuses and other rewards. The Bank provides free medical care to employees and their families and pays for the medications. The Bank also provides opportunities for overseas medical treatment for some cases that cannot be treated locally. The Bank grants employee social loans and housing loans without interest and it provides a small financial incentive for employees who do very special work. The Bank as well gives financial awards to outstanding employees in the local training programmes. The Bank issued a collective insurance policy which covers a number of risks such as accidents and death. The Board of Directors established the social services fund which aims to provide social assistance and services to employees to enhance their economic, cultural and social level. Recently, the new laws and the instructions of the CBL have exempted the banking sector employees from the labour law (15)1982.

Therefore, the Bank's top management has developed a new reward system that will start this year.

7.1.2.5 Bank's Environment

Bank C has faced the challenge of national competition since the late 1990s when businessmen set up new commercial banks. These banks deal with private companies and individuals. Therefore, these banks are now widely accepted by national customers and they have made the Libyan banking market competitive. Internal competition is the other type of competition that has been used in an organisational context to motivate the Bank's employees to work in a competitive environment preparing for the incoming international competition. In this competition the Bank's management determines the best 10 branches and agencies according to their FP and NFP during the year and then the employees in these units are rewarded. It adopted this kind of competition to encourage employees to be more service-oriented and to use more NFPMs and to encourage employees to apply the management strategy. The third type of competition is the international competition which will come into the Libyan market in late 2006 as mentioned by one of the interviewees with foreign banks entering the domestic market. Additionally, Libya will join the WTO in 2007 which will increase the competition.

7.1.2.6 Bank's Information Technology

Bank C wants to be the leader in the Libyan market. Therefore, the management is connecting on-line all branches and agencies in Libya in order to appear to the customers as a single branch and to provide the fastest service to the customers irrespective of where they are. The management of the Bank had evolved and it has updated its banking system (operating, information and reporting system) to be more appropriate for the changing banking environment. The Bank's new system covers

all services the Bank supplies in present such as ATM cash services, SWIFT and billing system as well as any services to be supplied in the future such as internet banking and phone banking.

7.1.2.7 Bank's Performance System

7.1.2.7.1 Financial Performance

Bank C's performance history from 1994 to 2004 has shown a year by year increase in profits except in 1998 when it failed to display an increase in profit because of the drop in oil prices which led to a depression in the local economy.

The Bank's annual report of 2004 reflected an increase of total assets to reach over LD 2000 million, the deposits to over LD 1500 million and the loans and credit facilities amounted over LD 1000 million. Shareholders' equity was over LD 100 million in 2004. The Bank's capital adequacy rate was over 12% which exceeded the defined standard of the Basle Committee which ranged between 8%-12%. The net profit on equity and the return on assets in 2004 increased by 6% and by 1% over previous year respectively. Finally, Bank C has had outstanding achievements in comparison with other local banks.

7.1.2.7.2 Non-financial Performance Measurements

The Vice-Chairman stated that since the appointment of the current Board of Directors, great attention has been paid to the necessity of developing quality of service, on-time delivery, customer satisfaction, employee satisfaction, productivity, internal processing and community acceptance. Therefore, these factors and related non-financial measurements have been implemented and used at the Bank's units but as unsystematic measurements of performance. The lack of an integrated standard PMS is part of the weakness that has been mentioned by most interviewees. However, the importance of NFPMs is well recognised at all management levels in

the Bank. Examples of NFPMs that are used for assessing the branches and agencies are:

- Number of accounts opened according to the types of customer.
- Number of accounts closed and reasons for closure.
- The average number and volume of transactions processed daily.
- Cleanliness and tidiness of branch/agency employees.
- Branch/agency employees' competence and courtesy.
- Number of customers using ATM to execute their transactions successfully (in the branches that have ATMs).

The executive management has also introduced customer satisfaction measurements. These measurements included customer suggestions and complaint boxes, internal evaluators and recently, ghost shoppers. Such material was studied and evaluated and then reported to the Board to be assessed and used in the decision-making process.

The administration of personnel and related divisions use NFPMs. The following are examples of measurements that are used to evaluate Bank C employees' performance:

- Employee's qualifications and skills.
- Employee selection standards.
- Employee turnover rate.
- Employee absentee rate.
- Employee's productivity, creativeness and effectiveness.
- Employee's creativeness.
- Employee's ability to be pro-active to customers' needs.
- Employee's responsiveness to customer.
- Employee's knowledge of other languages (English) and banking information.
- Employee's personality.
- Employee's behaviour and appearance.
- Employee's treatment of customer.
- Employee's respect of working time.

- Employee's punctuality.
- Employee's concentration and accuracy in the work.
- Employee's cleanliness and tidiness.
- Employee's degree of cooperation and participation with others.
- Employee's obedience of instructions.
- Employee's activity and knowledge of the work.
- Relevance of training programmes to employee duties.
- Correlation between the unit location and employee's accommodation.
- Employee's ability to understand instructions and master the work.

The Board of Directors is concerned about the degree of community acceptance and, therefore, it established the marketing department which aims to strengthen the Bank's relationship with its community. This department mainly used non-financial measurements to evaluate the Bank's critical factors that related to customers, service quality and employees.

The above measurements are examples of what Bank C is using to evaluate its performance. These measurements are analysed periodically. The managers of branches department and accounts department meet regularly to evaluate the results of these measurements and then they report to the Board of Directors.

7.2 DATA ANALYSIS

The researcher analysed the primary data collected at the research site in the light of the grounded theory approach informed by Strauss and Corbin. The approach's analytical procedures of coding permitted the researcher to specify key points (concepts) raised from each interview. These points were listed and checked to make sure all the points have been considered (see Chapter 4 for more details). Table 7-2 lists these points, which were raised by the interviewees.

Table 7-2: Main Points Raised by Interviewees

No	Points
1	<p>Limitations of FPMs</p> <ul style="list-style-type: none"> i. The deficiencies of FPMs (such as short-term, historical, quantitative, internal looking, misleading and structured indicators and sometimes reward wrong performance) encouraged managers to use NFPMs. ii. FPMs are insufficient to measure Bank's real performance. iii. Managers' long-term experience and their accounting background helped them to understand the deficiencies of FPMs and encouraged them to use NFPMs.
2	<p>Existing and Future Competition</p> <ul style="list-style-type: none"> i. The change of environment to competitive was a motive for exploring the FPMs' deficiencies and using NFPMs. ii. The State's new economic policies and laws since 1993 had made the environment more competitive which was a motive for using NFPMs. iii. Since 1996, the environment had changed to competitive and it will be more aggressive in the future. iv. The affiliation to WTO will make the environment more aggressive. v. The fear of existing and future competition and economic globalisation drove Bank's management to investigate long-term critical factors and measure them. vi. Competition was the main factor behind management's adoption of customer-oriented strategies. vii. There is a relationship between kind of environment and the type of PM viii. To survive! Concentrate on the customers, the competition will be aggressive. ix. Globalisation forced the development on the banks and made the world as a village.
3	<p>Management's Knowledge of the Relationship between NFPMs and FPMs</p> <ul style="list-style-type: none"> i. The causal relationship of NFPMs on FPMs was behind the use of NFPMs. ii. Management knows that, there is a strong relationship between NFPMs and FPMs. Therefore, it used NFPMs. The use of NFPMs leads to a positive impact on FPMs (profitability). iii. Management's attention has directed to the use of NFPMs because they are of more value.
4	<p>Demanding Customers</p> <ul style="list-style-type: none"> i. Since the late 1990s, the customers seem to be more demanding and their satisfaction drive the management to concentrate on non-financial factors (service quality and flexibility) and to measure them using NFPMs. ii. The openness and development of society made demanding customers who ask for special level of service delivery and type of service. If an organisation wants to be successful, it should study customers' attitudes, needs, behaviour and expectations.
5	<p>Operational Experience and Competence and Authority of Management</p> <ul style="list-style-type: none"> i. The Bank managers' operational experience and competence led them to use NFPMs. ii. Managers' long-term experience and their accounting background encouraged them to use NFPMs iii. The limited authority of the management could hinder the Bank from adoption of NFPMs.
6	<p>Level of Management</p> <ul style="list-style-type: none"> i. The kind of PMs depends on the managers' positions, the operational managers rely on NFPMs and top managers use a combination of both NFPMs and FPMs with more attention to the FPMs. ii. NFPMs are operational performance measurements.
7	<p>Top Management's Interference</p> <ul style="list-style-type: none"> i. The interference of top management in operational processes is driving force behind the Bank to concentrate on non-financial factors and measure them.
8	<p>Stability of Management</p> <ul style="list-style-type: none"> i. There is relationship between management's stability and the type of PMs. ii. Relatively long-term recruitment strategy encourages managers to focus on non-financial factors (such as quality of service and customer satisfaction) and use NFPMs.

9	<p>Collective Working Group</p> <ul style="list-style-type: none"> i. Working as a family group will enhance service quality and strengthen the Bank's relationship with its customers and it was behind the Bank's success in achieving competitive advantage. ii. Working as a concerted group was behind the Bank's use of NFPMs.
10	<p>Central Bank of Libya's Regulations</p> <ul style="list-style-type: none"> i. The old regulations of the CBL had prevented the Bank from achieving customer satisfaction sometimes. ii. The new management, regulations and strategies of the CBL have influenced the Bank's management to concentrate in non-financial factors adopt long-term strategies. iii. The new management, laws and strategies of the State and the CBL were behind the implementation and use of NFPMs. iv. The over-control and interference of the CBL in the Bank's management impeded it from adopting AT. v. The public ownership has a negative impact on the implementation of NFPMs. vi. The decree (15)1982 and public ownership have limited personal development vii. Financial mentality of shareholders has impacted on the use of NFPMs.
11	<p>Information Shortage</p> <ul style="list-style-type: none"> i. The lack of information has impeded the use of NFPMs and prevented the management from obtaining the benefits of NFPMs. ii. Libyan market is suffering from shortage of information which has impeded the management from adopting AMPs.
12	<p>Weakness of Infrastructure</p> <ul style="list-style-type: none"> i. The weakness of infrastructure such as telecommunications in Libya has hindered the implementation of NFPMs
13	<p>Traditional Educational System</p> <ul style="list-style-type: none"> i. Traditional education impacted on organisation stakeholders. ii. Traditional educational system negatively impacts the implementation of NFPMs
14	<p>Uncertainty of Economic Environment</p> <ul style="list-style-type: none"> i. Uncertainty encouraged management to use more NFPMs. ii. In uncertainty, NFPMs are better than FPMs.
15	<p>Development of Human Resources</p> <ul style="list-style-type: none"> i. Management developed and adopted new human resources strategies in conjunction with the use of NFPMs to enhance the Bank's critical success factors.
16	<p>Performance Reward System</p> <ul style="list-style-type: none"> i. The decree (1)2005 allowed employees to gain bonuses and other rewards. ii. Management's new strategies are aimed to satisfy employees and create customer satisfaction.
17	<p>Development of Banking System (Bank's Operating, Information and Reporting System)</p> <ul style="list-style-type: none"> i. Management developed the Bank's system in conjunction with the use of NFPMs to enhance the Bank's critical success factors. ii. The concentration on non-financial factors and the adoption of NFPMs encourages management to develop the Bank's operating, reporting and information system to provide up-to-date information in order to support the Bank's objectives and its critical success factors.
18	<p>Development of Management Accounting Information</p> <ul style="list-style-type: none"> i. The use of NFPMs leads to the development of MAI. ii. Budget and cost accounting are tools for enhancing the use of NFPMs. iii. Establishment of management accounting department will enhance the use of NFPMs.
19	<p>Development of Organisational Structure</p> <ul style="list-style-type: none"> i. The adoption of NFPMs encourages management to develop its organisational structure.
20	<p>Adoption of Advanced Management Practices</p> <ul style="list-style-type: none"> i. Management used AMPs in conjunction with the use of NFPMs. ii. The executive management has used benchmarking.

21	Variety and improvement of services. i. The adoption of NFPMs encourages management to improve and diversify the bank's range of services.
22	Introduction of advanced technology. i. The adoption of NFPMs encouraged Adoption of AT.
23	Positive Effects on FPMs i. The adoption of NFPMs increasing profitability of the Bank. ii. By using NFPMs, our market share has increased. iii. There is a strong relationship between NFPMs and FPMs. Since adopting NFPMs the profitability and customers' deposits have increased.
24	Capital Expenditure i. The adoption of NFPMs leads to an increase in capital expenditure.
25	Effectiveness of budget. i. The adoption of NFPMs leads to the improvement of the budget.

These points (concepts) were grouped and given labels. As in the previous case studies, the researcher combined the labels together in compatible ways by specifying the type of association of these labels with the phenomenon under investigation (see Chapter 4 for more details, p. 162). Tables 7-3 to 7-7 show the labels emerging after analysing the data and organising them in categories according to their association with the phenomenon.

In the next sections, the researcher will discuss the labels and specify relationships between category labels and the main category of this study, which is the use of NFPMs. This process will provide the basis for organising and developing the ideas that emerged from the analysis. Accordingly, the researcher will be able to generate a number of hypotheses based on these relationships between the main category and the other categories. By using Strauss and Corbin's paradigm model a clear understanding of these relationships will be provided in the researcher's model (Figure 7- 11).

7.3 MOTIVES FOR USING NFPMs

As mentioned in section 7.1.7.2 Bank C has focused on NFPMs that relate to quality of service, on-time delivery, customer satisfaction and loyalty and employees' performance appraisal. Bank C management concerns about concentrating NFPMs

were attributed to several motives that related to the Bank's organisational and environmental circumstances. Table 7-3 shows the labels that represent the main motives for using NFPMs, and indicates the interviewees who mentioned them. Each motive will be discussed in more detail in the following subsections from 7.3.1 to 7.3.4.

Table 7-3: Motives for Using NFPMs (Labels of Causal Conditions)

Interviewees	LFPMs	EFC	MKR	DCs
VCDG		√	√	√
MBMD	√	√	√	√
MBD	√	√	√	
MAD		√	√	
MEBS		√		√
MID		√	√	√
DMTC		√	√	
MPD		√	√	√
MAC		√	√	
EBD	√	√	√	
EAD	√	√		√
DMTM		√	√	
AMAA		√	√	
MAFB		√	√	
DMAB		√	√	
MBMB	√	√	√	√
DMGB		√	√	√

LFPMs: Limitations of FPMs.

EFC: Existing and Future Competition.

MKR: Management's Knowledge of Relationship between NFPMs and FPMs.

DCs: Demanding Customers.

7.3.1 Limitations of FPMs

The EBD explained that in a monopolistic environment FPMs were the prevalent measurements to increase the shareholders' worth. Yet, in a competitive environment managers need to concentrate on service quality, flexibility of service's procedures, employee satisfaction and loyalty and customer satisfaction and loyalty which are important factors behind financial success. The EBD reported that:

“The changing in the Bank's environment from monopolistic to competitive had shown that the Bank's success does not depend only on the achievement of profitability, but also on how to achieve on-

time delivery of service, customer satisfaction and loyalty and community acceptance. Explicitly, the changing in the environment clarified the FPMs' deficiencies. FPMs are quantitative and structured on special formulas and they are not able to measure, evaluate and explain these types of activities.”

The MBD criticised the FPMs as being insufficient and concentrating on short-term profitability. The MBD mentioned that FPMs are unable to reflect, measure and explain the real performance of the Bank which is a result of the non-financial aspects of performance such as service quality. The MBMD described FPMs as insufficient tools to measure an organisation's real performance because they suffer from several shortcomings. They are too internal looking, quantitative, structured and neglect long-term success factors. They mainly measure the final result of organisation activities through its short-term profitability. The MBD and MBMD confirmed that the limitations of FPMs are one of the motives for using NFPMs. The MBMD added that:

“FPMs make managers focus on lowering the expenses and increasing the profit without giving any attention to customer satisfaction and employee satisfaction which are critical factors to the organisation's survival and long-term success.”

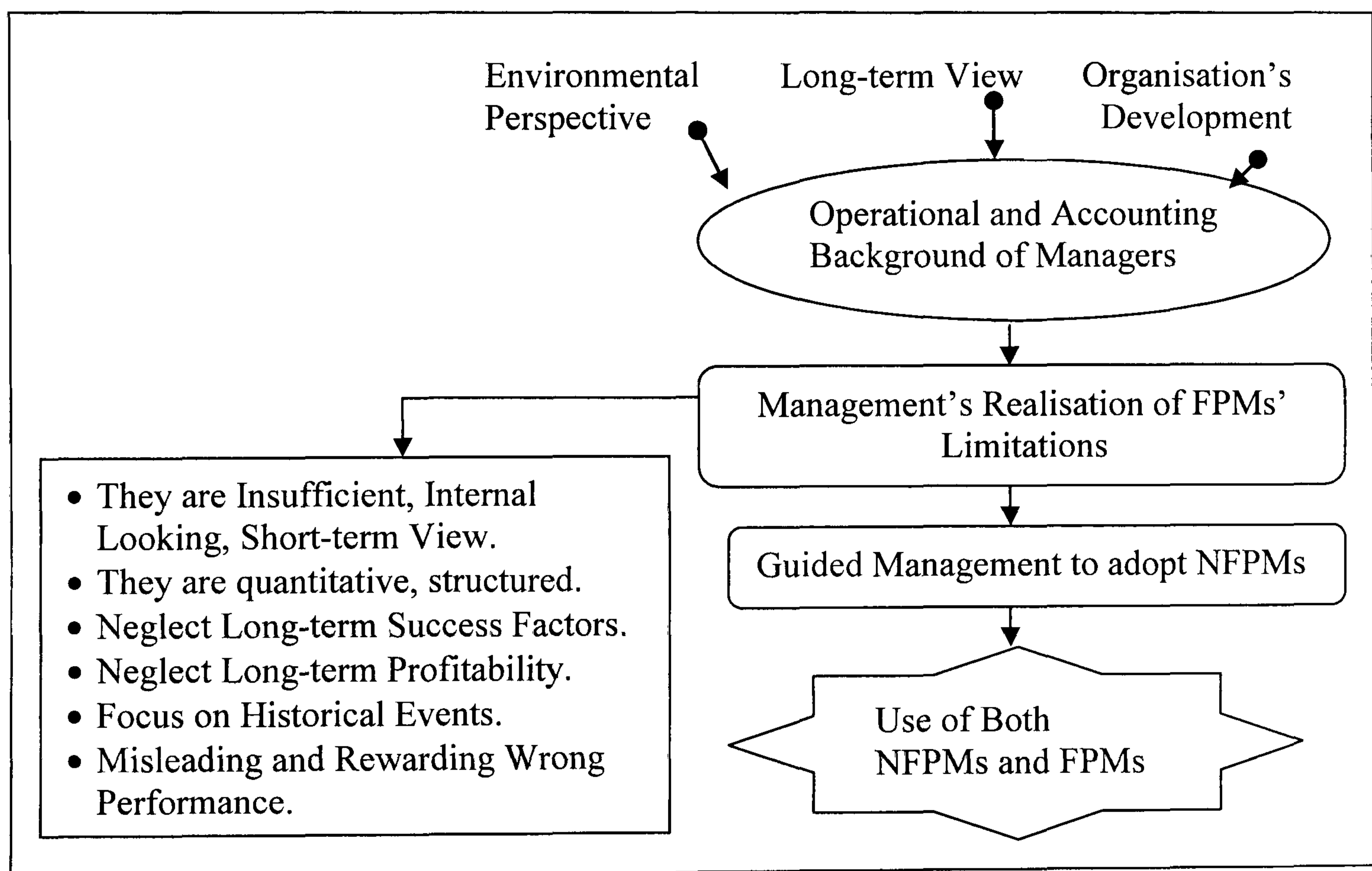
The EAD mentioned that the operational experience of the Chairman/General Manager and managers help them to know FPMs' limitations. FPMs depend on historical facts and numbers, are structured and ignore the organisation's future success factors such as customer satisfaction. Therefore, the operational background of management was a factor helping the understanding of the limitations of FPMs. Consequently, the management had turned to use the NFPMs gradually with the FPMs. The MBMB criticised FPMs as considering the financial aspects and neglecting an organisation's survival and long-term success. The MBMB added that the management of the Bank is aware of the limitations of FPMs and has encouraged

the employees at all levels of management to implement and use the NFPMs. The MBMB stated that:

“The more organisations develop the more they find that FPMs cannot justify why existing performance has happened, what factors are behind the financial result, how to rectify and improve the final result for next period which the NFPMs can do. Moreover, they cannot give the management reliable information that it needs in the decision-making process. They depend on historical events, are misleading and reward the wrong performance.”

Figure 7-1 displays managers’ understanding of the limitations of FPMs and the need to use NFPMs.

Figure 7-1: Limitations of FPMs and the Use of NFPMs



7.3.2 Existing and Future Competition

The DMTM reported that the LBS used to be well protected by the State because of its ownership of all the economic organisations. However, this protection is being eroded for several reasons. Firstly, there was the issuance of the decree No (1)1993 which permitted businessmen to establish new private banks, foreign banks to open

branches in Libya and the State to privatise the public organisations. Secondly, the falls in the oil price affected the State's ability to continue protecting and owning public organisations. The other reason was Libya's affiliation to the WTO. The DMTM believed that these circumstances had changed the environment to be competitive and it will be more competitive by 2007. The DMTM stated that:

“Appearance of the competition in the Libyan banking market was an influencing catalyst for banks' management to become interested in and adopt NFPMs.”

The MBMD, MAC, MPD and MBD mentioned that management tried to improve service quality and delivery and the relationship with its stakeholders such as customers. They confirmed that competition was the main incentive for Bank C's management to adopt customer-oriented strategies which in turn require it to measure its service quality and customer satisfaction. The management therefore adopted NFPMs.

The VCDG reported that before the late 1970s the Libyan banking industry was dominated by foreign banks and these banks used to be interested in some NFPMs such as customer complaint boxes. However, when the State nationalised all the banks, the environment became monopolistic which encouraged the banks' management to use mainly FPMs. Nowadays, the environment had changed again to be more competitive and, as a consequence, the management realised that it needs to reconsider and readopt NFPMs such as service quality and customer satisfaction to be used combined with FPMs. The VCDG emphasised that:

“There is a relationship between the kind of the environment where the organisation works and the kind of PMs. The more competitive the environment the more organisations need to use NFPMs combined with FPMs.”

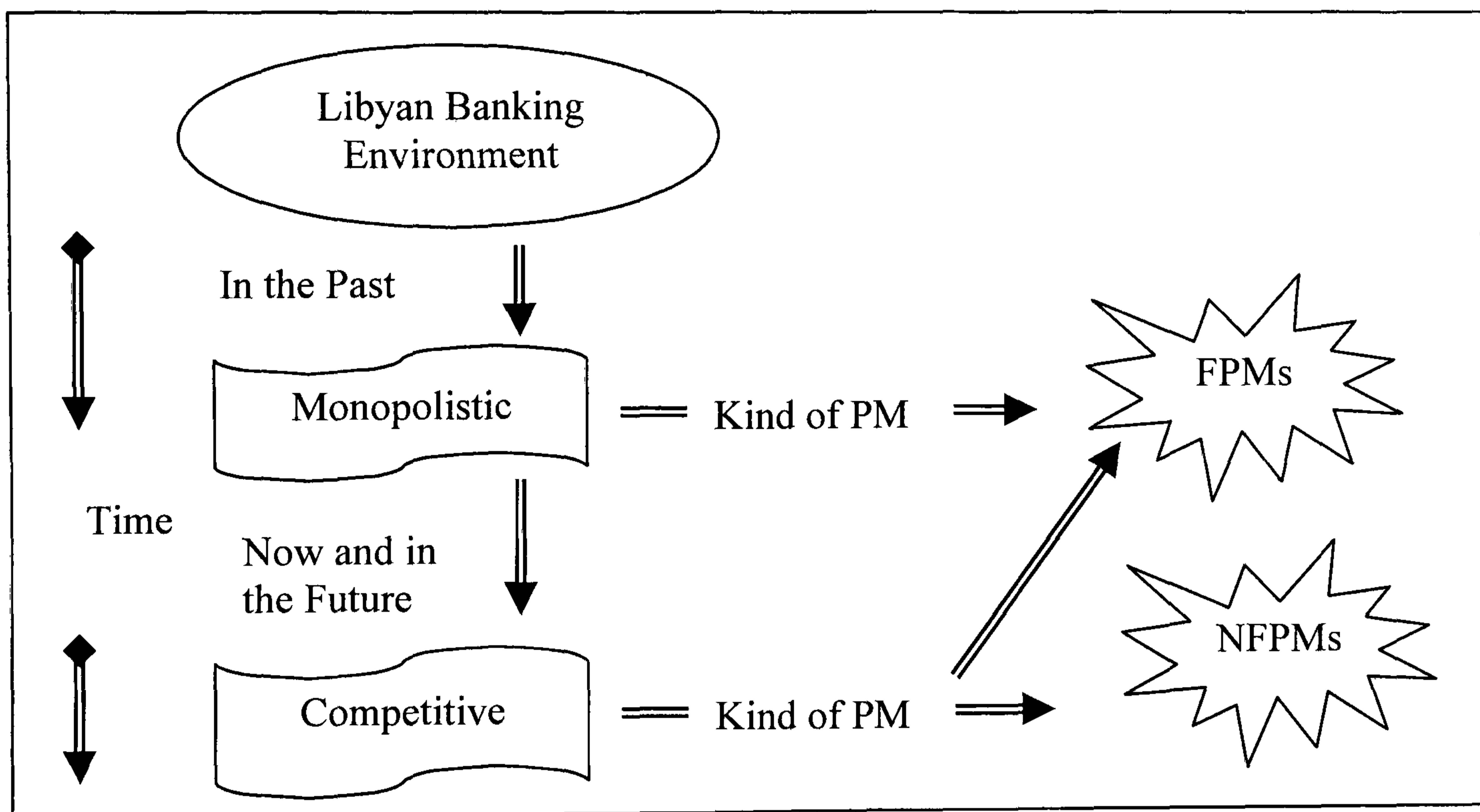
The MAD, EBD, AMAA, DMGB and DMTC confirmed that the need to adopt and use NFPMs appeared when Bank's management realised that its environment was no longer monopolistic. They confirmed that this competition put pressure on the management of Bank C to deliver higher quality of service in order to have more satisfied customers. The MID, MAFB, and DAMB emphasised that from 2003 all the Libyan banks are passing through a development period and all the State banks are trying to become the leader in the banking market. Therefore, this competition was an influencing motive that drove the Bank's management to adopt NFPMs. The EAD and MPD mentioned that the Bank is facing national competition from well-established private banks. This competition is the main force for Bank C to adopt NFPMs. They added that the management of Bank C is working to improve its service quality, on-time delivery and other critical factors for the existing and future international competition which will be aggressive. The MBMB stated the Bank had started to improve its service quality and customer satisfaction since the establishment of the first private commercial bank. The new bank has got a good reputation in the market by providing good services on time which increased the management fear for its future market share. The MEBS stated that:

“The fears of existing national and future international competition and economic globalisation were the main impetus for Bank C's management to study and define its long-time success factors and measure them.”

The MBD mentioned that The WTO agreement would come into effect by 2007 and international banks will then have freedom to enter the Libyan banking market. This has directed Bank C's strategies to be focused on critical success factors such as customers' needs and employees. Moreover, Bank C's management has tried to build suitable measurements which will give a true image of its actual performance. The MPD stated that service quality, customer satisfaction and employee satisfaction

used to be neglected on a monopolistic environment. However, now after the State's new economic policies from 1993, the Bank's management pays a great attention to supporting such activities and tries to find dependable measurements for these critical success factors. Finally, there was a general agreement between interviewees that there is a direct relationship between the competition and the Bank's adoption of NFPMs. Figure 7-2 summarises the relationship between the kind of environment and the use of NFPMs.

Figure 7-2: Kind of Environment and Performance Measurements



7.3.3 Management's Knowledge of Relationship between NFPMs and FPMs

The MBD and DMTC stated that managers' understanding of the positive relationship between NFPMs and FPMs is a critical factor influencing the use of NFPMs. The MBD explained this relationship by saying that:

“If managers give great attention to NFPMs regularly and then use the result in their daily decisions, they will receive a good result on their FPMs. The NFPMs are the pillars for achieving profitability and other FPMs.”

The DMTM mentioned that the Bank's managers prepare some NFPMs and they use these indicators for evaluating their performance and in daily decision making because they believed that these measurements have a positive impact on their FPMs. The VCDG, MAD, MID, MAC and EAD pointed out that the Bank's management used to use FPMs to measure the Bank's units' performance because they were forced to use them by the Central Bank. The management use some NFPMs in all levels of management but these are unsystematic measurements without publishing their results in the annual report of the Bank. They added that this use of NFPMs was attributed to the management's grasp of the causal relationship of NFPMs on FPMs. The MBMB asserted that:

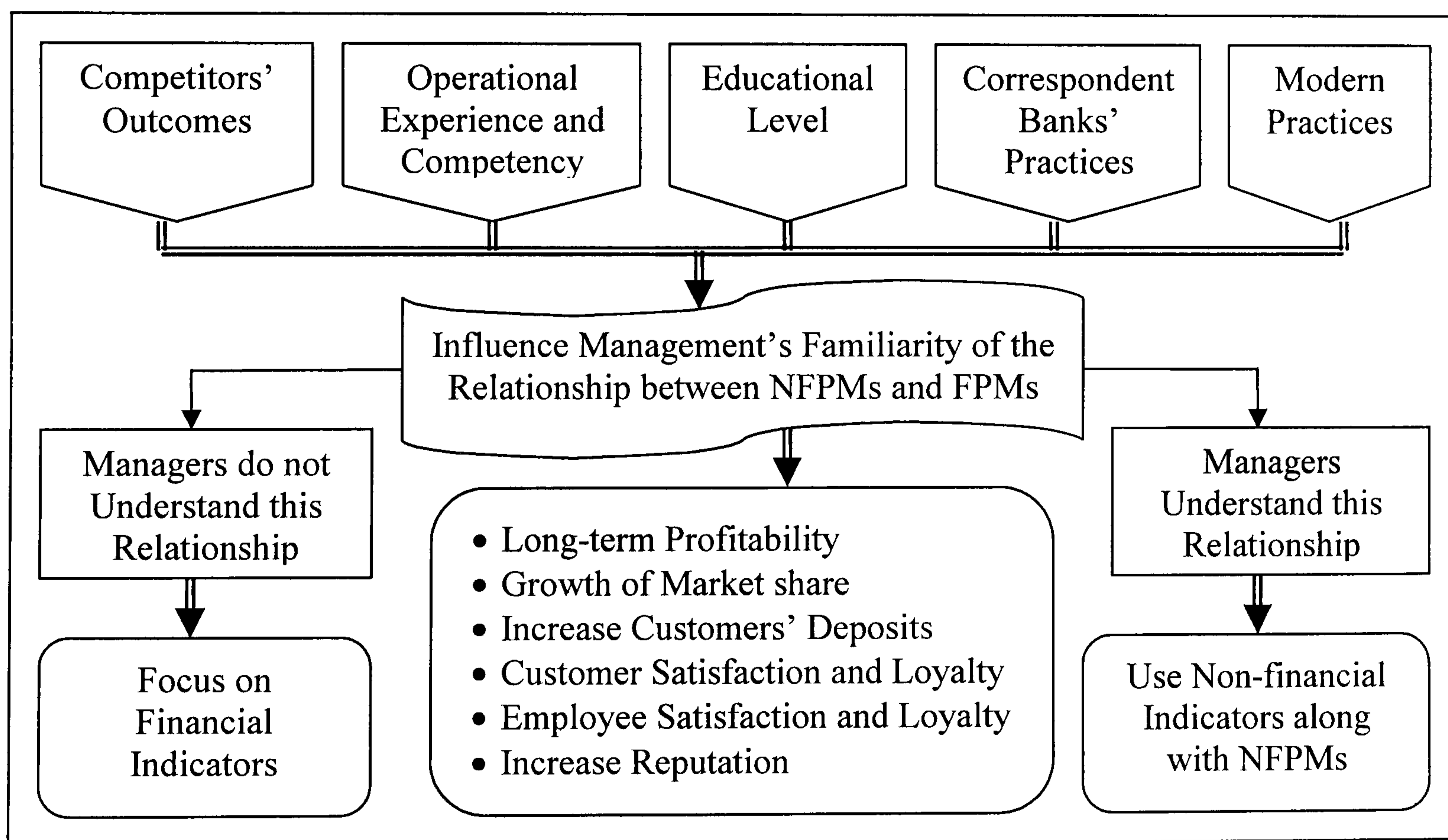
“Management awareness of the positive impact of NFPMs on the long-term profitability has driven the management to develop the Bank's critical factors and to adopt NFPMs.”

The MBMD reported that in light of the new economic policies in the banking sector, the management has got more authority to manage and develop the Bank. It started to adopt advanced management, accounting and technological techniques such as NFPMs. It adopted this technique because it knew that these measurements will positively reflect on the Bank's reputation, market share, customers' deposits and profitability. The MBMD and VCDG mentioned that several factors influenced management's understanding of the relationship between NFPMs and FPMs. These factors are manager's educational level, operational experience and competency, the visits to correspondent banks and their practices, training and modern practices in the world banking industry.

The DMGB and MPD reported that the educational level and long-term operational experience of the Chairman/General Manger (with banks inside and outside Libya) are behind his understanding of NFPMs' causal relationship with

FPMs which in turn has helped him to encourage the Bank's managers and employees to focus on and to use NFPMs. The AMAA, DMAB, EBD and MAFB reported that the majority of the Bank's managers have great operational experience which enhanced their recognition of the NFPMs' causal relationship with FPMs. They added that managers have developed their operational experience through their work in different divisions and departments of the Bank for a long time. Lastly, the majority of interviewees believed that the relationship between NFPMs and FPMs was the main driver that has encouraged the managers to concentrate on NFPMs. Figure 7-3 illustrates managers' appreciation of the relationship between NFPMs and FPMs and influencing factors.

Figure 7-3: Management's Appreciation of the Relationship between NFPMs and FPMs



7.3.4 Demanding Customers

The MBMD clarified that the changes in the Libyan economic environment, openness of society and the TV channels have changed customers' attitudes and behaviour and, as a consequence, customers changed significantly from being

simplistic to being demanding. Therefore, any organisation that wants to be successful has to look for ways to satisfy its customers by studying customers' attitudes, needs, behaviour and expectations and giving more concern to its NFPMs such as service quality, on-line delivery and employee satisfaction. The MBMD reported that since the late 1990s, the Bank's management decided that it wants to make its customers its main concern because the customers' attitudes and behaviour changed and began asking for special services and level of delivery which caused the Bank to adopt AT in order to protect its market share. The DMGB, MPD and MEBS mentioned that since the late 1990s, the Bank's management has concentrated on customers and has encouraged its employees to do so because it thinks that customers are the most important stakeholder group and satisfying customers is the key factor for the Bank's long-term success. The MBMB stated that:

“Before the openness, Bank C used to deal with simplistic customers and the management of the Bank used to use simple management and accounting techniques. It used more financial measurements for evaluating the performance than non-financial measurements. However, when the society changed and became more open to the world, the customers' needs and expectations have changed as well. Therefore, the Bank's management believes that the use of NFPMs is the most suitable technique for dealing with such customers.”

The MID and MBMD explained that customers started asking for more services and they compare what the Bank provides with what other banks provide even sometimes with foreign banks outside Libya without giving any concern to the price. The MID added that the service price is no longer very important for some groups of customers compared to the importance of getting high service quality. The EAD stated that:

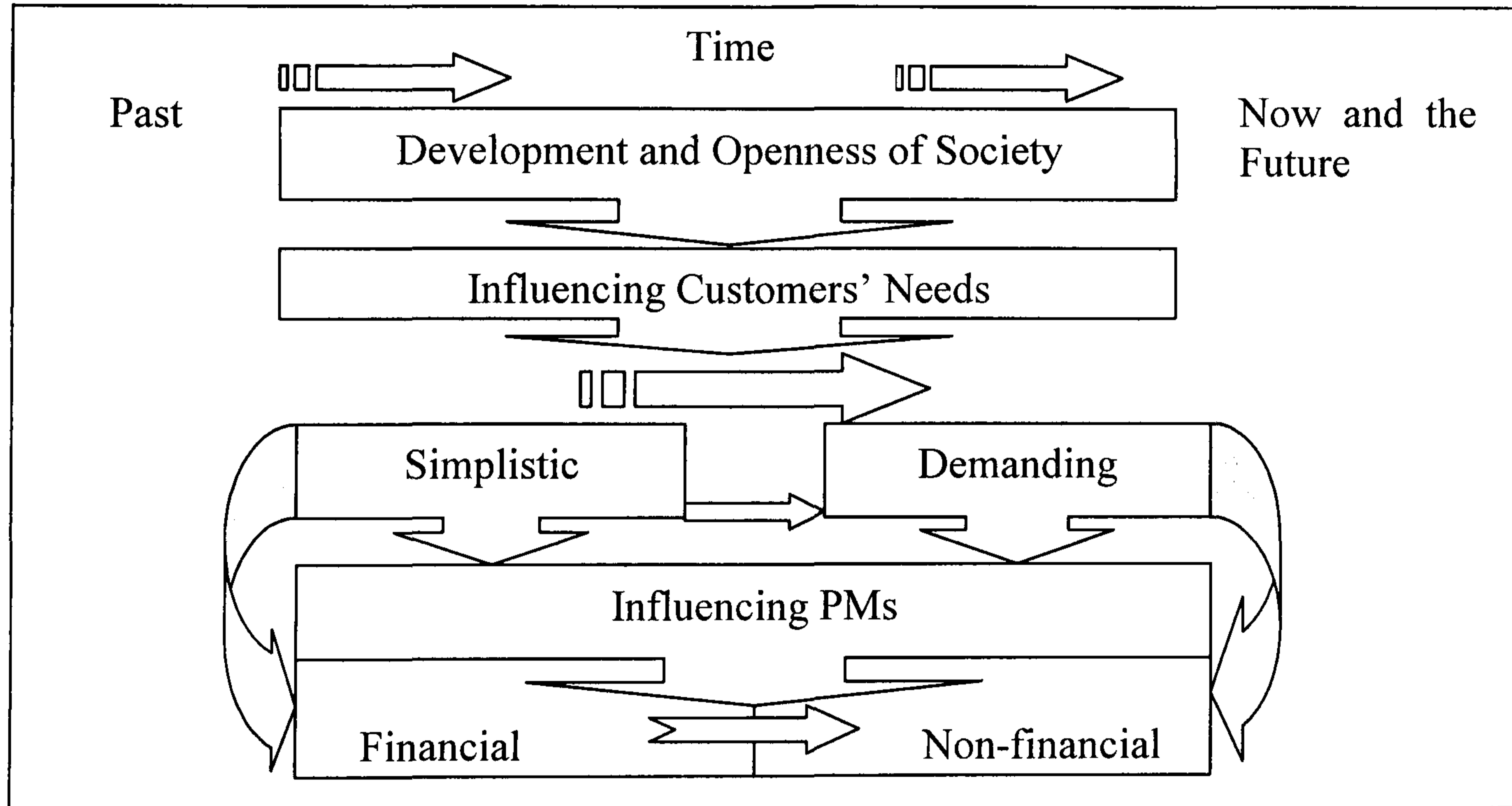
“If management does not give attention to its customers it will definitely lose its market share. So demanding customers are one of the key factors that forced management to implement and use NFPMs.”

The VCDG pointed out that Bank C tries to satisfy its customers' needs and to be near them. It adopts customer-oriented strategies and it works under a badge the "Friend Bank" which in turn will allow Bank C to have a bigger market share of the Libyan banking market. He concluded that continuous evaluation of customers' needs is necessary and he stressed this was one of the most important motives for adopting non-financial measurements. The VCDG said that:

"The Bank's customers became demanding which is one of the most important factors encouraging the management of the Bank to concentrate on activities such as service quality and customer satisfaction and to use NFPMs."

Figure 7-4 outlines the relationship between more demanding customers and the use of NFPMs.

Figure 7-4: Customers' Needs and the Use of NFPMs.



7.4 INTERNAL ENVIRONMENTAL FACTORS THAT INFLUENCE THE USE OF NFPMs

The researcher explored Bank C's internal environmental factors that affected management use of NFPMs. Internal environmental factors are the contextual

conditions that surround the phenomenon and have impacted on it in an organisational context. These internal environmental factors influence either positively or negatively the management use of NFPMs. Table 7-4 outlines the labels that are the main internal environmental factors influencing the use of NFPMs. These labels are related to the interviewees who referred to them. Each label will be discussed in more detail in the subsequent subsections from 7.4.1 to 7.4.5.

Table 7-4: Internal Environmental Labels

Interviewees	OECAM	LM	TMI	SM	CWG
VCDG	√		√		√
MBMD	√				
MBD	√	√	√		
MAD	√	√	√	√	
MEBS	√				
MID	√	√	√	√	√
DMTC	√				√
MPD	√	√	√	√	√
MAC		√	√		
EBD	√	√	√		
EAD	√	√		√	√
DMTM	√			√	√
AMAA			√		
MAFB	√	√	√		√
DMAB	√	√	√		
MBMB	√		√		√
DMGB	√	√	√		√

OECAM: Operational Experience and Competence and Authority of Management.
 LM: Level of Management.
 TMI: Top Management's Interference.
 SM: Stability of Management.
 CWG: Collective Working Group.

7.4.1 Operational Experience and Competence and Authority of Management

The VCDG mentioned that Bank C's managers have both operational experience and competence which developed from their work in different divisions in the Bank over the long-term. Moreover, he thought that managers' openness to the latest international advancements, their attendance at international conferences, their

training in and observing of the work of some correspondent banks and their studying and training with specialised institutions inside and outside Libya were behind their operational experience and competence which in turn helped them to understand all the ATs. The VCDG confirmed that the managers' operational experience and competence were behind their focus on and use of NFPMs. The MPD stated that the majority of Bank C's managers have long-term operational experience which has a positive effect on the implementation of NFPMs.

The MBMD pointed out that the Chairman/General Manager is a manager with high educational level in management and accounting and long-term operational experience and competence in banking work. These characteristics have driven him and his management to concentrate on advanced management and accounting techniques such as NFPMs. The MBMD, MEBS and MBD reported that Bank C's Chairman/General Manager is a banker well-known in the LBS for his operational experience and competence which developed through his work at different administrative levels with banks inside and outside Libya. They confirmed that his high educational level, his openness to international developments and advanced practices in management and accounting and his attendance at international conferences were the main factors behind the management concern for implementing the advanced management, accounting and technological techniques such as internet banking, mobile banks and NFPMs.

The MAD, DMTC and DMGB mentioned that the operational experience and competence of the Chairman/General Manager and the rest of the managers at different levels were the main factors behind the use of NFPMs. The MAD clarified that if just lower level managers have operational experience and competence and the top managers not, in this situation, an organisation could not use such measurements (NFPMs) because they do not have enough authority to decide to use these

measurements in a systematic way. The MID, MAFB, EAD and DMAB asserted that the high degree of operational experience and competence of the Bank's management helped it to realise that NFPMs are better measurements to evaluate performance. Despite its limited authority and the Central Bank which forced it to use FPMs in evaluating performance, it was using some NFPMs in an unsystematic way. On the other hand, the operational experience and competence of the management were influencing factors behind the use of NFPMs such as ghost shoppers to evaluate customer satisfaction and service quality and branches' performance. The EAD stated that:

“The more the management has operational experience and competence and authority the more it will implement NFPMs. Conversely, the lack of operational experience and authority drive management to depend on FPMs.”

The DMTM and EBD mentioned that operational experience and competence of management helped it in adopting recent advances, in spite of its limited authority. The VCDG reported that if the management of the Bank wants to execute any projects it has to get permission from the Central Bank and, in most cases, the Central Bank refused permission. However, the new policies of the Central Bank gave the management more authority to manage and develop the Bank. Therefore, it has adopted many advanced techniques which will help to improve the service quality and customer satisfaction. Moreover, before 2003, the Bank had no special strategy because it had to follow the Senior Planning Council of the State. In 2003 the State's new laws (through the Central Bank) gave the Bank's management more authority to prepare the main strategies and plans which are important to execute the Bank's work. Therefore, it adopted service-oriented strategies and then a number of projects to improve the service quality. The MEBS said that:

“I think, in recent years, the authority that management has got combined with its operational experience and competence has played a big role in the implementation of advanced management, accounting and technological techniques such as connection of the Bank’s branches, internet banking and the use of NFPMs.”

There was a general agreement among interviewees that the management’s operational experience and competence and authority are the major factors behind implementing and using NFPMs.

7.4.2 Level of Management

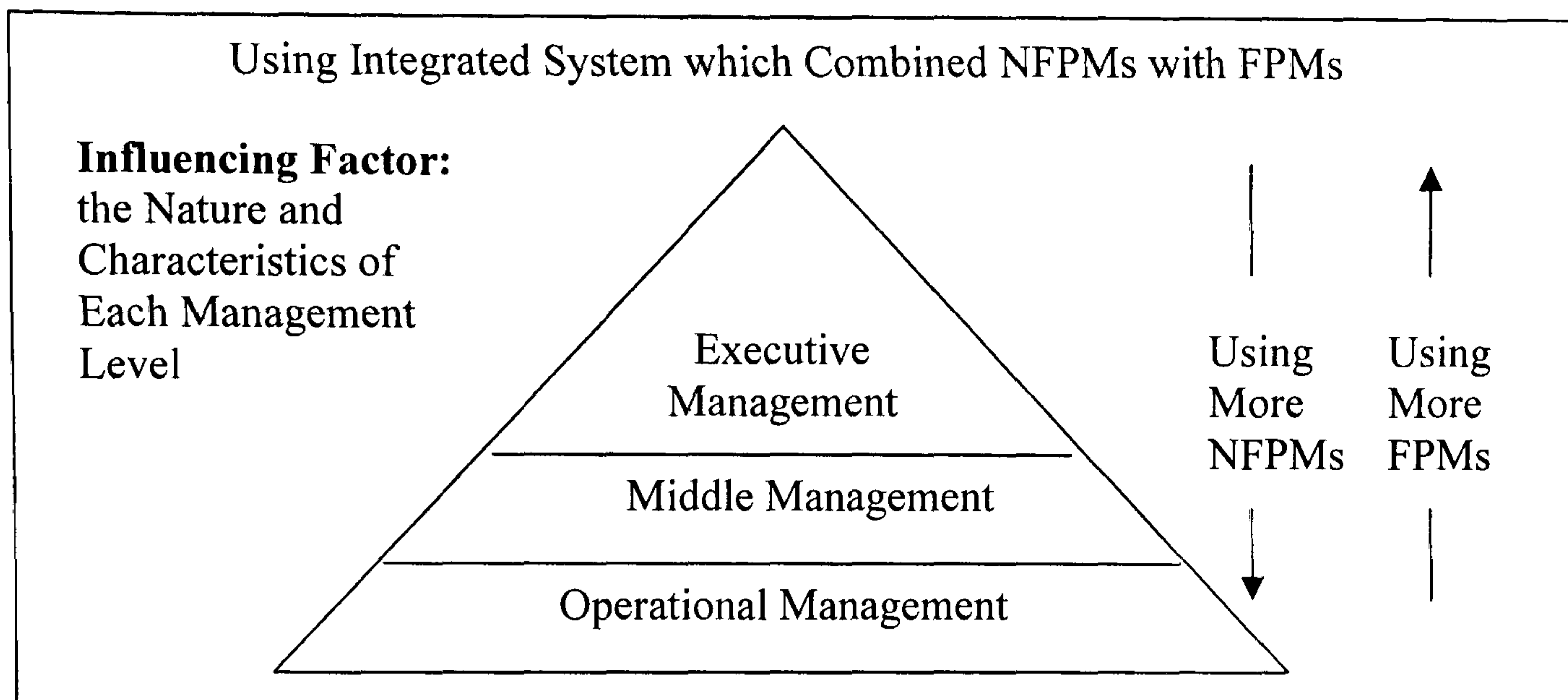
The MBD, MAFB and DMAB reported that NFPMs are used through all the Bank’s management levels, however, they are used in different percentages but not with a systematic PMS. The operational management uses more NFPMs but the executive management uses more FPMs or a balance between NFPMs and FPMs. The EAD, EBD, MAD, MPD and MAC mentioned that NFPMs are used more by management that has a direct relationship with the production and customers which is operational and middle management because the nature of NFPMs is connected with operational tasks related to production, customers and employees. They reported that, in general, there is a relationship between the kind of PMs and the management level. The top management usually use a mix of FPMs and NFPMs. The MID and DMGB said respectively that:

“The use of NFPMs is connected with the Bank’s hierarchy. As one goes up the hierarchical levels, one could find that the top of the hierarchy use more FPMs. On the contrary, if one comes down will find that the bottom of the hierarchy use more NFPMs.”

“All managers use NFPMs but the use of NFPMs is increased whenever one moves to the bottom of an organisation’s hierarchy”.

Figure 7-5 illustrates the relationship between management levels and the kind of PMs and the influencing factors.

Figure 7-5: Management Levels and Use of NFPMs



7.4.3 Top Management's Interference

The VCDG stated that the Chairman/General Manager has a high level of operational experience combined with a management and accounting background which helped him to manage the Bank successfully. The Chairman/General Manager's knowledge of the causal relationship between NFPMs and long-term FPMs drove his interest in improving and developing the Bank's service quality and on-time delivery which in turn would satisfy customers, enhance the community acceptance and increase the Bank's market share and profitability. The VCDG concluded that:

“The Chairman/General Manager's characteristics have driven him and his management to interfere in a lot of the daily operational processes. This interference has positively affected the use of NFPMs.”

The MBD reported that the Chairman/General Manager's interference is a major factor for the Bank's success. The MAD, MBD, DMGB, DMAB, MPD, EBD and MAFB reported that the interference of the Chairman/General Manager in the Bank's units' processes is an influencing factor encouraging the Bank's managers to use NFPMs. The MBMB, reported that

“The service oriented mentality of the Chairman/General Manager helped him to encourage the Bank’s staff to focus on the Bank’s critical success factors and use NFPMs.”

The MID, AMAA and MAC mentioned that the Chairman/General Manager is managing the Bank with noticeable interference in the daily management of the Bank’s operation. They reported that the Chairman/General Manager is a driving force behind the Bank concentrating on NFPMs.

7.4.4 Stability of Management

The MAD, EAD and MID reported that there is a relationship between the stability of management and the kind of PMs to be used. On the one hand, stable management is likely to use NFPMs if it has a good level of operational experience and competence and authority and a good understanding of the causal relationship of NFPMs. On the other hand, unstable management that just manages the organisation for the short-term – even it has a good level of operational experience and competence - it would focus more on FPMs and pay less attention to service quality and other non-financial factors because these factors need more capital expenditure and their resulting positive effect on profitability takes a long time to appear. The MID added that instability of management is one of the factors that negatively affects the use of NFPMs and the reverse is also true. The DMTM mentioned that stable management combined with other factors such as high experience is an influencing factor for management to concentrate on achieving long-term profitability via non-financial activities. He added that managers’ fear of losing their position encourages them to try to reduce expenses and increase the profit to give a good impression of their capability to the Board and then to shareholders. This belief would drive them to focus mainly on FPMs which in turn could affect the service quality and customer satisfaction in the long-term.

The MPD explained that a major characteristic of the Bank's recruitment policy is appointments for the long-term and for the Board of Directors it is three years and Directors can be reappointed. He confirmed that the Bank's top, middle and lower managers have been relatively stable. The MPD added that this policy would encourage managers to focus mainly on NFPMs if they have a favourable level of operational experience and competence and authority. However, the control by the Central Bank obliged the management of Bank C to use FPMs. Conversely, the Chairman/General Manager has a high level of experience and competence and he knows the NFPMs' causal relationships which encouraged him and his management to implement and use NFPMs. Consequently, in recent years the Bank has achieved a good level of profitability by using such measurements. The MPD stated that:

“If the recruitment of managers is for the long term, according to their operational experience and competence and if they have enough authority then they would automatically focus more on non-financial factors and use NFPMs along with FPMs which demand more operational expenditure in the short-term but they will reflect high profitability on the long-term.”

7.4.5 Collective Working Group

The MPD, EAD and DMTC mentioned that the management of the Bank is really looking forward to being the “Friend Bank” for everyone in the Libyan banking market. Therefore, management's belief is for the staff to work as a collective group in each unit of the Bank and in the Bank as one unit to achieve the Bank's objectives.

The MBMB stated that:

“The Bank's management has encouraged staff to work effectively in a family group because it thinks that a collective group is an influencing factor for enhancing the Bank's service quality, strengthening the Bank's relationship with its customers and achieving competitive advantage.”

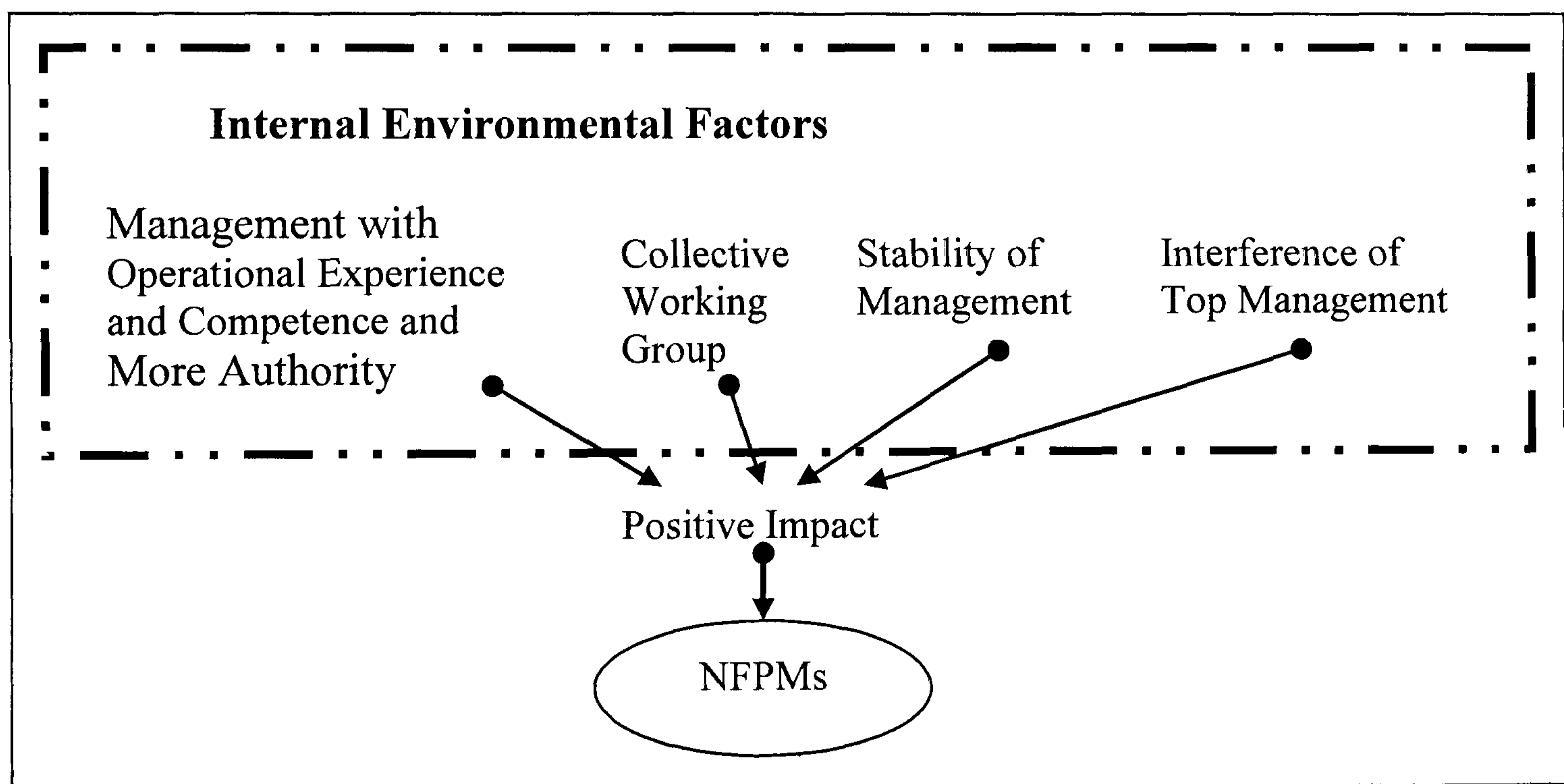
The DMTM, DMGB, MID and MAFB explained that a collective group is a tool for encouraging staff to work effectively helping each another. It has created

collaboration between employees and enhanced the employees' understanding of how to develop the Bank's success factors. Therefore, the collective working group is an important factor behind the enhancement of the Bank's environment to encourage the use of NFPMs. The CVDG said that:

“Bank C's management always try to embolden its staff to perform collectively as one team to build a suitable organisational context for NFPMs to be used effectively.”

Figure 7-6 summarises the impact of the internal environmental factors on NFPMs.

Figure 7-6: Internal Environmental Factors' Impact on the Use of NFPMs



7.5 EXTERNAL ENVIRONMENTAL FACTORS INFLUENCING THE USE OF NFPMs

An organisation's relationship with its environment affects its selection of a specific set of measurements to evaluate its performance. In this section, the researcher identifies the external environmental factors that have influenced Bank C's implementation of the phenomenon under investigation which is the use of NFPMs. Some of the Bank's external environmental factors have a positive and the others

have a negative impact on the phenomenon. Table 7-5 summarises Bank C's external environmental labels that were stated by the interviewees. A detailed discussion of each factor follows in the next subsections from 7.5.1 to 7.5.5.

Table 7-5: External Environmental Labels

Interviewees	CBLR	IS	WI	TES	UEE
VCDG	√	√	√		
MBMD	√				√
MBD	√	√	√	√	√
MAD	√	√	√		
MEBS		√			
MID	√		√	√	√
DMTC	√				
MPD	√	√		√	
MAC	√		√		
EBD	√	√	√		√
EAD	√	√	√		
DMTM		√			
AMAA			√	√	
MAFB	√		√		√
DMAB	√		√		√
MBMB	√	√	√	√	√
DMGB	√	√	√		

CBLR: Central Bank of Libya's Regulations.
 IS: Information Shortage.
 WI: Weakness of Infrastructure.
 TES: Traditional Educational System.
 UEE: Uncertainty of Economic Environment.

7.5.1 Central Bank of Libya's Regulations

The EAD and DMTC pointed out that the public ownership phenomenon and some of the State's laws and the Central Bank's regulations such as the decree number (15)1982 restricted the development of the Bank and in turn impaired and impeded the use of NFPMs such as service quality and customer satisfaction. The EAD stated that:

“The public ownership and some of the State's legislation and the Central Bank's regulations had a negative impact on using NFPMs. On the contrary, they encouraged the management to use and depend on financial measurements.”

The MBMB, MAFB, DMAB, DMGB and MBMD mentioned that the old management of the Central Bank had directed the public banks by applying the State's legislation and strategies and with a financially oriented mentality. They clarified that the State's legislation and strategies and the Central Bank's regulations were ambiguous and contradictory. They also confirmed that these conditions encouraged management to concentrate on short-term profitability rather than long-term critical success factors such as service quality, on-time delivery and customer satisfaction.

The VCDG, MAC, EBD and MAD reported that the Central Bank's over-control and interference in the management of the Bank hindered management's ability to enhance service quality and delivery and to satisfy its customers (such as its interference in specifying service price). They confirmed that the over-control and interference have negatively influenced the development of the Bank's critical success factors and in turn the use of NFPMs. The VCDG pointed out that the management of the Bank has to get approval from the Central Bank to introduce any technique that aims to develop the Bank. The VCDG said that:

“Bank C's management has made an agreement with an international company to install ATMs. However, the management of the CBL used its power and refused the execution of the whole agreement and it allowed the management to make only a part of the agreement.”

The MPD, MBMD and MID clarified that the new management, regulations and policies of the Central Bank have encouraged the Bank's management to adopt the advanced management, accounting and technological techniques and practices which in turn will reflect in long-term success while the former management of the Central Bank had directed the Bank's management to concentrate on achieving high profitability. The MBMD stated that:

“The new management of the Central Bank with its service-oriented mentality is an influencing factor in developing the banking environment. Its strategies have encouraged the Bank’s management to give further attention to NFPMs.”

The MBD reported that the law (1)2005 [which exempts the Bank’s employees from decree (15)1982], the decree (1)1993 [which aims to decrease the State’s ownership of the Banking Sector], the affiliation to the WTO and Basle II made the environment competitive and it will be more competitive in the near future. These conditions required the management to improve its long-term critical success factors and to use NFPMs. The MBD confirmed that the new legislation and strategies of the State and the Central Bank’s new regulations were the most important factors in adopting NFPMs.

7.5.2 Information Shortage

The EBD, DMGB, DMTM, MBMB, MPD and EAD reported that the Libyan market is suffering from shortage of information. They added that Libya opened a new stock market two years ago and this market is still underdeveloped. They confirmed that lack of information handicapped many organisations from adopting AMPs such NFPMs. Therefore, the lack of reliable information was a major factor that impedes organisations’ adoption and use of NFPMs. The MAD thought that limited information has a negative impact on the use of NFPMs. The MAD stated that:

“The lack of information is the major obstacle preventing organisations from using some of the AMPs such as NFPMs.”

The VCDG stated that in a competitive environment, information about customers, markets and new projects is very important for organisations’ management to perform effectively. He added that the lack of information has

prevented the Bank from satisfying its customers and negatively affected the use of NFPMs.

The MEBS mentioned that Bank C's management tried to build up its own information system. It established a new division which aims to provide the required information. The MBD mentioned that Bank C's branches department held all internal information and collected the data related to NFPMs from the Bank's branches and agencies and prepared reports for the Bank management and the Research and Statistics Unit in the CBL. The MEBS mentioned that the management of Bank C is working to link the Bank's branches which aims to provide quickly the required financial and non-financial information and in turn this link will enhance the management's ability to evaluate the units' performance. The VCDG said that:

“All the Libyan organisations have faced an information shortage problem which impacted negatively on their work and, as a consequence, the Central Bank has signed a contract with the International Bank about linking all the Libyan banks with the Central Bank and the stock market. I think this system will provide essential information and enhance the use of NFPMs.”

7.5.3 Weakness of Infrastructure

The DMGB, AMAA, EAD, MAC, EBD, MID and MAD confirmed that the weakness of infrastructure such as telecommunications system in the Libyan environment is one of the major factors that negatively affected the adoption and implementation of advanced management and technological techniques and practices. The DMAB and MBD reported that, in most cases, the weakness of electricity and telecommunication systems impeded the Bank from achieving on-time delivery and customer satisfaction. The majority of interviewees mentioned that there were weak points in the infrastructure (electricity and telecommunications systems) in the Libyan environment. Moreover, they thought that this weakness is one of the

influencing factors that hindered the implementation of NFPMs. The VCDG stated that:

“In order to bring the AT used in international banks, the Bank’s management perceived that there was a weakness in infrastructure such as telecommunications system. Consequently, the Bank management had made huge capital expenditure to overcome this obstacle and adopted some of the AT which aims to improve service quality, on-time delivery and to obtain customer satisfaction and community acceptance.”

The MAFB and MBMB asserted the same point and said respectively that:

“Since 1993, the management realised that the implementation of AT such as ATMs needs a suitable technological environment and it tried to do so.”

“The Bank’s management decided to obtain the latest technologies used in international banks to improve the service quality and satisfy its customers. Therefore, it had invested in the best available infrastructure. For example, it achieved connection to the International SWIFT System in order to benefit from international development in modern telecommunications.”

7.5.4 Traditional Educational System

The MBD and MID mentioned that Libyan educational systems – specially, financial and managerial educational system - have not developed according to the advances made in the western countries. Consequently, it impeded the organisation’s aspiration to develop its systems and techniques because of its effects on the organisation’s stakeholders (shareholders, employees and customers). They asserted that this traditional educational system was one of the main reasons for the shareholders’ financial mentality (management of the Central Bank) which in turn impeded the Bank’s management during the process of developing the Bank and adopting AT such as the implementation of NFPMs. The MPD stated that:

“The educational system – financial and managerial educational systems - has generated graduates with limited knowledge of advanced management and accounting techniques such as NFPMs. The level of employees’ knowledge often negatively impacts on the

Bank's relationship with its customers. Therefore, Bank C's management recruitment policy is built on training the new employees for one year day-by-day in the Bank's units under the supervision of expert staff in order to develop their understanding of the work environment and to enhance their abilities to deal with the customers."

The MBMB clarified that the organisation's development depends on the level of education in the country and the degree of the openness of society. The MBMB reported that, on one hand, the traditional educational system has created undemanding customers who negatively impacted on the use of NFPMs. On the other hand, the openness that has occurred in the Libyan environment has created demanding customers. Those customers are requesting services that the Bank cannot supply because of the Central Bank's rules, policies and instructions which in turn negatively influenced the adoption of NFPMs. For example, customers ask for big credit facilities at a lower level of interest (the Central Bank sets the rate of loan interest). Therefore, the Central Bank's lending policies have led to a negative impact on the Bank's abilities to satisfy customers' financial needs. The AMAA and MBMB argued that the educational system is very traditional and it has a negative influence on adopting and using NFPMs.

7.5.5 Uncertainty of Economic Environment

The MBMD stated that the uncertain economic environment was caused by the openness of society, globalisation, competition, the US sanctions and the State and the Central Bank's new laws. This situation revealed that FPMs are insufficient, inaccurate and do not reflect the real performance of the Bank.

The MBMB mentioned that the managers of organisations know that the Libyan economic environment is no longer stable because of the new trends in the environment such as the State's new economic laws and policies. This instability has driven them to concentrate on non-financial information (such as how to keep the

customer, how to get society acceptance, what do customers' need and how to improve the organisation's long-term profitability) and to find reliable measurements (NFPMs). The MID reported that when the economic environment was certain and stable, the managers depended on FPMs to assess and evaluate their organisation's performance. On the other hand, the recent economic uncertainty had affected their organisation's profitability which drove managers to think about something to be used with quantitative information to build their organisation's long-term survival. He asserted that the uncertain environment was a cause for strengthening the need to concentrate on NFPMs. The MID stated that:

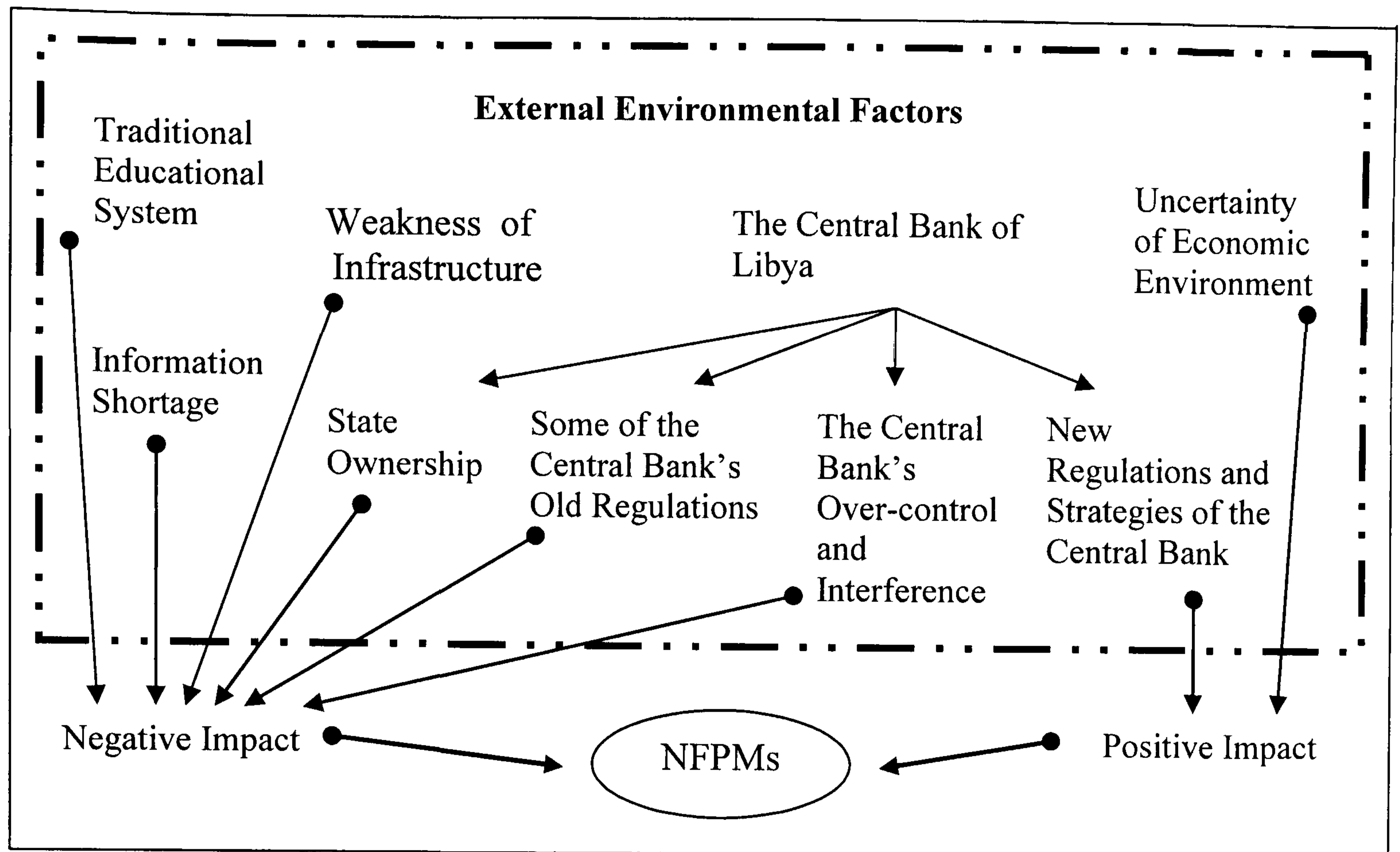
“Therefore, the uncertain environment is one of the most important factors reviving the managers' thought about implementing NFPMs to help them to deal with such a situation.”

The MAFB mentioned the same point and stated that:

“Uncertainty of economic environment drove management to use both financial and non-financial measurements and to depend primarily on non-financial information in the decision making process.”

The MBD, DMAB and EBD mentioned that the uncertain economic environment is an influencing factor that encouraged the management of the Bank to concentrate on NFPMs. Figure 7-7 summarises the influence of the external environmental factors on Bank C's use of NFPMs.

Figure 7-7: External Environmental Factors' Influence on the use of NFPMs



7.6 STRATEGIES THAT MANAGEMENT ADOPTED IN CONJUNCTION WITH NFPMs

Bank C's management has set a group of strategies for developing and implementing and using the NFPMs. In this section, the researcher explains these strategies. Table 7-6 summarises the labels that refer to the main strategies related to the implementation of NFPMs. These strategies are listed against the interviewees who referred to them. A detailed discussion of each label follows in the next subsections from 7.6.1 to 7.6.6.

Table 7-6: Actions/Interaction Strategies Labels

Interviewees	DHR	DRS	DBS	DMAI	DOS	AAMP
VCDG	√	√	√		√	√
MBMD		√	√	√	√	√
MBD	√	√	√	√	√	√
MAD						
MEBS	√		√		√	√
MID	√	√			√	√
DMTC	√					

MPD	√	√			√	√
MAC	√		√			
EBD	√			√		√
EAD		√	√	√	√	√
DMTM	√		√	√	√	√
AMAA	√		√	√		
MAFB	√		√			√
DMAB	√		√			√
MBMB	√		√			
DMGB	√		√			

DHR: Development of Human Resources.

DRS: Development of Reward System.

DBS: Development of Banking System (Bank's Operating, Reporting and Information System).

DMAI: Development of Management Accounting Information.

DOS: Development of Organisational Structure.

AAMP: Adoption of Advanced Management Practices.

7.6.1 Development of Human Resources

The DMTC, MAFB, DMTM, MBD, MEBS, EBD and MAC stated that development of human resources is one of the most important factors for any organisation to obtain long-term success. Therefore, the Bank's management has made extensive efforts to develop its staff to be consistent with the advances in the banking industry especially after the appearance of competition. The MPD and MID clarified that the management has adopted internal and external training programmes. First, the external training programmes are offered by the Union of Arab Banks in Jordan, Jordan Academy, Union of Al Magreib Banks and the Bank's correspondent banks. Second, the internal training programmes are conducted by the Training Centre of the CBL and Association of Libyan Banks. Moreover, the Bank's management opened its own training centre. The training centre's management organised extensive advanced training programmes in different areas. Additionally, on the job training is carried out during working hours under the supervision of proficient staff.

The VCDG mentioned that the management of the Bank knows that the professional capabilities and effectiveness of employees are behind a high level of

service quality and customer satisfaction. Therefore, it adopted some important steps in enhancing employees' competence which in turn will reflect first in NFPMs' results and then in FPMs. It established its own training centre and training programmes which converted training programmes from the traditional financially oriented – that were provided by the Training Centre of the CBL - to service oriented training programmes. The MAFB stated that:

“The management of the training centre has asked the branches' managers about the weakness of employees and then it provides suitable programmes for them to improve and enhance their skills and abilities.”

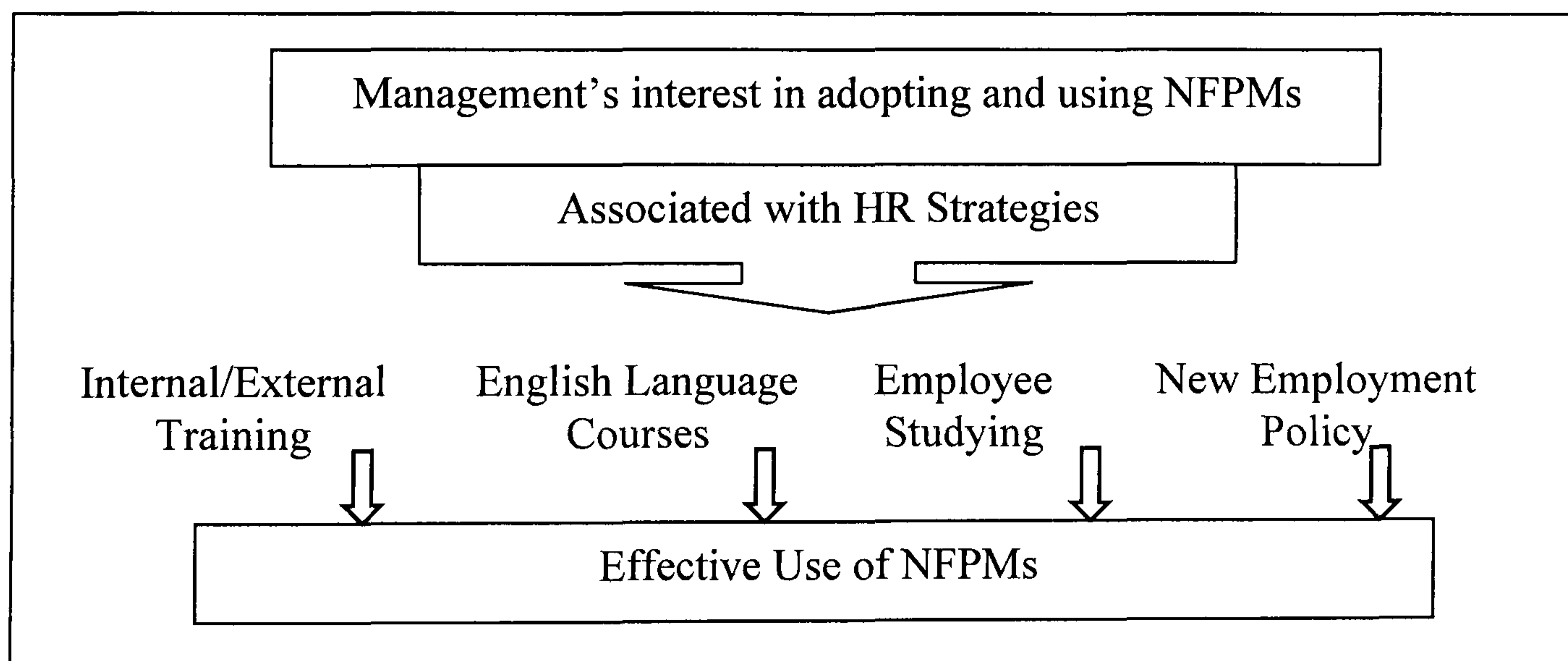
The MBMB, AMAA, DMAB and DMGB revealed that the implementation of NFPMs such as service quality and customer satisfaction required regular advanced training programmes to enhance employees' understanding of the nature of the banking industry (such as service) and to encourage them to follow any new developments in this industry. The DMTC said that:

“Therefore, the training centre provides intensive courses in developing and improving employees' skills and abilities which will help them to deal with and to be sensitive to customers which in turn will enhance the use of NFPMs.”

The VCDG emphasised that service quality, on-time delivery and customer satisfaction are delivered by employees. Moreover, management appreciates that qualified and competent employees are the major factor to enhance these activities and to guarantee long-term success. Therefore, it adopted human resources strategies that would be an important step in enhancing NFPM results concerning service quality and customer satisfaction. Every year it chooses ten employees to finish their higher education inside and outside Libya. It is also aware of the importance of employees knowing the English Language well and therefore it adopted courses for them to facilitate communication with customers and to help them easily understand

the developments in the banking industry. The MPD added that the Bank's management adopted new service-oriented recruitment policies. It set new criteria to be used in the recruitment of employees. In the past the concentration was on the negative aspects of employees which led to failures in their work and then these employees were dropped. The new trend is to concentrate on the positive aspects of employees and to recognise the employees' abilities to work in the Bank - on the basis of their qualifications, abilities and capabilities. It also adopted a strategy of one year training for prospective employees (candidates) at one of the Bank's branches to familiarise them with the nature of the banking service, the proper methods of providing services to customers, how to deal with customers and to encourage employees to work as a collective team with the Bank's employees as one family. Figure 7-8 illustrates the HR strategies that management adopted to stimulate the use of NFPMs.

Figure 7-8: HR Strategies and the Use of NFPMs



7.6.2 Development of Reward System

The EAD stated that the evaluation of performance of the Bank's units and of the Bank as one unit is heavily based on FPMs with some NFPMs required by the CBL. The evaluation of employees' performance is based on their NFP according to the employee's annual report. The employee's annual report consists of several

measurements that related to the employee's NFP such as employee's degree of responsiveness to customer, level of innovation and creation and others. The MPD added that according to the result of this report the employee used to get bonuses until 1982 when the law of labour number (15)1982 was implemented which prohibited the employee from obtaining the bonuses and other rewards. However, this report is still used to evaluate an employee's performance for promotion to another functional grade and getting other annual premiums.

The VCDG confirmed that the NFPMs such as quality of service, on-line delivery, employee satisfaction and customer satisfaction were used in the context of the Bank until the law (15) was established. However, the establishment of this law led to a decrease in using these measurements because it stopped the main motivation of using them which was the bonuses. Nevertheless, the management tried to overcome this obstacle by paying for overtime and giving small rewards to stimulate employees to work effectively and achieve the Bank's objectives. The VCDG stated that:

“The reward system of the banking employees should not follow the law (15)1982. It has to be defined by the Bank's Board of Directors and authorised from their Shareholders' Meetings and it has to be associated with productivity.”

The MBMD and MID mentioned that the new management of the Central Bank realised that the law (1)1982 is no longer appropriate and, therefore, it established a new law number (1)2005 which has given the management of the commercial banks more authority to manage their banks. The MBMD said that from the law (1)2005:

“The determination of employees' financial treatment in each commercial bank is executed by decision from the bank's Board of Directors. That means the banking employees were exempted from the labour law (15)1982.”

The MPD and MBD clarified that this law – (1) 2005 - had allowed the Bank's management to establish new basic regulations and prepared a new reward system. They pointed out that the management has increased its efforts in encouraging the use of NFPMs. Therefore, in this system, management associated the employees' and units' performance with the reward system which would encourage employees to achieve the Bank's new strategies and objectives. The MPD confirmed that this system will be implemented from this year.

The VCDG reported that the Chairman/General Manager has paid a great deal of attention to developing the reward system. The Chairman/General Manager and his management constituted a committee for preparing a proposed system. In this system the salary will be increased gradually and employees will get bonuses and other rewards which depend on the result of their annual reports and their units' performance. Additionally, the Bank's management uses another kind of reward which is every year the management defines the best ten branches and agencies according to the units' performance and then it rewards the employees of these units by giving them a percentage of the profit they have achieved or they receive valuable presents.

7.6.3 Development of Banking System (Bank's Operating, Information and Reporting System)

The MBMD stated that the new management of the CBL has encouraged the management of public commercial banks to take account of the customer as an important factor for success and to focus on activities such as service quality and other critical factors to survive in the new competitive environment. The MEBS added that, nowadays, Libya is passing through a period of preparation for a new stage in its national economy. The MEBS asserted that the management of the Bank

adopted several years ago a strategy of developing the Bank's banking system in order to enhance service quality and delivery. It installed an advanced modern system which produces all services and processes all data and then provides the units' management with daily financial and non-financial information to help them to make effective decisions.

The MBD mentioned that the Bank's operational managers used to report regularly to the executive management on financial and non-financial information and measurements which they used in their daily work and decision making. The MAC, AMAA, DMAB and DMGB pointed out that the advances in the banking industry, competition and economic openness forced the Bank's management to improve service quality and delivery to obtain customer satisfaction and community acceptance. Therefore, these conditions had driven the Bank's management to adopt AT. One of them is an advanced modern banking system which aims to provide management with updated and systematic information to assist it in making correct managerial decisions. Moreover, it would help employees in achieving their work quickly and effectively.

The VCDG mentioned that the concentration on using NFPMs has driven the Bank's management to develop and improve its systems. The advanced modern banking system was installed in all the Bank's units. Nowadays, the management is working to connect all the Bank's branches, agencies and headquarters together to produce on-line information about units' performance which would assist the Bank's management to evaluate the Bank's units' performance. On the other hand, it would help customers to achieve their transactions wherever they were. Additionally, this connection of the Bank's units is an introductory stage of Libya's "National Payment System". The VCDG stated that, nowadays, the CBL is carrying out a strategic project with the public and private commercial banks which is a "National Payment

System". In this system all Libyan commercial banks will associate together and all internal and external transactions will go through this system by using ATs.

The DMTM, MAFB and MBMB mentioned that the management installed an advanced modern banking system for several reasons: for providing new services that the banking market has not provided; for improving the way that these services were provided; for building a database for all types of services, customers and employees; for providing regular reports about banking services, customers and employees in the Bank's units to use in developing services; and for providing information to the top management to assist it in making effective managerial decisions. The EAD concluded that the development of the banking system would improve the Bank's critical success factors such as service quality, on-time delivery and customer satisfaction which will enhance the level of the Bank's market share.

7.6.4 Development of Management Accounting Information

The EBD and EAD mentioned that the Bank does not have specific departments in its organisational structure for MA and cost accounting. However, the Bank's branches department, marketing department, inspection department and accounts department perform the management and cost accounting tasks. The EAD added that the management accounting methods used in the Bank are fairly conservative and include budget, financial comparisons, ratio analysis, financial performance and some non-financial indicators for the Bank's units (branches and agencies) and for the Bank as one unit.

The MBMD stated that the CBL used to set the prices for banking services of the commercial banks. However, from 2004 it transferred this responsibility to the commercial banks' management. Consequently, the Bank's management constituted a committee to calculate the cost and set the prices of services. He thought this step

encouraged accountants to focus on analysing the cost of each activity to combine low cost with a high level of quality to realise customer satisfaction. They have used much non-financial information to achieve this purpose.

The MBD, MAD and MBMB mentioned that the adoption of advanced management techniques (such as NFPMs and benchmarking) is associated with the development of the reported accounting information which in turn has assisted the management in making effective managerial decisions. The MBD mentioned that benchmarking as a new technique is used by the branches department to evaluate the Bank's performance level compared with the performance of each bank in the LCBS. Then the result of this comparison is reported to the top management to be used in its decision making process. The MBMD stated that:

“The adoption of budget, benchmarking techniques and cost accounting has developed the MAI, moreover, they are preliminary steps to build a strong basis for developing the Bank's performance appraisal system.”

The DMTM and AMAA pointed out that the Bank's units are given monthly, three monthly, six monthly and yearly reports. These reports have financial and non-financial information and measurements. Then these reports are used by the branches department and the accounts department to produce monthly, three monthly, six monthly and yearly reports provided to the top management to give it all the information about the Bank's units' performance and in turn to direct and guide the decision making process.

The EAD pointed out that the Bank's branches department performs MA and financial accounting which encourages this department's employees involved with operational units to design, evaluate and report on NFPMs, although they do not have enough knowledge of the aspects related to the Bank's critical success factors. The MBMD reported that:

“The new strategies concerned with adopting management accounting techniques such as NFPMs and benchmarking have encouraged the Bank’s units to produce and report more accounting information. However, the Bank’s management needs to make the right decision to establish a new department which is management accounting to enhance the implementation of these techniques and to provide integrated reports that consist of the Bank’s FP and progress on the Bank’s critical success factors.”

7.6.5 Development of Organisational Structure

The MPD mentioned that the objective of an organisational structure is to help its employees to achieve their functions effectively. The Bank has details of operational guidelines for each job. It defines the authority and responsibility of each job, division, department and unit and the relationships between them. Generally, it helps the employees to perform their functions accurately, correctly and effectively. The MPD added that however, the new competition, new strategies and the new laws and decisions of the Central Bank have driven the Bank’s management to create new departments. Consequently, management is required to carefully study any developments and evaluate their impacts on the organisational structure.

The MBMD, EAD and MBD mentioned that Bank C has detailed accurate and effective job descriptions. They added that Bank C had established new departments and planned to create others with proposed descriptions and level of authority and responsibility. However, the current organisational structure needs some adjustments to be consistent with the Bank’s new activities and environment. The MID and DMTM mentioned that the creation of new departments has caused confusion in the authority and responsibility between some departments because the proposed description of each new department was prepared without taking the other departments’ description into account and, as a consequence, that could affect the management’s interest in concentrating on and using NFPMs. The MEBS confirmed the same point and stated that:

“The management demanded to adjust its organisational structure in order to be consistent with the new advances that Bank C’s management adopted and to help the management to collectively achieve the Bank’s new objectives for future success.”

The VCDG reported that according to new strategies and the new laws of the CBL, the top management had taken a decision about developing its organisational structure. It established new departments which are electronic banking services department, marketing department and risk management department and it planned to open others such as customer relations division.

The MEBS pointed out that the electronic banking services department was established in order to develop banking services to be at the best level in the market and to provide the customers with easy and unlimited banking services in any place the customer will be and at any time by using the advanced modern banking systems. It consists of proficient employees in different field such as information system, management, accounting and computer technology. It provides support to the Bank’s units and it also provides reports to the management concerning electronic services and banking operating system to assist it in the decision making process.

The MBMD mentioned that the banking services marketing department aims to create a good image for the Bank with the general public relying on advertising about the Bank’s services which will create and support the confidence of customers. It supports management by doing marketing research and studies to define the kind of future customers, the degree of competition and the proportion of actual demand for banking services. It reports to the management about service quality, customer satisfaction and employees’ competence which in turn assists the management in the decision making function. It measures and evaluates these factors using NFPMs such as customers’ suggestions and complaint boxes. These complaints and suggestions are analysed and reported to management to take corrective steps.

The MEBS mentioned that management has planned to open a customer relations division. It aims to serve customers and improve the Bank's relationships with its customers. The MEBS stated that:

“A customer relations division will open to help customers by providing the necessary information and consultation and to improve and enhance the Bank's relationships with its customers through identifying customers' needs and attitudes and studying the customers' reaction to the Bank's services.”

7.6.6 Adoption of Advanced Management Practices

The MBMD clarified that Bank C's AMPs included some techniques that management has adopted and implemented to enhance and strengthen management effectiveness and the Bank's productivity. The MBMD stated that management's strategy to be the leader in the Libyan banking market encouraged it to use a number of AMPs that aimed to develop and improve the Bank's service quality, on-time delivery, customer satisfaction, employee satisfaction and community acceptance.

The MBMD and MBD mentioned that benchmarking is an important technique that the management of the Bank used for evaluating its performance against other banks in the Libyan banking market. It applies this tool to compare the Bank's performance with the others and then the results are used in planning and developing the Bank's strategies. They added that the management discovered that the competitors had achieved great success. Therefore, it tried to imitate their successful techniques. The MEBS asserted that all Bank C's advanced strategies were adopted by benchmarking against the foreign and correspondent banks. The MEBS confirmed that the consequence of benchmarking was to improve the internal processes of the Bank's services and to adopt new services such as billing system and banking system which in turn would develop the Bank's service quality and customer satisfaction and community acceptance. The EAD and VCDG said respectively that:

“All advanced practices that Bank C adopted to improve service quality and on-time delivery were a result of the benchmarking against the foreign banks because the public banks’ practices were pretty rudimentary and recently, they are passing through updating stages.”

“The Bank has built a good relationship with its correspondent banks. These correspondent banks offer chances for training the Bank’s employees. Therefore, Bank C has been sending employees (especially managers, assistant managers and deputy managers) to these training programmes. In addition to that the Bank’s management benefits from these opportunities by benchmarking against their techniques, products, internal processes, systems and management strategies in order to develop the Bank’s services and systems.”

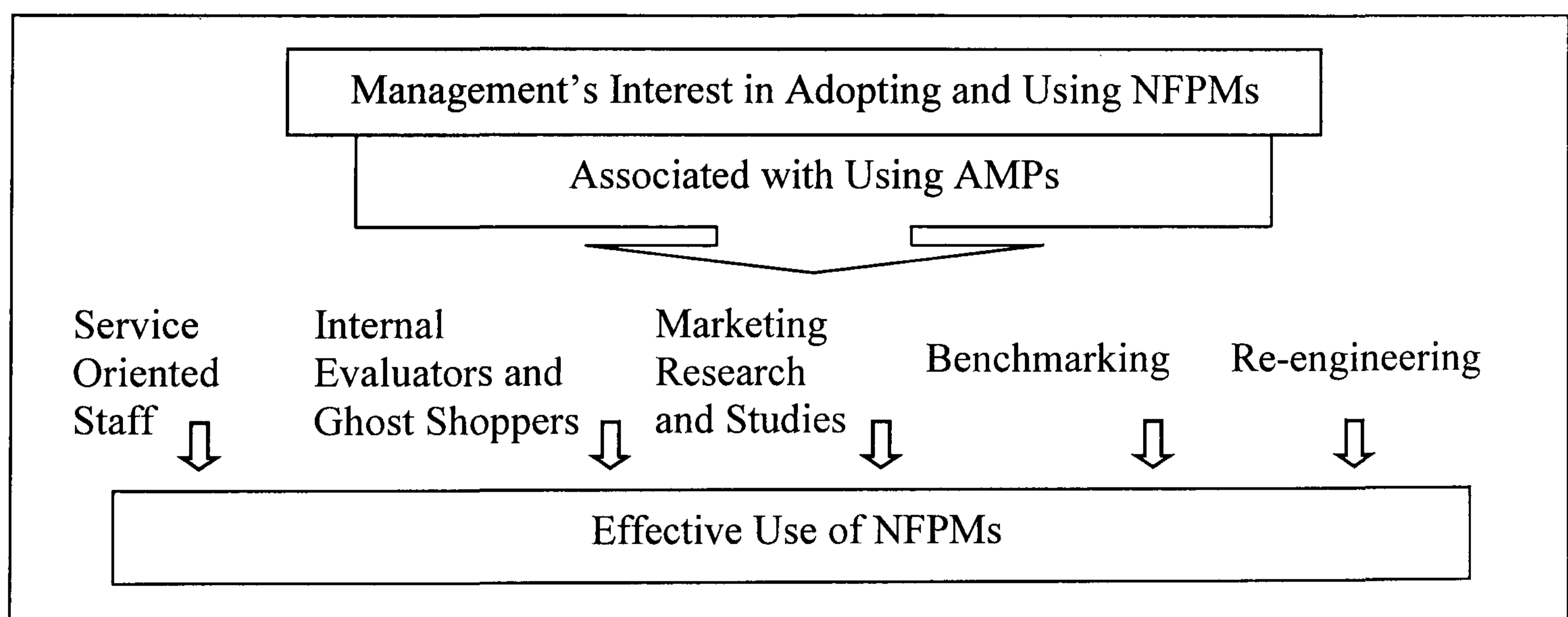
The MPD, MBD, MAFB and DMTM mentioned that management of Bank C has recognised that service oriented staff is one of the important factors to achieve customer satisfaction. Therefore, first, it established a training centre to develop the banking knowledge of employees and to improve and enhance their abilities to achieve their jobs and the Bank’s objectives effectively. Another strategy is one year training for candidates in one of the Bank’s branches under the supervision of proficient staff. This kind of training aims to teach and train employees to be friendly to customers and to improve their responsiveness, transaction speed and the Bank’s banking systems. A third strategy is to replace some branches’ managers with service oriented ones as a result of management’s interest in the implementation of NFPMs such as service quality and customer satisfaction.

The MBMD pointed out that the marketing research and studies division, banking service division and data and information division that related to the marketing department were established to run periodic studies about the Bank’s services and customers compared with the Bank’s competitors. These studies will supply the Bank’s management with essential information, to develop the Bank’s services and create customer loyalty. The MBMD added that this department and its

divisions will use cost accounting and management accounting techniques such as TQM and benchmarking technique.

The MAFB and DMAB mentioned that the Bank's management uses a number of advanced performance evaluation methods such as internal evaluators and ghost shoppers to evaluate branches and agencies to develop the Bank's critical success factors. The ghost shoppers and internal evaluators visit the Bank's branches and agencies and ask employees about some services and observe employees' behaviour and then they provide Bank C's management with information of the evaluation which it uses in the decision making process. The EAD and EBD argued that all these advanced practices were a result of Bank C's strategy of benchmarking against the best foreign banks who had previously implemented such practices. Figure 7-9 shows the AMPs that management adopted to enhance the use of NFPMs.

Figure 7-9: AMPs and the Use of NFPMs



7.7 CONSEQUENCES OF IMPLEMENTATION AND USE OF NFPMs

The adoption of NFPMs and the strategies of Bank C's management have some consequences. Table 7-7 shows the labels which refer to the main consequences that

have resulted from using NFPMs. These consequences are listed against the interviewees who mentioned them. A detailed discussion of each label will follow in the next subsections from 7.7.1 to 7.7.5.

Table 7-7: Labels for Consequences of Implementation and Use of NFPMs

Interviewees	VIS	IAT	PEFPMs	CE	EB
VCDG	√	√	√		
MBMD	√			√	√
MBD	√	√	√		√
MAD	√	√			
MEBS	√	√	√	√	√
MID	√		√		
DMTC			√		
MPD	√		√	√	
MAC		√			
EBD	√	√	√	√	√
EAD	√			√	√
DMTM	√	√		√	
AMAA	√	√	√		
MAFB	√		√		√
DMAB	√		√		√
MBMB	√		√		
DMGB		√	√	√	

VIS: Variety and Improvement of Services.

IAT: Introduction of Advanced Technology.

PEFPMs: Positive Effects on FPMs.

CE: Capital Expenditure.

EB: Effectiveness of Budget

7.7.1 Variety and Improvement of Services

The VCDG, MBMB and MBMD mentioned that the Bank's management now had more authority to manage the Bank from the management of the Central Bank. This authority enabled it to reconsider and improve its strategies. It adopted a customer oriented strategy which drove it to study customers' needs and local market requirements. Moreover, this authority directed the Bank's management to focus on service quality and on-time delivery to deliver customer satisfaction. They asserted that this allowed the management to develop and improve its existing services and introduce new services. The MBMD stated that:

“The new trend of using NFPMs that related to service quality and customer satisfaction and management desire to increase its market share and to be the “Friend Bank” for everyone were behind the improvement and diversity of the Bank’s service range.”

The MEBS pointed out that the Bank has recently specified customers’ needs and requirements which motivated it to introduce new services and increase service quality to have satisfied customers and increase its market share. The MEBS said that:

“The new concentration on and use of service quality and customer satisfaction measurements will improve service quality and create new services. The Bank has recently introduced new services such as billing system and it is working to introduce others such as internet banking and phone banking which will lead to satisfying the Bank’s customers.”

The MBD and MPD pointed out that the Bank’s management diversified its services as a consequence of the adoption of NFPMs. They added that services had developed as a result of the Bank’s new policy founded on “customer is the basis of the banking activity and various banking services.” The MBD said that:

“Developing, improving and diversifying the Bank’s service range was a result of management’s interests in studying service quality and customers’ needs and adopting NFPMs.”

The EBD and EAD mentioned that the nature of FPMs was not concerned with the kind of products and services or customer behaviour. On the other hand, use of NFPMs such as quality of service, delivery and customer satisfaction encourages organisation’s management to focus on the best way to improve and develop its products and services. Therefore, there is a positive relationship between the use of NFPMs and the variety of products and services because of the ability of NFPMs to connect the organisation with its surrounding environment. The DMTM asserted that adoption of NFPMs and planning based on customers’ needs had driven the Bank’s

management to provide an assortment of services which reflected a new direction in the banking market. The MAFB pointed out that Bank C's management introduced new services in response to its adoption of NFPMs. The MAD, AMAA, MID and DMAB added that the Bank services have been developed and diversified as a result of the management's attempts to increase the Bank's market share through enhancing quality of service, delivery, the procedures of providing the service, customer satisfaction and community acceptance. The MBMD and MEBS listed the Bank's services range as follows: traditional banking products such as opening various accounts, debiting, crediting, transferring funds; international currency deposits; banking cards and cash machines; various credit cards and prepaid cards; billing system and businessmen branches.

7.7.2 Introduction of Advanced Technology

The MAD, DMGB, MAC and AMAA asserted that the adoption of NFPMs had driven the Bank to adopt ATs (such as ATMs) which aimed to enhance service quality, delivery and obtain customer satisfaction. The MBD mentioned that management's interest and tracing advances in the world banking industry and its desire to improve the Bank's service quality were behind its adoption of the latest ATs which in turn would improve the Bank's performance. The MEBS reported that the ATs that Bank C has adopted were SWIFT and ATMs and the prepaid Cards (in Dollars) and the work in process such as the connection of the branches, agencies and headquarters, mobile banks - to provide banking services in underdeveloped areas, internet banking and phone banking. The MEBS added that all these ATs to develop service quality and delivery in turn will satisfy Bank C's customers.

The EBD pointed out that the management aim, which is to achieve long-term success, cannot be achieved without measuring, improving and developing the

critical factors related to service quality, delivery and flexibility and simplicity of procedures. As a result the management adopted AT related to software and hardware. The DMTM asserted that all the Bank's branches and agencies use computers with advanced network systems.

The VCDG mentioned that the Bank's management has adopted a long-term strategy of developments as a consequence of its desire to improve the quality of service, on-time delivery and its adoption of NFPMs. The VCDG said that:

“The Bank started repairing and building, and using modern equipment which in turn would enhance the level of service and customer satisfaction and be more convenient for employees.”

7.7.3 Positive Effects on FPMs

The AMAA, DMAB, and DMGB stated that the NFPMs have a direct relationship with FPMs. They confirmed that the improvements in service quality and delivery have a positive impact on customer satisfaction which in turn has led to a gradual increase on the Bank's FPMs such as profitability and customers' deposits. The MBMB reported that the adoption of NFPMs was behind the increase in the Bank's year-to-year profitability and customers' deposits.

The MBD mentioned that the policy of the existing management of the Bank is to achieve the best level of service quality and delivery and to satisfy its customers. This trend drove it to adopt NFPMs because the Bank's management has a strong belief that NFPMs have a direct causal relationship with FPMs. That is, the improvement of these factors has positively impacted on the Bank's reputation and development which then reflected an increase in the Bank's FPMs such as profitability. The MAFB, MPD and DMTC pointed out that the high level of service quality and delivery and proficient and satisfied employees will collectively lead to satisfied customers and then a good level of reputation will give rise to financial

measurements. The MEBS revealed that the improvements in service quality and delivery, the studying of customers' behaviour to satisfy them and the continuous training and developing of employees to obtain their satisfaction and loyalty will deliver improved profitability. For example, the simplicity and flexibility of service procedures and modus operandi led to an increase in revenue in the long-term.

The EBD stated that the improvement in NFPMs indicated to what extent the organisation is successful and led to improved FP. The EBD added that the final financial consequences were a result of the NFP. If the NFP of an organisation was good then it will be positively reflected in its profitability.

The VCDG reported that the reason for focusing on non-financial activities and adopting NFPMs was to enhance the Bank's reputation and to increase the Bank's profitability and customers' deposits. He added that according to his experience, the increase in the Bank's profitability and customers' deposits is directly connected to the level of the development and enhancement of the Bank's critical factors (service quality, delivery and proficient and satisfied employees). For example, a higher service quality with proficient and satisfied employees will increase customer satisfaction and enhance the Bank's reputation in the market, and then this will increase the number of customers and number of transactions which in turn will give rise to better FP. The MBMD stated that:

“The Bank has been made big investments in several projects which aimed to diversify and improve the Bank's services and on-time delivery such as development of Bank's systems, introducing internet banking and phone, ATMs and connection of the Bank's branches and agencies and, as a consequence, the Bank has achieved outstanding financial results. In 2004, the Bank is still continuing its spread of services according to customers' requirements, and it had achieved 30% increase in profitability compared with the profitability of last year and its market share had increased as well.”

The MID and EBD confirmed that the implementation of the NFPMs had a positive impact on the Bank's long-term success factors such as customers' deposits and profitability.

7.7.4 Capital Expenditure

The MBMD mentioned that the management's interest in NFPMs and its pursuits of the advances in the world banking industry encouraged it to adopt advanced management practices and technologies which were considered to be important for achieving future success especially after the changes that had occurred in the Libyan economic environment. This strategy has cost the Bank a relatively large amount of capital expenditure. The MBMD said that:

“The cost of these developments which were adopted in order to improve service quality and delivery and to enhance customer satisfaction was high. However, it will reflect on the Bank's customers' deposits and profitability.”

The MPD revealed that the management adoption of NFPMs led to the Bank investing in capital expenditure which was spent on developing the banking system, redesigning organisational structure, acquiring ATs, establishing the Bank's training centre and building and refurbishing the Bank's branches, agencies and head office. He added that this capital expenditure was essential to improve and enhance the Bank's service quality and on-time delivery to attract more customers and gain community acceptance.

The MEBS mentioned that the management has adopted a new strategy consisting of many elements: training and developing the Bank's employees; importation of the latest AT in the banking industry; implementing international standards in the Bank's work and developing the Bank's organisational context which would improve the Bank's services and achieve long-term success. He added

that this strategy had caused an increase in the Bank's capital expenditure. The EBD, DMTM and DMGB pointed out that the Bank's management has been invested in long-term projects relating to service quality and on-time delivery which increased the Bank's capital expenditure. He added that the management's objective for these projects is to obtain customer satisfaction and community acceptance through being the 'Friend Bank' for everyone. The EAD said that:

“This increase in the capital expenditure started to reflect in the Bank's reputation and profitability. According to the final report of 2004, the Bank achieved a 30% increase in profitability compared with the profitability of 2003.”

7.7.5 Effectiveness of Budget

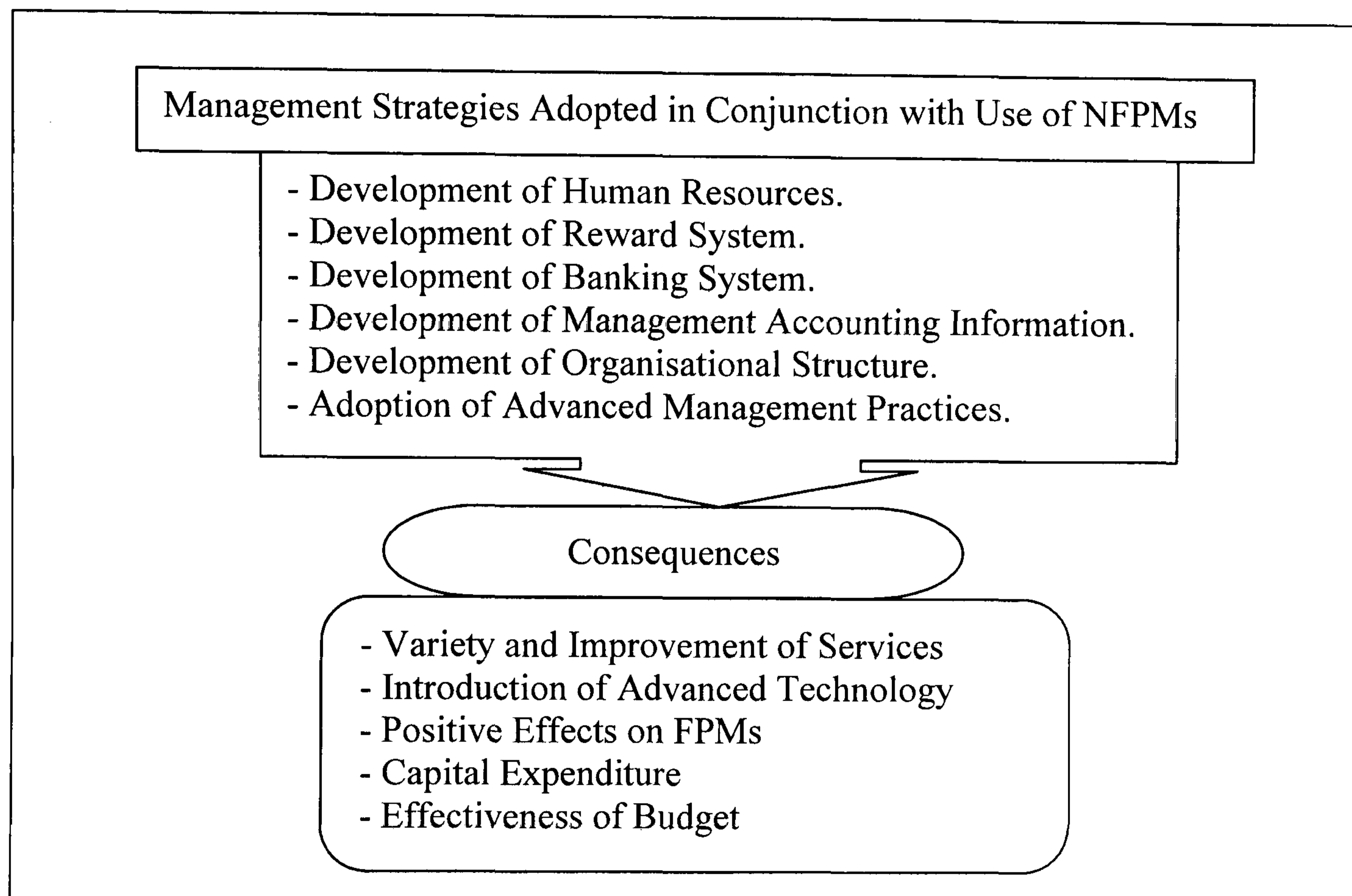
The MBD, DMAB and MAFB mentioned that the concentration on service quality and customer satisfaction affected the Bank's budget. The financial divisions of the Bank's units use the results of these indicators as fundamental in setting the annual budget. The MBD stated that:

“The Bank started preparing and using the budget from 1998. However, from the last three years and from pursuing the achievement of the budget, one can find that, the budget of every unit and of the whole Bank has been prepared and the budgets were very close to actual. That could be primarily attributed to the accountants' reliance on financial and non-financial information when they were preparing the budget.”

The MBMD, EBD and EAD mentioned that the budget is an effective tool for achieving different managerial jobs, improving the performance and decision making and as well as for controlling and monitoring the Bank's activity. Therefore, the results of NFPMs such as service quality and customer satisfaction were instrumental in helping management to identify problems that needed to be resolved and to direct the budget. The MEBS pointed out that the results of NFPMs were used to direct the Bank's units budget with the optimum use of these resources by studying the

structure of the Bank's customers (depositors and lenders). This helps managers and accountants to create an effective budget which is close to the annual financial statement. Figure 5-10 shows the management strategies for enhancing the use of NFPMs and the related consequences.

Figure 7-10: Consequences of Management Strategies Adopted in Conjunction with the Use of NFPMs



7.8 RESEARCHER'S MODEL FOR BANK C

As mentioned earlier, Strauss and Corbin's paradigm (1990, 1998) model was used in analysing the data of this case study. The model assists the researcher to develop and relate the categories to the main phenomenon under investigation, which is the use of NFPMs. According to this model, labels are grouped and related to the phenomenon under investigation in terms of causal conditions, context, intervening conditions, action/interaction strategies, and consequences. The researcher was able to generate hypotheses as consequence of specifying the relationship between the emerging categories by using Strauss and Corbin's paradigm. The researcher will

discuss the paradigm components in detail in the following subsections from 7.8.1 to 7.8.5. Figure 7-11 shows the researcher's model for Bank C.

7.8.1 Causal Conditions

The term "causal conditions" is used to refer to the events or happenings that make the phenomenon happen. In this case study a number of events have caused the occurrence of the phenomenon under investigation (NFPMs). These causal conditions which have driven Bank C's management to adopt and use the NFPMs were explained in section three of this case study. These causal conditions included the following:

- Limitations of FPMs.
- Existing and Future Competition.
- Management's Knowledge of Relationship between NFPMs and FPMs.
- Demanding Customers.

7.8.2 Context

The term "context" is used to refer to a particular set of characteristics in which the phenomenon has occurred. The researcher has made adjustment for the context to include mainly internal organisational influences that surround the phenomenon within the Bank. The researcher named the contextual conditions as internal environmental factors. In section four, the interviewees have identified Bank C's internal environmental factors that relate to the use of NFPMs. These internal environmental factors included the following:

- Operational Experience and Competence and Authority of Management.
- Level of Management.
- Top Management's Interference.
- Stability of Management.
- Collective Working Group.

Internal environmental factors may have a positive or negative effect on the phenomenon. In this case the researcher has found that the Bank's management stability, management experience and competence with more authority, collective working group and top management interference positively influenced management's interest in using NFPMs. The internal environmental factors have their effects also on causal conditions such as management operational experience and competence which might facilitate management's knowledge of the relationship between NFPMs and FPMs. They also may enhance Bank C's management strategies, for example the internal environmental factors such as Bank C's stability of management may be behind the strategies that management adopted such as the development of the banking system and the adoption of advanced management practices and technologies.

7.8.3 Intervening Conditions

Intervening conditions are general conditions that impact on the phenomenon and the strategies that an organisation could implement. The researcher defined intervening conditions as environmental conditions that surround the phenomenon and have an impact on the phenomenon and organisation strategies. The researcher named intervening conditions as external environmental factors. In section five, the interviewees have identified several labels representing the external environmental factors that influenced the implementation of NFPMs. These external environmental factors are:

- Central Bank of Libya's Regulations.
- Information Shortage
- Weakness of Infrastructure.
- Traditional Educational System
- Uncertainty of Economic Environment.

The external environmental factors may have a positive or a negative impact on the phenomenon and the Bank's strategies.

7.8.4 Action/Interaction Strategies

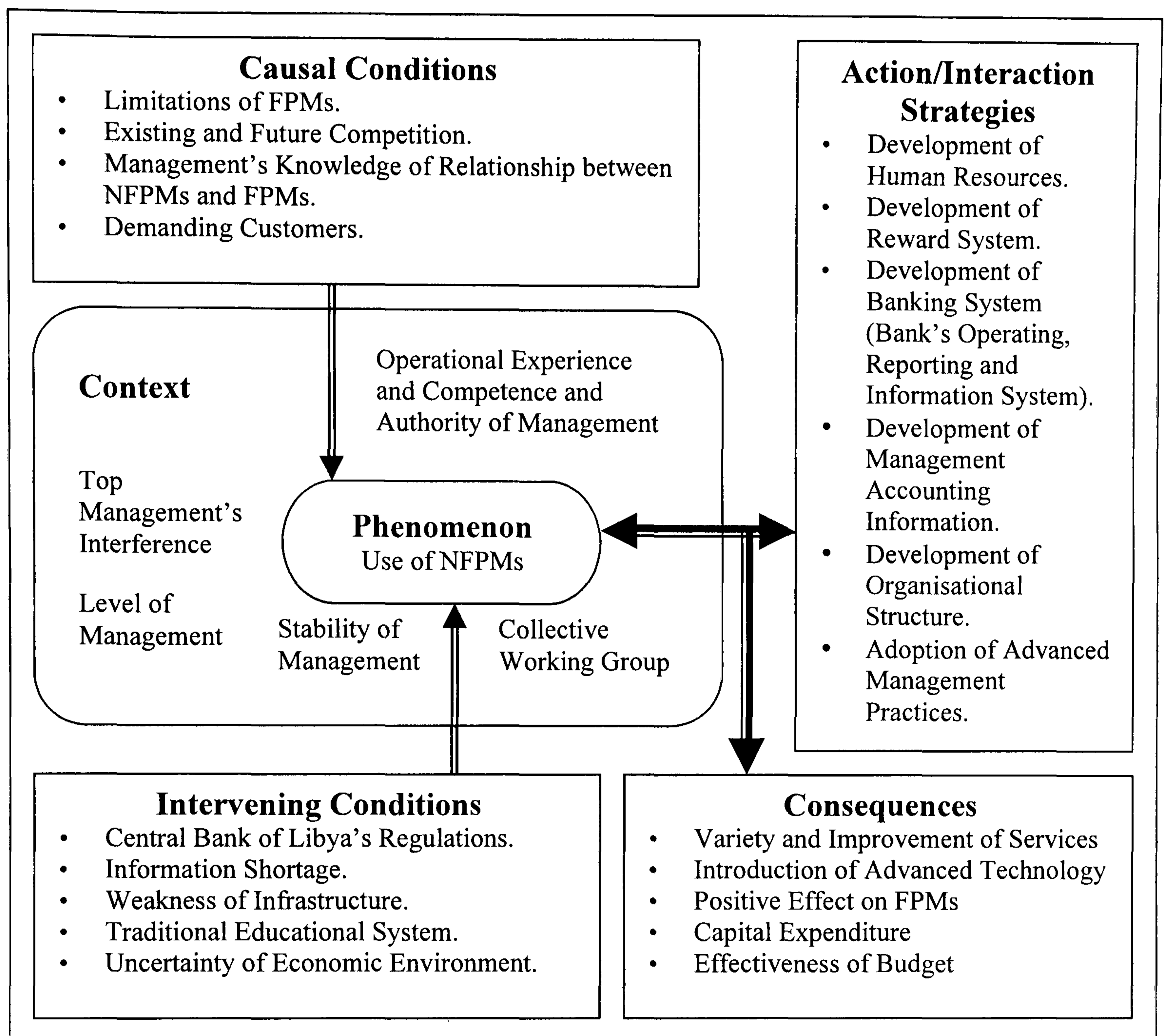
These include strategies in managing the phenomenon under investigation. Bank C's management generated and used a number of strategies that enhanced the use of NFPMs. In section six, the researcher has specified the action/interaction strategies that Bank C's management has used in response to the use of NFPMs. Bank C's management strategies included the following:

- Development of Human Resources.
- Development of Reward System.
- Development of Banking System (Bank's Operating, Reporting and Information System).
- Development of Management Accounting Information.
- Development of Organisational Structure.
- Adoption of Advanced Management Practices.

7.8.5 Consequences

Consequences are the outcomes of action/interaction strategies that have been implemented to manage the phenomenon under investigation. In section seven, the researcher has specified a number of consequences stemming from Bank C's management strategies concerning the use of NFPMs. These consequences included the following:

- Variety and Improvement of Services.
- Introduction of Advanced Technology.
- Positive Effects on FPMs.
- Capital Expenditure.
- Effectiveness of Budget.

Figure 7-11: Researcher's Model for Bank C.

7.9 HYPOTHESES

This case study was conducted in a public commercial bank. This Chapter started with the interviewees and background of Bank C and discussed in-depth the use of NFPMs in the LCBS. Then the data analysis has been explained in the second section. The motives for using NFPMs, internal and external environmental factors, action/interaction strategies and related consequences have been discussed in the preceding sections. The researcher used the grounded theory approach developed by Strauss and Corbin (1990 and 1998) during the case analysis. The in-depth analysis processes resulted in an identification of the major relationships between the

emerged categories and the phenomenon under investigation. Hypotheses are generated from these relationships between the emerged categories (see figure 7-11).

The substantive hypotheses that emerged from the analysis are listed below:

- 1) The limitations of FPMs are one of the major motives leading to a bank's use of NFPMs (see subsection 7.3.1 and figure 7-1).
- 2) The competitive environment is one of the main motives for managers in a bank using NFPMs (see subsection 7.3.2 and figure 7-2).
- 3) Management's knowledge of the relationship between NFPMs and FPMs is one of the major motives leading to a bank's use of NFPMs (see subsection 7.3.3 and figure 7-3).
- 4) Demanding customers are one of the major motives leading to a bank's use of NFPMs (see subsection 7.3.4 and figure 7-4).
- 5) Management with operational experience and competence and more authority, top management's interference, stability of management, and collective working group positively affect a bank's use of NFPMs (see subsections 7.4.1, 7.4.3, 7.4.4 and 7.4.5 and figure 7-6).
- 6) Lower level managers in a bank tend to use NFPMs more than middle and higher level managers do (see subsection 7.4.2 and figure 7-5).
- 7) New regulations and strategies of the Central Bank and the uncertainty of the economic environment positively influence a bank's use of NFPMs (see subsections 7.5.1 and 7.5.5 and figure 7-7).
- 8) State ownership, some of the Central Bank's old regulations, over-control and interference of the Central Bank in a bank's management, information shortage, weakness of infrastructure and traditional educational system negatively influence a bank's use of NFPMs (see subsections 7.5.1, 7.5.2, 7.5.3, and 7.5.4 and figure 7-7).
- 9) The development of human resource strategies to be more service-oriented is associated with a bank's use of NFPMs (see subsection 7.6.1 and figure 7-8).
- 10) The development of the reward system to be linked with non-financial performance is associated with a bank's use of NFPMs (see subsection 7.6.2).
- 11) The development of the banking system (operating, reporting and information system) is associated with a bank's use of NFPMs (see subsection 7.6.3).
- 12) The development of a bank's management accounting information is associated with its use of NFPMs (see subsection 7.6.4).

- 13) The development of a bank's organisational structure is associated with its use of NFPMs (see subsection 7.6.5).
- 14) The adoption of the advanced management practices is associated with a bank's use of NFPMs (see subsection 7.6.6 and figure 7-9).
- 15) Use of NFPMs encourages a bank to diversify and improve its range of services (see subsection 7.7.1 and figure 7-10).
- 16) Use of NFPMs encourages a bank to adopt advanced technology (see subsection 7.7.2 and figure 7-10).
- 17) Use of NFPMs leads to improvement in a bank's profitability, customers' deposits and other FPMs in the long-term (see subsection 7.7.3 and figure 7-10).
- 18) Use of NFPMs leads to an increase in a bank's capital expenditure in the short-term (see subsection 7.7.4 and figure 7-10).
- 19) Use of NFPMs leads to improvement in a bank's budget (see subsection 7.7.5 and figure 7-10).

CHAPTER 8

BANK D

8.0 INTRODUCTION

Bank D is one of the private commercial banks in the LCBS. The case study is divided into ten sections. Section one shows details about interviewees and the background information about the Bank. The data analysis is outlined in section two. The motives for adopting NFPMs are researched in section three. Section four discusses the internal environmental factors that influence the use of NFPMs. The external environmental factors affecting the use of NFPMs are discussed in section five. Section six deals with the strategies Bank D's management adopted to implement NFPMs. The consequences of using NFPMs are presented in section seven. Section eight shows the findings of this case study in terms of Strauss and Corbin's paradigm model. Section nine concludes with the substantive hypotheses emerging from this case study. Lastly, section ten presents a general conclusion for the four case studies.

8.1 INTERVIEWEES' AND BANK'S BACKGROUND

8.1.1 Interviewees

The interviews were run over a period of six weeks, during which fifteen semi-structured interviews were completed. During the first week of the visit to the Bank the researcher met the manager of the personnel department and deputy manager of the main branch who gave the researcher an overview of all the Bank's objectives, strategies, business, units, products, systems and ownership and the researcher then conducted the case study by interviewing, observing, and inspecting documents. The interviews lasted between one and half hours and two hours and two interviewees

were interviewed twice (see Table 8-1) because the interview time was insufficient for them to complete their discussion and they were very busy. Some interviews were conducted during the working day and others were conducted after working hours. All the interviews took place at the interviewees' offices in the Bank's premises.

Table 8-1: Profile of Interviewees and Number of Interviews Conducted

Job Title	Symbol	Number of Years with Banking Sector	Number of Years with this Bank	Number of Years in Current Job	Qualification	Number of Interviews
General Manager of the Bank	GMB	35	7	7	Traditional Commercial Diploma	1
Manager of Personnel Department	MPD	30	7	7	High School Certificate	2
Auditor of the Bank	AUB	32	3	3	High School Certificate	1
Head of Accounting Office	HAO	6	4	4	BSC in Accounting	1
Head of the Financial Affairs Division	HFAD	32	3	3	High School Certificate	1
Manager of the main Branch	MMB	42	4	4	Traditional Commercial Diploma	1
Deputy Manager of the Main Branch	DMMB	7	7	4	BSC in Accounting	2
Head of Current Accounts Division and Foreign Exchange Division in a Branch	HCAB	6	6	6	BSC in Business Management	1
Head of Personnel Division	HPDB	25	4	4	High School Certificate	1
Accountant of a Branch	ACMB	4	4	3	Intermediate Diploma in Accounting	1
Director of an Agency	DIA	37	4	4	Bachelor of Arts	1
Head of the Current Accounts Division in an Agency	HCAA	5	5	4	BSC in Business Management	1
Accountant of an Agency	ACA	4	3	3	BSC in Accounting	1
Total						15

The researcher followed the same steps and conditions that were used in the previous case studies (see Chapter 4 for more details). During the interviews, the researcher asked open and broad questions which concentrated on the research objectives (see Chapter 4 for research questions). She also tried to ask for more explanation and examples which assisted her to investigate the research problem in depth namely the use of NFPMs in the LCBS. Table 8-1 displays some details about

the interviewees in this case study such as job title, experience, qualifications and the number of interviews.

8.1.2 Bank¹

Bank D is a private commercial bank operating in the Libyan market that was dominated by the five SCBs since the Revolution of 1969 until the mid 1990s. Bank D was founded in the late 1990s according to statute number (1)1993 and its amendments and commercial law number (65) 1970. It is regulated by the CBL. Bank D started operations as a Libyan joint stock company and is widely acknowledged to be one of the most successful private commercial banks. Bank D is based in Tripoli - Libya's capital city. The Bank serves the private corporations, organisations, companies, factories and individuals especially those located in its region. The Bank is a member of the Union of Arab Banks and the Association of Libyan Banks.

During the seven years of the Bank, in spite of the difficulties that faced it, the Bank has achieved a good reputation as a private commercial bank in the Libyan banking market. Since the Bank started, it has built its position in the Libyan market as a private commercial bank from one branch in the beginning to a Head Office and approximately 50 branches and agencies with plans for opening more in the near future. The manpower of Bank D increased in all areas from its establishment to reach about 300 employees in 2004. In addition, all employees are of Libyan nationality. Bank D's investment policy concentrated on deposits with the national public commercial banks. The Bank's investments reached under LD 30 million as shown in the annual report of 2004.

¹ The information in this section is taken from Bank D's annual reports (1999-2004), interviews with Bank D's employees and the CBL's publications.

8.1.2.1 Bank's Ownership

Bank D's ownership is held by private corporations, organisations, companies, factories and individuals located in its own region. Libya's banking laws require that no enterprise can own more than 5% of a bank and the limit for any individual is 1% and 2% for families. Bank D was established with capital under LD 10 million. It has cash and capital in pursuance of guaranteed letters in accordance with the General People's Committee's decree number (221)2003. The number of the Bank's shareholders totalled less than 4000 including private corporations, organisations and individual shareholders (including in pursuance of guaranteed letters).

8.1.2.2 Bank's Management

Bank D is managed by a Board of Directors which consists of a Chairman, Vice-Chairman, General Manager and four members who are elected at the Bank's Shareholders' Meeting. The functions of Chairman and General Manager are separated in the structure of this Bank. Bank D's management came from the banking sector (the majority from Jamahiriya Bank and National Commercial Bank) which means they have long-term experience in the banking world which has been an essential factor of success. They appear to be well motivated and efficient and they have been attracted because of high salaries and performance rewards.

The Board's members and the majority of the managers have been in place from the date of establishment of the Bank. The General Manager is from the banking sector with long term experience and is a driving force behind the Bank's success. From the establishment of the Bank the management has adopted a customer-focused strategy and the executive management has recruited staff accordingly. Moreover, the majority of senior managers are of a similar age, although they have several more years before retirement and some are already retired from the public sector and

therefore, the Bank has worked to employ and develop a cadre of younger officers to take over these managers' roles. Bank D's staff has enjoyed a strong working relationship and they work as one family in all the Bank's units which has provided it with stability and continuity.

There has been no evidence that the Bank's Chairman and Vice-Chairman have tried to interfere in the Bank's day-to-day operations. However, the General Manager has managed the Bank with direct interference in day-to-day operations. The majority of interviewees thought that his interference was a main factor behind the Bank's success because of his good and long operational experience in the banking world combined with his accounting background.

8.1.2.3 Bank's Organisational structure

Bank D's fundamental organisational structure is still being developed. On the other hand, the Bank has a preliminary organisational structure. The majority of interviewees believe that the preliminary organisational structure has clear job descriptions and it has defined the functional authority and responsibility of each unit, department, division, office and job. The manager of the personnel department mentioned that the Bank's management has signed a contract with the Managerial Organisational Centre to develop the Bank's organisational structure but the management has delayed the execution of the contract because of the uncertain policies of the CBL about the private banks which has created an unstable environment for these banks.

8.1.2.4 Bank's Management Objectives and Strategy

Bank D's strategy is to strengthen its position in the banking market as a private commercial bank by providing more developed services and in a timely fashion. Bank D's mission is to provide the best, highest quality, most reliable and fastest

banking services by using the most advanced technological techniques and methods used in the banking industry and to satisfy its customers by providing diversified services with flexibility of service providing procedures. The Bank's objectives are to meet its customers' expectations and gain their satisfaction, be always in the forefront and increase the Bank's business, financial indicators (profitability) and returns on its shareholders' equity. The Bank's management is keen on developing its human resources and, therefore, it aims to strengthen their skills by providing them with internal and external training in theory as well as the practice of their tasks. The Bank's competitive environment has driven its management to adopt an offensive strategy, in order to build its market share. A comprehensive marketing campaign is planned for the Bank's services to ensure that the Bank is building good relationships with the community. The management has adopted a customer-oriented strategy. It also encourages units' employees to be more involved with customer development.

8.1.2.5 Employees' Benefits and Incentives

The Bank's top management has developed an employee incentives system, as well as medical care and social services which motivate employees to provide a better banking service. The Bank provides free medical care to employees and their families and pays for the medications locally. A financial incentive is provided for employees who achieve very special work related to service quality and customer satisfaction. The Bank offers employees social loans without interest and the management is considering providing housing loans to employees without interest. The Bank provides a financial incentive for all employees twice a year for religious occasions.

8.1.2.6 Bank's Environment

The main strategy of Bank D is to enhance its reputation and increase its market share in the market which will lead to the Bank's growth and development. Bank D operates in a competitive environment with the State and private commercial banks which cover different areas of the Libyan market. The competitive position of Bank D comes from its attempts to provide the banking services at a high level of quality and on-time. Moreover, the Bank will face another type of competition which is international competition that it will start when the CBL allows foreign banks to enter the Libyan market and when Libya completely affiliates to the WTO and then many foreign banks will enter the domestic market and compete with the Libyan banks for market share.

8.1.2.7 Bank's Information Technology

Bank D's departments and divisions were supplied with computer equipment equivalent to the most modern computing technology in the banking industry. Bank D's branches and agencies are connected on-line with the result that they appear to the Bank's customers as one branch regardless of which one they are dealing with. Bank D's banking system covers all the services the Bank provides at present such as SWIFT, as well as any services to be provided in the future such as ATM cash services.

8.1.2.8 Bank's Performance System

8.1.2.8.1 Financial Performance

Bank D's performance history from 1999 to 2004 has shown a year-by-year increase in profits except in 1999 when it failed to display a profit for two reasons. First, 1999 was the year of building and equipping the Bank and the absence of depositors was the second reason in that year.

The Bank's total assets were under LD 500 million, the depositors' accounts were under LD 400 million, the loans and credit facilities amounted to under LD 60 million and shareholders' equity was under LD 50 million in the annual report of 2004. The annual reports show dividends of between 8%-23% of the capital from 2000 to 2004. The Bank's capital adequacy rate was between 8%-12% in 2004.

8.1.2.8.2 Non-financial Performance Measurements

Bank D's executive management has encouraged its units to concentrate on NFPMs since the establishment of the Bank because it is aware of the importance of NFPMs as principal pillars for outstanding financial results. These measurements include service quality, on-time delivery, customer satisfaction and loyalty, flexibility of service, employee satisfaction, employee loyalty and community acceptance. The use of NFPMs is intensive at the operational management level.

The Bank's management considers the employees as the most important factor for long-term success. It evaluates employees' performance according to their NFP. The administration department evaluates the employees' performance through the managers of units and then it sends these reports to the General Manager to be assessed and used in the decision making function. The following are examples of measurements that are used in relation to Bank D's employees:

- Employee's degree of cooperation and participation with others.
- Employee's degree of acceptance of criticism and comments.
- Employee's ability to be pro-active to customers' needs.
- Employee's appearance, cleanliness and tidiness.
- Employee's understanding and intelligence.
- Employee's creativeness and behaviour adaptation.
- Employees' responsiveness.
- Employee's ability to control and manage.
- Employee's ability to speak foreign languages.
- Employee productivity rate.

- Employee's proficiency and skilfulness.
- Employee's knowledge of work.
- Employee's ability to use the equipment.
- Employee's ability to make use of the training programmes.
- Relevance of training programmes to employee duties.
- Employee medical absentee rate.
- Employee absentee rate.
- Employee's ability to attract more customers.
- Employee's punctuality and working time.
- Employee's competence in executing customers' requirements.

The Bank's management assesses and evaluates the service quality using the following measurements:

- Number of accounts that have been opened according to the type of account
- Number of accounts closed and reasons for closure.
- Number and volume of transactions processed.
- Transaction time span in comparison with competitors' time.
- Availability and suitability of bank facilities.
- External and internal design of the bank.

The measurement that is used to assess and evaluate customer satisfaction by Bank D is the customer complaints boxes.

Bank D's executive management is concerned about society acceptance and the degree of satisfaction with the Bank's services. It has contributed to some social projects. The measurements used by Bank D to evaluate society acceptance are the degree of contribution to the society compared with competitors, and number of accounts that are opened and number and volume of transactions processed during the period (daily, weekly, half monthly, monthly, three monthly, six monthly, and yearly).

The above measurements are examples of what Bank D is using to evaluate its performance. These measurements are analysed periodically. The staff of the

banking operations department evaluates the results of these measurements and then they report to the General Manager to be used in the decision making function. The Bank's management then transfer some of these measurements to the statistics unit of the CBL. However, the annual report of Bank D does not have any results of NFPMs.

The AUB, HAO and DMMB stated that the Bank's management evaluates the performance of each unit and for the Bank as one unit financially according to the indicators that are requested by the CBL. However, it measures employees' performance through their NFP. Finally, the lack of an integrated standard PMS is part of the weakness that was mentioned by the most of the interviewees.

8.2 DATA ANALYSIS

The researcher analysed the primary data collected at the research site in the light of the grounded theory approach developed by Strauss and Corbin (see Chapter 4 for more details). The approach's analytical procedures of coding enabled the researcher to define key points (concepts) that were raised from each interview. These points were summarised, listed and checked to make sure all the points (concepts) were considered. Table 8-2 shows these points which were mentioned by the interviewees.

Table 8-2: Main Points Raised by Interviewees

No	Points
1	<p>Limitations of FPMs</p> <ul style="list-style-type: none"> i. FPMs are indicators that do not tell the management any information of customer satisfaction which is now the main objective for any organisation. ii. FPMs are short-term, historical, quantitative, internal looking and structured indicators of performance. These deficiencies drive the management to use NFPMs. iii. FPMs do not have ability to predict what the future performance is likely to be. iv. FPMs are insufficient to judge Bank's performance because of their deficiencies. v. FPMs are lacking the ability to measure the organisation's real performance.
2	<p>Existing and Future Competition</p> <ul style="list-style-type: none"> i. The banking market was monopolistic but now it is more competitive and it will be more aggressively competitive in the future. This competition is behind the use of NFPMs. ii. Foreign banks will enter the market and could attract employees and customers.

	<ul style="list-style-type: none"> iii. The fear of competition was the main driver for focusing on non-financial factors and using NFPMs which are effective indicators for survival. iv. Globalisation has a very strong effect on Bank D's management decision of adopting NFPMs. v. Competition was the main factor behind management's decision of customer-oriented strategies. vi. There is a relationship between type of environment and the type of PM. Competition encouraged the use of NFPMs.
3	<p>Management's Knowledge of the Relationship between NFPMs and FPMs</p> <ul style="list-style-type: none"> i. Managers' knowledge of NFPMs' effects on FPMs was behind the usage of NFPMs. ii. The positive relationship between NFPMs and FPMs was behind the use of NFPMs. iii. The management's attention has concentrated on NFPMs because they are the producers of profitability.
4	<p>Demanding Customers</p> <ul style="list-style-type: none"> i. Since the late 1990s, the customers seem to be more demanding. ii. Since the Bank was established, customers seem to be more demanding. One of the important factors for the Bank is what does its customers' need. Therefore, Bank D adopted a customer-oriented strategy. iii. The openness and development of society and TV channels made demanding customers. These demanding customers ask for special level of service quality and type of service. Therefore management adopted some non-financial measurements to satisfy them.
5	<p>Operational Experience and Competence of Management</p> <ul style="list-style-type: none"> i. The use of NFPMs depends on the managers' operational experience. Therefore, the long-term operational experience of management was behind the implementation and use of NFPMs. ii. The Bank managers' operational experience, competence and their accounting background led them to use NFPMs.
6	<p>Level of Management</p> <ul style="list-style-type: none"> i. The kind of PMs is correlated with the level of management (the Bank's hierarchy of management), the lower and middle level used more NFPMs than the top management uses. ii. NFPMs are operational performance measurements. iii. The use of NFPMs depends on each manager's tasks.
7	<p>Top Management's Interference</p> <ul style="list-style-type: none"> i. The interference of General Manager in operational processes is driving force behind the Bank to concentrate on non-financial factors and use non-financial measurements. ii. The Management is centralised and its interference in operational processes could negatively impact on NFPMs usage. iii. Over-interference of the Bank's management in operational operations could hinder the use of NFPMs.
8	<p>Central Bank of Libya's Regulations</p> <ul style="list-style-type: none"> i. Some regulations of the CBL have prevented the Bank from achieving customer satisfaction sometimes. ii. The instructions imposed by the CBL have impeded the Bank's activities. iii. The Board of Directors has to get acceptance from the CBL to produce any new service. iv. Some legislation is traditional and no longer suitable in a competitive environment with demanding customers.
9	<p>Weakness of Infrastructure</p> <ul style="list-style-type: none"> i. Weakness of infrastructure in Libya environment has hindered the management from adopting the developments. ii. Weakness of infrastructure has affected management's desire for the implementation and use of NFPMs. iii. Weakness of infrastructure such as telecommunication and electricity was the major obstacle facing the Libyan organisation. US sanctions had caused the weakness of infrastructure.

	<ul style="list-style-type: none"> iv. The adoption of management and technological techniques has forced the Bank's management to develop its own environment. v. The Central Bank has taken new steps to rebuild the banking environment by adopting the AT.
10	<p>General Public's Lack of Banking Knowledge</p> <ul style="list-style-type: none"> i. Some customers do not have knowledge of banking business which does not encourage the implementation of NFPMs. ii. General public's lack of banking knowledge was an obstacle to using the NFPMs. iii. NFPMs require an aware society to be successful.
11	<p>Development of Human Resources</p> <ul style="list-style-type: none"> i. Management's strategies are to adopt the newest banking services and continue developing employees to create customer satisfaction. ii. Use of NFPMs had directed the management to develop its employees. The Bank management has worked to prepare and develop competent and effective managers iii. Internal and external training programmes are to enhance employees' skills and service quality. iv. Management adopted new recruitment strategies to enhance Bank's critical success factors.
12	<p>Performance Reward System</p> <ul style="list-style-type: none"> i. Reward system should link to the Bank's objectives. ii. Management gives employees rewards on the basis of NFPMs. iii. Management uses employee's efficiency report (linked to NFPMs) to evaluate employee's performance and to promote employee. iv. Reward system should completely connect with the results of FPMs and NFPMs. v. The Bank is developing a new reward system.
13	<p>Development of Banking System (Bank's Operating, Information and Reporting System)</p> <ul style="list-style-type: none"> i. Management developed the Bank's system in conjunction with the use of NFPMs to enhance the Bank's critical success factors. ii. Use of NFPMs has driven the management to develop the Bank's operating system and information and reporting system.
14	<p>Development of Management Accounting Information</p> <ul style="list-style-type: none"> i. The Bank does not have in its organisational structure a management accounting department. However, it uses many management accounting methods and practices such as budgeting, activity costing and benchmarking which in turn lead to the improvement in the information reported. Operational units report financial and non-financial information which has helped management to perform its job. ii. Establishment of management accounting department will enhance the use of NFPMs. iii. Budgeting, activity costing and benchmarking are tools for enhancing the use of NFPMs. iv. Budgeting, activity costing and benchmarking are means for adopting integrated PMS.
15	<p>Adoption of Advanced Management Practices</p> <ul style="list-style-type: none"> i. The use of benchmarking technique has increased the use of non-financial information and has encouraged the use of NFPMs. ii. Management adopted benchmarking and reengineering in conjunction with the use of NFPMs.
16	<p>Variety and improvement of services.</p> <ul style="list-style-type: none"> i. The adoption of NFPMs encourages management to improve and diversify the Bank's range of services.
17	<p>Introduction of advanced technology.</p> <ul style="list-style-type: none"> i. The adoption of NFPMs encouraged adoption of AT. ii. The adoption of advanced management techniques has forced the Bank's management to develop its own environment by adopted the AT.

18	<p>Positive Effects on FPMs</p> <ul style="list-style-type: none"> i. The FPMs are the final result of non-financial activities or performance. ii. NFPMs are the ladder to achieve the financial objectives for any organisation. iii. By concentrating on non-financial factors our market share increased. iv. The outcomes of NFPMs will reflect on FPMs (profitability). v. The fundamental goal of banking is to obtain customer satisfaction, which will then be reflected in financial indicators.
19	<p>Capital Expenditure</p> <ul style="list-style-type: none"> i. The adoption of NFPMs leads to an increase in capital expenditure.

These points (concepts) were grouped and given labels. As in the previous case studies, the researcher combined the labels in compatible ways by defining the kind of relationship between these labels and the phenomenon under investigation (see Chapter 4 for more details, p. 162). Tables 8-3 to 8-7 show the labels emerging after analysing the data and organising them in categories according to their relationship to the phenomenon.

In the next sections, the researcher will discuss the labels and define the relationships between category labels and the main category of this study, which is the use of NFPMs. This process will provide the basis for organising and developing the ideas that emerged from the analysis. Accordingly, the researcher will be able to generate a number of hypotheses based on these relationships between the main category and other related categories. By using the Strauss and Corbin's paradigm model a clear understanding of these relationships will be provided in the researcher's model (Figure 8-11).

8.3 MOTIVES FOR USING NFPMs

Bank D has used NFPMs related to quality service, on-time delivery, customer satisfaction, employee performance appraisal, and community acceptance as mentioned in subsection 8.1.7.2. The Bank's use of NFPMs was attributed to several motives that related to the Bank's nature and internal and external environmental conditions. Table 8-3 displays the labels that described the principal motives for

using these measurements and shows the interviewees who referred to them. Each motive will be discussed in more detail in the next subsections from 8.3.1 to 8.3.4.

Table 8-3: Motives for using NFPMs (Labels of Causal Conditions)

Interviewees	LFPMs	EFC	MKR	DCs
GMB	√	√	√	
MPD		√	√	
AUB		√	√	√
HAO	√	√		√
HFAD		√		
MMB		√	√	√
DMMB	√	√	√	√
HCAB	√	√	√	√
HPDB		√	√	
ACMB	√	√	√	√
DIA		√		√
HCAA	√	√	√	
ACA	√	√	√	

LFPMs: Limitations of FPMs.

EFC: Existing and Future Competition.

MKR: Management's Knowledge of Relationship between NFPMs and FPMs.

DCs: Demanding Customers.

8.3.1 Limitations of FPMs

The GMB reported that FPMs were suitable when the organisation's objective was to maximise the profitability and the wealth of shareholders. However, in the competitive environment to achieve such profitability the organisation's main objective was to achieve high level of customer satisfaction which FPMs are not able to measure because they are structured and too internal looking. Consequently, FPMs are no longer good measurements for measuring the organisation's actual performance. The GMB stated that:

“In a competitive environment, Bank's (or any organisation's) success does not depend on achieving a profitability objective, rather, it depends on how it operates in such an environment and achieves a good relationship with its customers and achieves their expectations which in turn will lead to a high level of profitability.”

The HCAB revealed that the technological developments and economic competitive environment have clarified that FPMs have some inadequacies such as they could not provide a clear image of how an organisation is operating in the long-term and they could not show the feeling of customers about the organisation's products and services. The HCAB confirmed that:

“In order to measure the organisation's actual performance and increase the organisation's long-term profitability, management should encourage the use of NFPMs.”

The DMMB mentioned that in a competitive environment, organisations competed by concentrating on activities such as quality, delivery, customer satisfaction, innovation, flexibility and community acceptance. These types of activities cannot be measured and evaluated by traditional financial measurements. They need forward looking PMs which will give management indications of its true performance and the degree of environmental acceptance. Therefore, the Bank's management started looking for and using more long-term and forward looking PMs which are NFPMs such as customer satisfaction. The HAO revealed that in the light of competition in the Libyan banking market the FPMs are insufficient as indicators to measure the performance of the Bank. The HAO stated that:

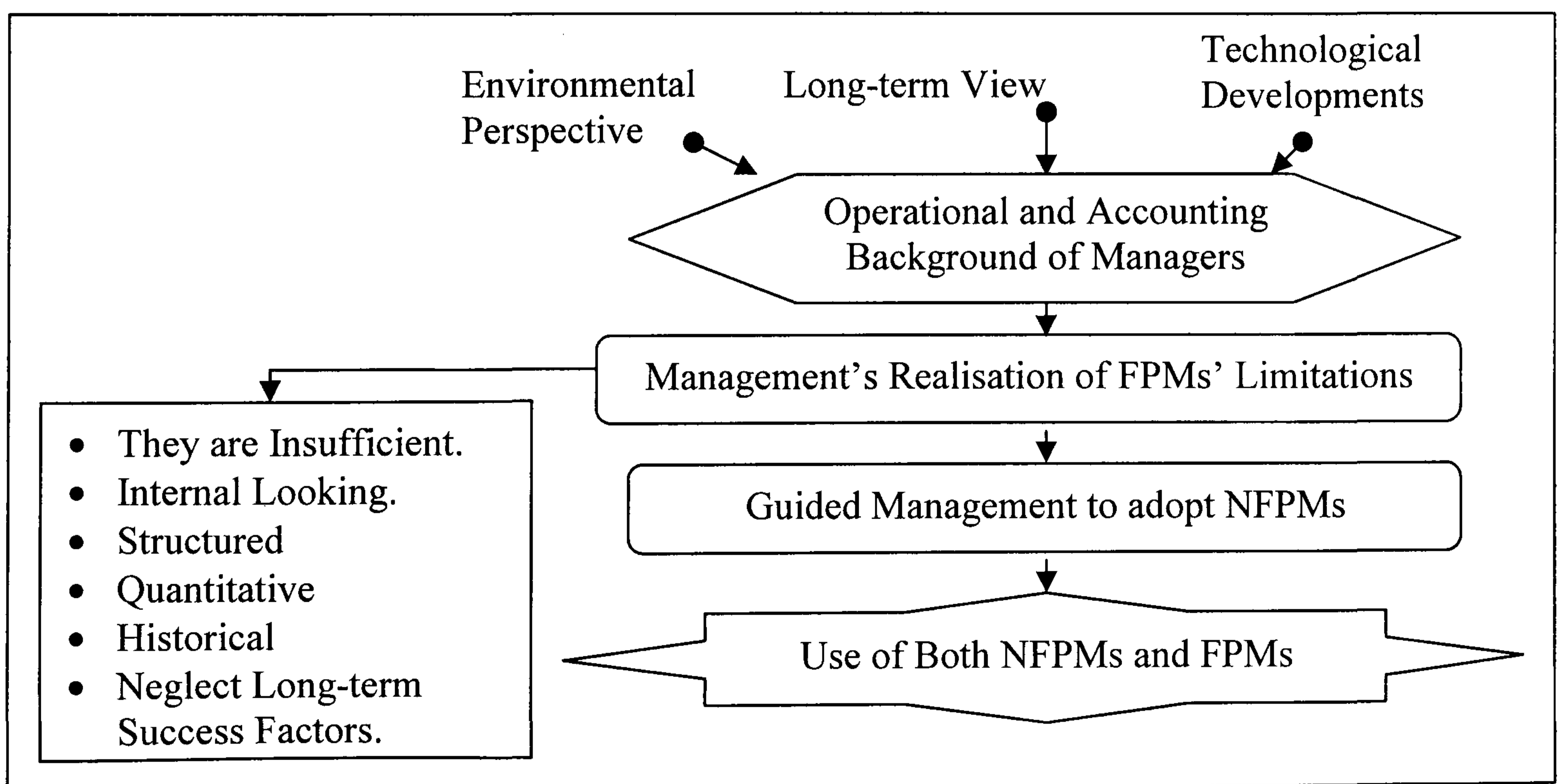
“FPMs are unable to reflect the actual image of the Bank's performance which is a final result of non-financial factors. These factors can be measured only by non-financial indicators which then their results reflect in FPMs. Therefore, the inadequacy of FPMs to measure a whole organisation's performance is one of the main factors influencing the use of NFPMs.”

The ACA considered that the FPMs do not show the whole organisational performance rather they show the financial aspect of the Bank's critical success factors. The ACA confirmed that the FPMs measure the final results which is the level of progress in profitability and neglected other related factors which were

behind this profitability such as quality of service, on-time delivery and customer satisfaction. The HCAA mentioned that FPMs depend mainly on historical financial information and neglect the non-financial information that related to the Bank's principal success factors such as service quality, on-time delivery, and flexibility. The HCAA confirmed that FPMs are quantitative and structured and they cannot measure and evaluate non-financial aspects.

The ACMB agreed that FPMs are not able to measure and explain organisational performance and non-financial factors need to be measured such as service quality, on-time delivery, employee satisfaction and customer satisfaction. ACMB confirmed that FPMs are lacking the ability to measure an organisation's whole performance. Figure 8-1 displays management understanding of FPMs' limitations and the use of NFPMs.

Figure 8-1: Limitations of FPMs and the Use of NFPMs



8.3.2 Existing and Future Competition

The GMB claimed that the entry of private banks to the local market made the banking environment more competitive and therefore, from the beginning, Bank D's

management adopted customer-oriented strategies and has focused on providing the best service and on-time to obtain customer satisfaction. The MMB reported that Bank D was established in a competitive environment adding that competition usually encourages organisations' desires to improve and develop quality of product or service, delivery, flexibility of service's procedures, customer satisfaction, employee satisfaction and community acceptance and then to assess and evaluate these factors. The MMB confirmed that competition is one of the main motives influencing management to implement the NFPMs. The DIA mentioned that when he was working in a State bank and when the environment was monopolistic this encouraged managers to use mainly FPMs to assess their ability to increase the Bank's profitability. However, after the establishment of private banks, the environment became competitive which has encouraged managers to concentrate on critical success factors and measure them to achieve outstanding financial results.

The MMB confirmed that:

“There is a relationship between the kind of environment where organisations work and the kind of PMs to be used. In competitive environment the management needs to use NFPMs along with FPMs.”

The MPD stated that competition was the main motive for Bank D's management using NFPMs. The AUB and HCAB mentioned that Bank D was established in a competitive environment and the fear of failure has driven its management to adopt NFPMs such as customer satisfaction, service quality and on-time delivery. They added that the fear of competition was one of the main factors influencing Bank D's management to use NFPMs. The DMMB stated that:

“The establishment of Bank D in a competitive environment has caused it to enhance all its critical success factors including service quality, customer satisfaction, on-time delivery, flexibility, employee satisfaction, and community acceptance. Therefore, the competition was one of the main motives that directed the management's attention

to provide developed services, to enhance its relationship with customers and to use NFPMs.”

The HPDB pointed out that the economic system has changed since the establishment of private banks. The environment was stable and monopolistic and then became competitive and it will be even more aggressive when the foreign banks enter the market. He believed that the fear of globalisation and local and international competition were the main motives for State and private banks’ management to focus on NFPMs. The HCAA and HFAD reported that the future economic environment is likely to be more competitive and, therefore, the local banks need to prepare for this forthcoming international competition. The HAO, HCAA, HFAD and ACMB argued that the local and forthcoming competition was the main driver for the local banks to adopt and use advanced management, accounting and technological techniques and methods. The GMB mentioned that the entry of foreign banks was expected to make the competition very aggressive. Therefore, Bank D’s management is focusing on building a good relationship with its stakeholders (employees and customers) and on developing the Bank’s equipment and management and accounting techniques and methods to face this competition. The DIA and the HPDB respectively stated that:

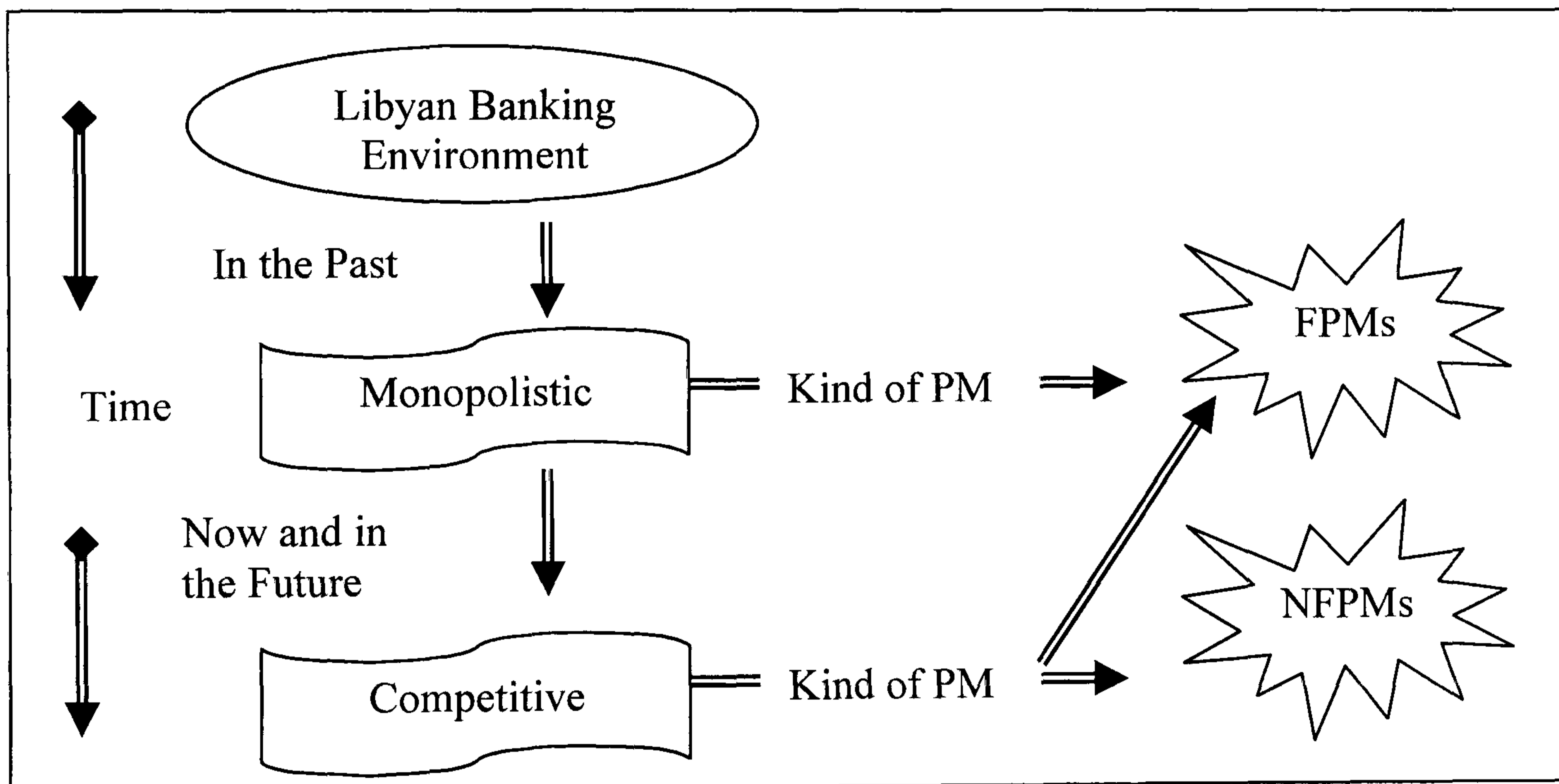
“The time we live in is competition and technological age. In this circumstance, if an organisation wants to survive it has to be the best in providing the highest quality of service, on-time and with lowest cost. Therefore, the existing and coming competition has encouraged the Bank’s management to concentrate on non-financial aspects and apply long-term success measurements (NFPMs).”

“Globalisation means that familiarity with the world through the TV, internet, conferences and outside training programmes. Therefore, globalisation has a very strong effect on Bank D’s management decision of adopting NFPMs.”

The MMB reported that the foreign banks will enter the local market soon and those banks have long experience and they are more developed in providing the

banking services which may be more attractive than what local banks offer. Therefore, Bank D has been driven to implement and use advanced management and accounting methods such as NFPMs. It has concentrated on its customers' needs and expectations to obtain their satisfaction and loyalty. The ACA mentioned that there were several reasons for D's use of NFPMs, the most important being competitors. The majority of interviewees believed that there was a direct relationship between degree of competition and the organisation's degree of usage of NFPMs. Figure 8-2 summarises the relationship between the kind of environment and the kind of PMs.

Figure 8-2: Kind of Environment and Performance Measurements



8.3.3 Management's Knowledge of Relationship between NFPMs and FPMs

The ACA believed that managers' knowledge of the positive impact of NFPMs on FPMs was an influencing motive for management's adoption of NFPMs. The ACA added that the banking background and competence of managers played a great role in their understanding of this positive direct relationship and using NFPMs. The MMB stated that managers' banking experience during their operational duties has enhanced their perception of the positive relationship between NFPMs and FPMs. The GMB stated that:

“Managers’ understanding of NFPMs’ positive impact on an organisation’s profitability in the long-term through increasing market share and achieving customer satisfaction and loyalty was the main motive to use such measurements.”

The DMMB, HCAA and MPD asserted that management’s adoption of NFPMs could be attributed to managers’ operational experience which assisted them to recognise such a relationship between NFPMs and FPMs. The MPD revealed that managers’ operational experience has developed through their work in different divisions over a long-term in the banking sector (public banks) combined with participation in internal and external training programmes, their visits to correspondent banks and attendance at conferences.

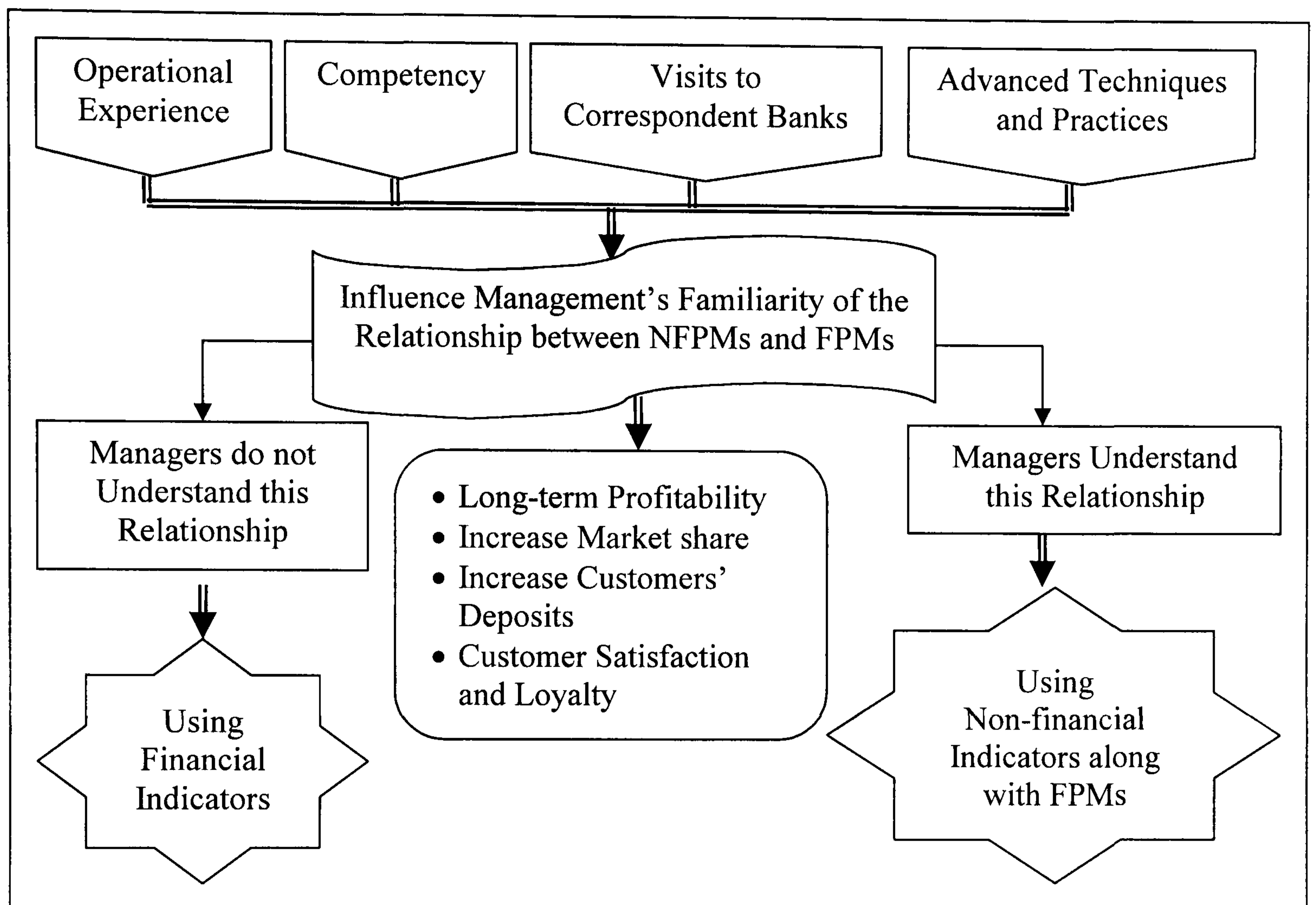
The MMB stated that if managers understood the positive effect of NFPMs on FPMs they then would adopt and use NFPMs along with FPMs. Conversely, if managers do not understand such a relationship between NFPMs and FPMs, they then would only concentrate on and use FPMs to evaluate performance and to make their managerial decisions. He added that the managers’ knowledge of NFPMs’ effects on FPMs was due to long-term operational experience that they have gained from their work in different operational divisions in the banking sector and their openness to advanced techniques and practices that foreign banks adopted. The AUB said that:

“There is a direct relationship between management’s operational experience and the level of understanding of the NFPMs’ positive impact on FPMs (such as profitability and customers’ deposits) which has reflected on their usage of NFPMs.”

The HCAB, ACMB and HPDB reported that the managers’ experience and their ability to perceive the strong relationship between NFPMs and FPMs were the most important factors leading them to use NFPMs. Figure 8-3 demonstrates

management's appreciation of the relationship between NFPMs and FPMs and related influencing factors.

Figure 8-3: Management's Appreciation of the Relationship between NFPMs and FPMs



8.3.4 Demanding Customers

The MMB stated that during the late 1990s customers' behaviour and attitudes have changed from being simple customers to being more demanding because of the openness and development of State and international TV channels. He added that those demanding customers forced organisations to take better care of them and to make them the main factor. This in turn directed the management to adopt customer-oriented strategies, to concentrate on activities that related to customers such as service quality, on-time delivery and customer satisfaction and to measure them using appropriate measurements.

The DIA and AUB mentioned that the Libyan customers used to accept any kind of service that the Libyan banks provided without any discussion which meant that the customers were relatively undemanding. They added that at that time, the management used only FPMs such as profitability. However, the openness of society has created new types of customers who are influenced by the western lifestyle. They compare the local banks' services in respect of quality of service and on-time delivery without paying any attention to the service price. They ask for some services that foreign banks provide outside Libya. They go to foreign banks in the neighbouring countries for much services. The DMMB asserted that the change in customers' attitudes and behaviour has directed the management of the Bank to enhance service quality and on-time delivery, to diversify the services and to improve the flexibility of service providing procedures. Consequently, it adopted measurements relating to these activities such as customer complaint boxes in order to assess customer satisfaction. The AUB pointed out that:

“The Libyan banking system used to deal with undemanding customers who are less knowledgeable about advanced international banking services. Therefore, the traditional banking system was suitable. However, the development and openness of society and the TV channels changed customers' needs and behaviour and they became more demanding. So organisations needed to change their systems.”

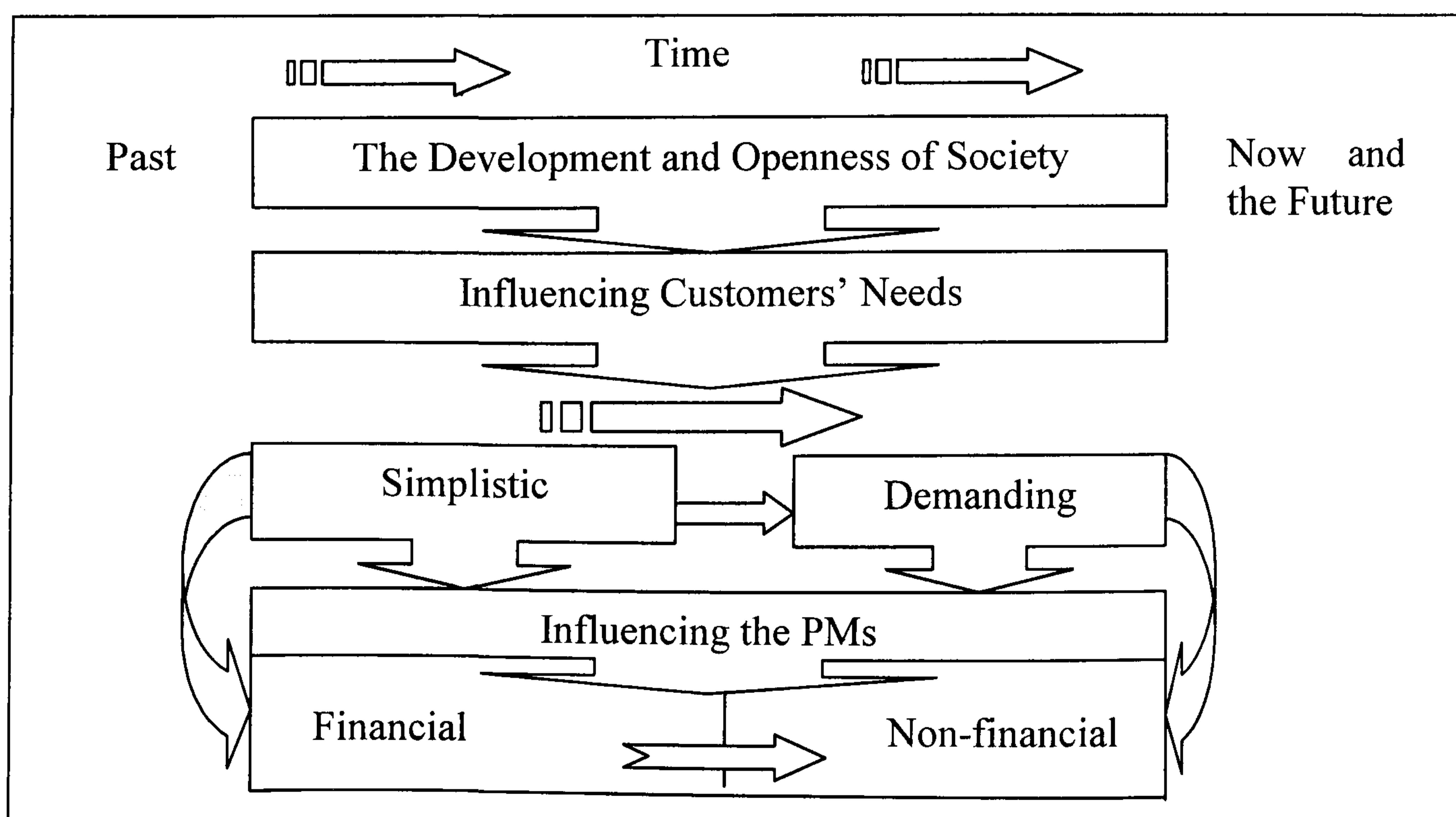
The ACMB and HCAB mentioned that customers are the principal factor in banking transactions and in the stability of a bank in the market. Therefore, satisfying customers is an essential factor for the Bank's development, growth and success. The HCAB added that the new circumstances of the Libyan economic environment have encouraged local banks to make customers as their main concern. The DMMB pointed out that since the Bank was established its management has felt the need to make customers its main concern especially if it wants to increase its market share.

He added that management was aware of the changes that have happened in the domestic customers' attitudes and behaviour. The DMMB reported that the changing of customers' behaviour influenced the management strategies to be more service oriented and to use more and more NFPMs in order to effectively assess customer satisfaction and to be close to its customers. He confirmed that:

“Any management wants to increase its market share, it should focus on NFPMs to deal successfully with customers' demands.”

The MMB and HAO believed that that the use of NFPMs was a suitable technique for dealing with demanding customers. MMB confirmed that the management of Bank D has paid great attention to satisfy its customers' expectations because it thinks focusing on increasing the level of customer satisfaction will lead to increasing the Bank's market share and profitability. The HCAB mentioned that the majority of customers are businessmen who look for a high quality of service and on-time delivery. This specific type of customer has driven the Bank's management to concentrate on NFPMs. The HCAB believed that demanding customers are one of the most important factors influencing the use of NFPMs. Figure 8-4 summarises the relationship between the demanding customers and the use of NFPMs.

Figure 8-4: Customers' Needs and the Use of NFPMs.



8.4 INTERNAL ENVIRONMENTAL FACTORS THAT INFLUENCE THE USE OF NFPMS

The researcher identified Bank D's internal environmental factors that influenced the management use of NFPMS. Internal environmental factors are the contextual conditions that surround the phenomenon and have impacted on it in an organisational context. These internal environmental factors impact either positively or negatively on the use of NFPMS. Table 8-4 summarises the internal environmental factors influencing the use of NFPMS. These factors are related to the interviewees who referred to them. Each factor will be discussed in more detail in the subsequent subsections from 8.4.1 to 8.4.3.

Table 8-4: Internal Environmental Labels

Interviewees	OECM	LM	TMI
GMB	√		√
MPD	√	√	
AUB	√	√	√
HAO	√	√	√
HFAD			
MMB	√		√
DMMB	√	√	√
HCAB	√		
HPDB	√		√
ACMB	√	√	
DIA	√	√	√
HCAA			√
ACA	√	√	√

OECM: Operational Experience and Competence of Management.

LM: Level of Management.

TM I: Top Management's Interference.

8.4.1 Operational Experience and Competence of Management

The DMMB reported that D's managers have long operational experience which assists them to deal with customers' expectations and needs. The DMMB believed that the operational experience of operational managers has encouraged them to use NFPMS such as flexibility of service execution procedures because of their

understanding of the detailed procedures of their work and how they impact on their units' performance and the whole Bank's performance. He clarified that the managers' operational experience has developed through their long-term work in different divisions in the public banks. The MPD attributed the managers' concern for NFPMs to their banking background and their openness to the latest international advances and their attendance at international conferences.

The MMB mentioned that the General Manager had worked in different divisions and administrative levels when he was an employee in the public banking sector which enabled him to gain both long-term operational experience and competence. He added that the General Manager's operational experience and competence have encouraged his management to concentrate on NFPMs such as service quality, on-time delivery, and flexibility of service execution procedures to obtain customer satisfaction. The DIA stated that the General Manager is a banker with management, accounting and operational experience which has encouraged him and in turn his management to focus on aspects such as service quality, on-time delivery, flexibility of service execution procedures and customer satisfaction and to use related measurements which are NFPMs. The ACMB said that:

“The interest in and measurement of an organisation's critical success factors lead any organisation to achieve a high level of profitability. Nevertheless, that could not occur unless the organisation's managers have outstanding operational experience and competence to lead them to understand the operational procedures of their tasks and the impact of measuring these factors on their FP.”

The GMB confirmed that the majority of executive management has long-term operational experience within the banking world which has a positive effect on the improvement in the Bank's critical success factors and the use of NFPMs and benchmarking. The HAO and ACA believed that management experience and competence had a direct relationship with the use of NFPMs. The HCAB and HPDB

pointed out that there is a direct relationship between management operational experience and the use of NFPMs. They explained that operational experience enables managers to understand their operations and detailed procedures which can enhance service quality and on-time delivery. The HCAB confirmed that the lack of operational experience discouraged some managers from determining and measuring their organisation's critical success factors and from understanding the impacts on the FP. The HCAB concluded that:

“Limited operational experience drove any management to depend on financial measurements to measure and evaluate its performance.”

The AUB pointed out that Bank D's management has worked to prepare and develop competent and effective managers. The AUB clarified that when the Bank was established the management recruited some employees who had long-term experience in the public banks and at the same time it appointed new employees who had a university qualification and then united them in a collective team. Moreover, the Bank adopted internal and external programmes to increase employees' understanding of banking work and to be informed about and benefit from the ways that other banks provide services. The majority of interviewees confirmed that the Bank's management possesses the competence and operational experience which are behind its use of NFPMs and this use will encourage it to develop a systematic integrated performance appraisal system for the Bank and its units.

8.4.2 Level of Management

The DIA, MPD and HAO mentioned that all the management levels use the NFPMs, however, the NFPMs are used more by the lower and middle operational management because NFPMs are operational measurements. The DIA reported that:

“NFPMs are fundamental measurements which finally lead to FP. They deal with daily production operations of services. So,

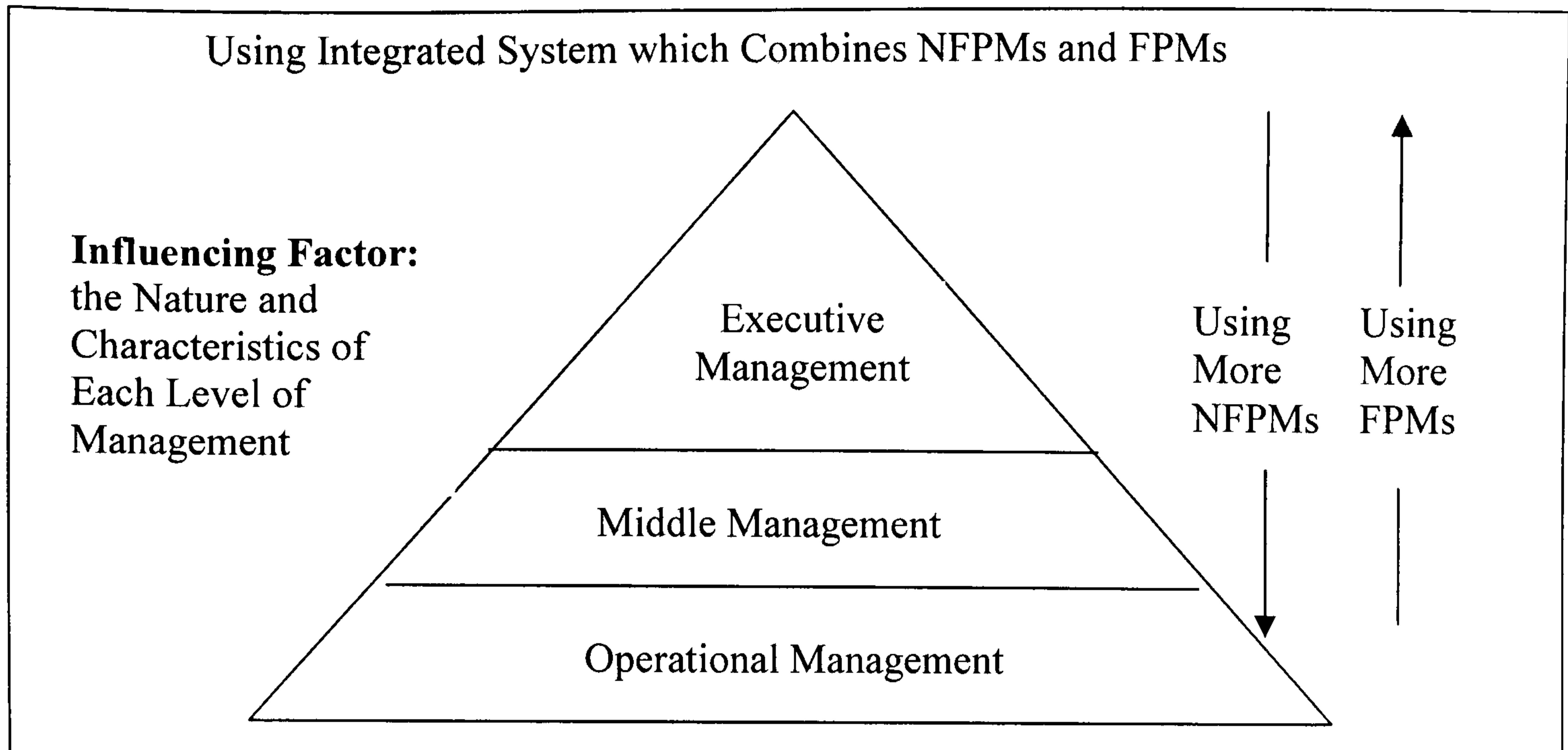
operational managers are the heaviest users of NFPMs in their daily operations and decisions.”

The DMMB confirmed that there is a relationship between the kind of PMs and the management levels. He pointed out that the lower operational managers deal directly with customers and production of services and are driven to use more non-financial information and measurements in daily management. The DMMB clarified that by saying, in the end of the day we ask ourselves some questions such as how many transactions have we achieved successfully and unsuccessfully. Moreover, we ask for the reasons for unsuccessful transactions and we try to find suitable solutions for these transactions to avoid the same mistakes the next time.

The AUB revealed that, on one hand, middle and lower level of management use more NFPMs because of the nature of their tasks and duties. They deal with customers and provide the services. On the other hand the top management uses a mix of NFPMs and FPMs but it tends to depend on FPMs. The ACMB and ACA mentioned that there is a relationship between the level of management and the kind of PM that should be used. They attributed that to the nature of management tasks and duties. The ACA concluded that:

“All the management levels use a mixture of PMs (financial and non-financial) and this use correlates with the Bank’s hierarchy, as one goes up the top of the hierarchy, one finds that these managers heavily depend on FPMs. Conversely, as one goes down to the lower management, one finds that these managers heavily use NFPMs.”

Figure 8-5 summarises the relationship between management levels and the kind of PMs and the influencing factors.

Figure 8-5: Management Levels and the Use of NFPMs

8.4.3 Top Management's Interference

The MMB, DIA and DMMB stated that the Chairman, General Manager and executive management have long-term operational experience and they are very competent managers. They confirmed that the General Manager and executive management are concerned with improving the Bank's services and satisfying customers for future success. They added that the General Manager and executive management concentrate on NFPMs because of their belief of the positive impact of the NFPMs on FPMs. They asserted that the General Manager's operational experience encourages him to interfere in daily processes.

The GMB reported that although the Chairman and Vice-Chairman encourage the executive management to develop and improve the Bank's services and satisfy customers, there was no evidence that they interfere in the day-to-day management of the Bank. The HAO and AUB mentioned that the General Manager's interest in the Bank's long-term success factors such as service quality, on-time delivery and customer satisfaction have driven him to manage the Bank with noticeable interference in the detailed day-to-day management of the Bank. They concluded that

the interference of the General Manager was a major factor behind the use of NFPMs and the Bank's success. The ACA stated that:

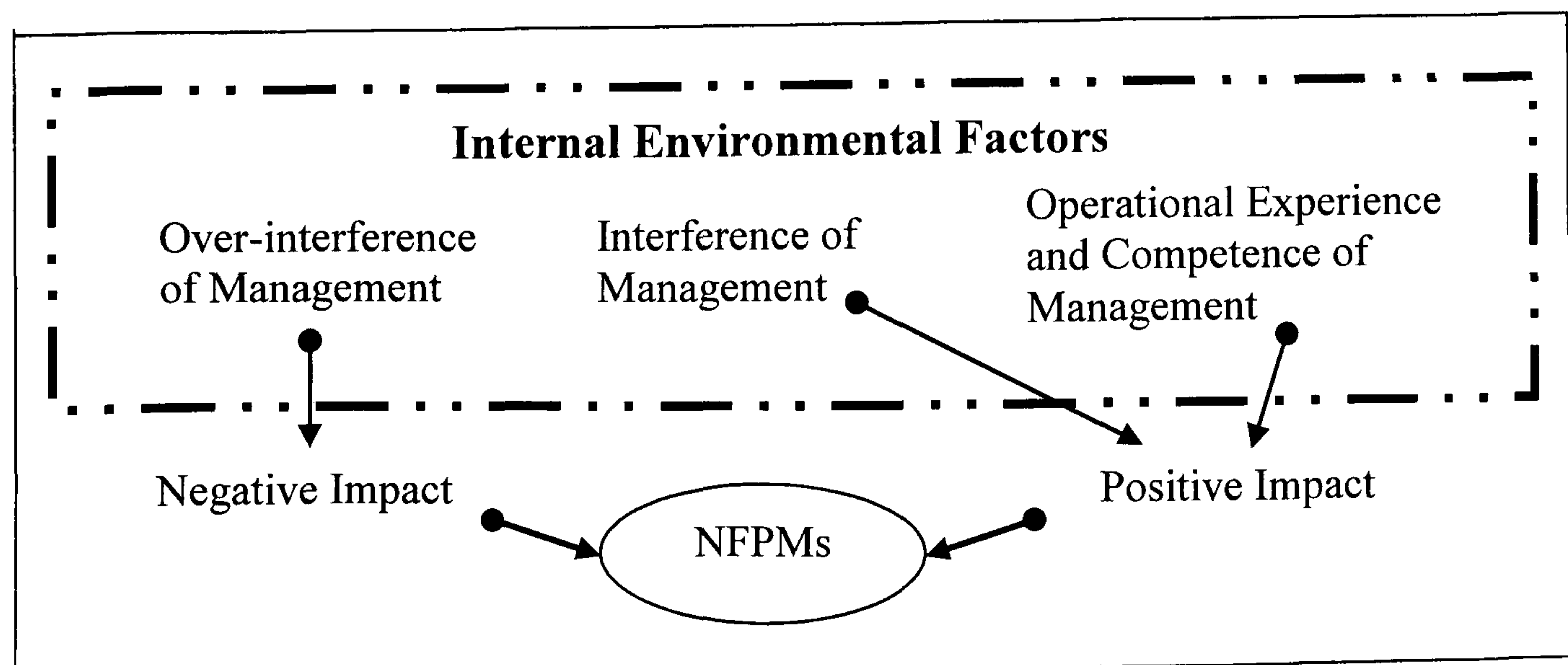
“Even the General Manager seemed to be a more service oriented manager; he interferes in the Bank's units daily operations. This interference positively affects the level of service quality and customer satisfaction.”

The HCAA, MMB, HCAA and DMMB stated that the management of the Bank is centralised. The operational managers have to refer to the General Manager for everything. The HCAA and HPDB reported that the over-interference of the General Manager could sometimes negatively impact on the use of NFPMs. They added that the General Manager sometimes determines the way that the employee has to follow which hinders the employee's innovation and this reflects negatively in employee satisfaction which in turn could negatively impact on customer satisfaction. The ACA mentioned that the General Manager's interference is sometimes in favour of a customer. The HCAA stated that:

“The over-interference of the General Manager kills the innovation spirit with the employees and negatively affects the staff usage of NFPMs. Therefore the decentralisation is a prerequisite for more successful implementation of the NFPMs.”

Figure 8-6 summarises the impact of the internal environmental factors on the use of NFPMs

Figure 8-6: Internal Environmental Factors' Impact on the Use of NFPMs



8.5 EXTERNAL ENVIRONMENTAL FACTORS INFLUENCING THE USE OF NFPMs

Bank D works in a competitive environment and this influenced its selection of a specific set of measurements to assess and evaluate its performance. The researcher has identified several external environmental factors that have either a positive or negative influence on the use of NFPMs. Table 8-5 summarises the external environmental labels which were raised by the interviewees. Each factor will be discussed in detail in the following subsections from 8.5.1 to 8.5.3.

Table 8-5: External Environmental Labels

Interviewees	CBLR	WI	GPLBK
GMB	√	√	
MPD	√	√	
AUB	√	√	√
HAO	√	√	
HFAD	√	√	
MMB	√	√	√
DMMB	√	√	
HCAB	√	√	√
HPDB	√	√	
ACMB	√		√
DIA	√		
HCAA	√		
ACA	√	√	√

CBLR: Central Bank of Libya's Regulations.

WI: Weakness of Infrastructure.

GPLBK: General Public's Lack of Banking Knowledge.

8.5.1 Central Bank of Libya's Regulations

The AUB, MPD, DIA and MMB reported that in the Libyan banking system, banks' management use profitability as the main measurement for evaluating their branches' success. They added that the establishment of private banks which made the environment more competitive was a catalyst for the Libyan banks' management to focus on NFPMs. They added that in this environment the private banks need to build their market position. However, Libyan legislation and the Central Bank of

Libya's regulations and instructions are obstacles for the private banks in terms of building customers' and investors' trust. The GMB and HCAA revealed that the laws have hindered the use of NFPMs. Several barriers to private banks have been introduced which have limited their ability to satisfy customers' needs. The GMB explained that one of these barriers is the setting of the interest rate on loans and deposits which has hindered the Bank from satisfying its customers. The HCAA mentioned another example which is the regulation that prevents public organisations from opening accounts in the private banks. The GMB added that the Board of Directors has to get approval from the CBL to introduce any new service or open any new unit. The DMMB, HCAB believed that the Libyan legislation and the CBL's regulations and instructions were an external environmental factor that hindered the use of NFPMs. The DMMB said that:

“The Bank sometimes cannot satisfy some of its customers because of the laws which in turn do not facilitate the Bank's willingness to grow and develop.”

The HFAD and HAO criticised some of the Libyan legislation and the CBL's regulations and instructions as being no longer suitable in a competitive market with demanding customers. The HPDB stated that the laws were issued when the FPMs were the only measurements for performance. The HAO, HFAD and HPDB believed that these laws could negatively impact on the use of NFPMs.

The DIA and AUB stated that the Libyan environment was considered to be in a period of development and the CBL has issued new regulations. They added that, however, the laws and regulations still hindered the Bank from accomplishing what the management wanted to achieve. They thought that such laws and regulations have a negative effect on management concern for using NFPMs. The MMB added that:

“Contradiction and instability of the laws influenced service quality and customer satisfaction and that could negatively impact on the management intention to implement and use NFPMs.”

The DMMB, DIA, ACA and ACMB were concerned with the CBL’s regulations that restricted the management of the Bank from satisfying its customers. They asserted that the CBL imposed very strict rules on private banks about day to day transactions which hindered the Bank’s ability to satisfy its customers’ needs. They concluded that the CBL’s regulations and instructions represent an obstacle to the use of NFPMs. Therefore, the over-control and interference of the CBL have a negative influence on the development of the Bank’s critical success factors and on management’s interest in using NFPMs.

There was general agreement among the interviewees that regulations and instructions of the CBL and the indirect interference of the Central Bank in management prevented Bank D from achieving full customer satisfaction.

8.5.2 Weakness of Infrastructure

The HPDB and HFAD mentioned that a major external environmental factor that hinders local banks’ use of NFPMs was the weakness of infrastructure (i.e. electricity and telecommunications system). They added that this weakness decreases management’s interest in using NFPMs. The MPD commented that:

“In the Libyan environment, there is weakness of infrastructure (such as electricity and telecommunications) which negatively impacts on using the advanced management and technological techniques and methods such as NFPMs and ATMs.”

The GMB stated that NFPMs as a developed technique require strong electricity and telecommunications networks to facilitate the connection between the Bank’s units (branch, agency and head office) and to facilitate the adoption of the management and technological techniques such as SWIFT and ATMs which in turn

assist the management to develop its service quality and delivery and then to obtain customer satisfaction. Therefore, the Bank's management was forced to develop its own environment which in turn involved capital expenditure. It introduced SWIFT and linked the head office with the branches and agencies networks in order to improve its service quality and delivery and to initiate the use of NFPMs. The MMB stated that:

“Although the Libyan environment is suffering from the weakness of infrastructure, the Bank's management had invested in ATs to improve service quality and satisfy its customers such as the international telecommunications system (SWIFT) and developing the Bank's system and the computing equipment.”

The AUB, HAO, and HFAD pointed out that the main problem with the local environment was its weakness of infrastructure (electricity and telecommunications system) and this has affected management's interest in adopting recent ATs. The AUB also confirmed that the US sanctions on Libya has resulted in the weakness of infrastructure (the telecommunications system). The DMMB thought that this weakness of the electricity and telecommunications system has negative effects on the management's desire to use NFPMs. The ACA pointed out that the Libya environment is still underdeveloped and has weaknesses in the electricity and telecommunications system which in turn limits management's ability to perform effectively. He added that Bank D was suffering from the weakness of infrastructure in the society. He mentioned that this weakness was considered to be an influential factor affecting management's intention to implement and use the NFPMs.

The AUB stated that in the near future international banks would have the ability to enter the Libyan local market. He confirmed that this action has driven the CBL to take new steps for rebuilding the banking environment by adopting the most ATs. Moreover, this action has driven the management of Libyan banks to adopt

accounting, management and technological techniques and methods to provide very high service quality and then to obtain a high level of customer satisfaction which means emphasising the use of NFPs. The DMMB and HAO mentioned that since the late 1990s the CBL's new strategies are directed to developing and rebuilding the Libyan economy by introducing advanced management and technological techniques such as the National Payment System. They believed such developments will help the Bank's management to enhance the quality of service, delivery and customer satisfaction.

8.5.3 General Public's Lack of Banking Knowledge

The AUB and MMB mentioned that the openness of society and the traditional educational system have created a group of customers who are demanding but with little knowledge of the banking industry. This group of customers is a difficult phenomenon for the Bank to deal with. They added that this in turn negatively influenced the Bank's ability to satisfy their needs. The ACA asserted that a number of the society's members suffered from the lack of banking awareness and the main problem for the management of the Bank was how to deal with this segment of customers. The ACA stated that:

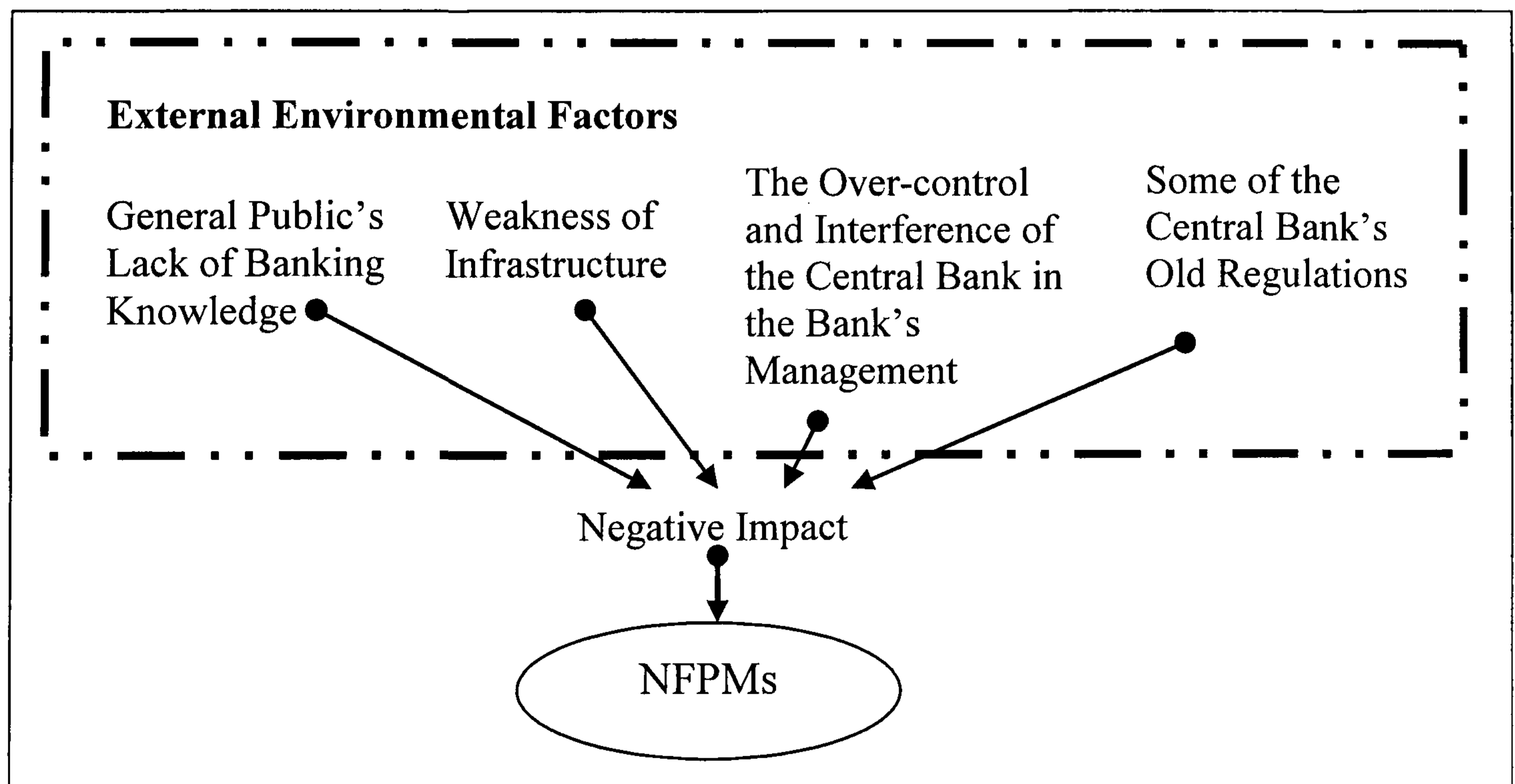
“The lack of knowledge of banking business of some society's members has created an obstacle that negatively affects the management's interest to assess and evaluate its NFP such as customer satisfaction.”

The ACMB pointed out that the main problem with the public was their unawareness of banking business which in turn did not assist them to deal with the new technological advancements in the banking industry such as ATMs. The ACMB confirmed that the lower level of public understanding of the nature of banking business represented an obstacle to the adoption and use of NFPs. The HCAB

reported that the public was a motive behind the Bank's development. He clarified that they always call for new advances as in western countries such as ATMs. However, their level of understanding of these advances and how to deal with them hindered the Bank from getting the advantages of using these advances such as NFPMs. The ACA agreed that the adoption of advanced management and technological techniques and practices such as NFPMs and ATMs need an aware society to appreciate, accept and deal with such new technologies. The AUB concluded that the public's lack of knowledge of banking business was one of the main external environmental factors that affected the use of NFPMs. The MMB confirmed that the lack of banking awareness of the public was one of the factors that limited the use of NFPMs.

Figure 8-7 summarises the influence of the external environmental factors on Bank D's use of NFPMs.

Figure 8-7: External Environmental Factors' Influence on the Use of NFPMs



8.6 STRATEGIES THAT MANAGEMENT ADOPTED IN CONJUNCTION WITH NFPMs

Bank D's management has adopted a specific set of strategies to support the use of NFPMs. Table 8-6 summarises the labels that represent the main strategies which have been adopted concerning the use of NFPMs. These strategies are listed against the interviewees who referred to them. Following Table 8-6 there is a detailed discussion of each label in the next subsections from 8.6.1 to 8.6.5.

Table 8-6: Actions/Interaction Strategies Labels

Interviewees	DHR	DRS	DBS	DMAI	AAMP
GMB	√				√
MPD	√	√			
AUB	√	√	√	√	√
HAO	√		√	√	√
HFAD	√				
MMB	√				
DMMB	√	√	√	√	√
HCAB	√	√	√	√	√
HPDB		√	√		
ACMB	√			√	
DIA	√				
HCAA	√		√	√	
ACA	√	√		√	

DHR: Development of Human Resources.

DRS: Development of Reward System.

DBS: Department of Banking System (Bank's Operating, Information and Reporting System).

DMAI: Development of Management Accounting Information.

AAMP: Adoption of Advanced Management Practices.

8.6.1 Development of Human Resources

The GMB mentioned that human resources represent one of the key factors for success in the service industry. The GMB added that one of the main management strategies to encourage the use NFPMs was the development and improvement of employees. The Bank's management has adopted various human resources policies. It has adopted a policy of both internal and external training that aims to enhance

service quality and personnel's awareness of the new advances in the banking industry. The MPD and HAO mentioned that Bank D's management was keen to develop its employees as a result of using NFPMs. It has adopted the following strategies: a) appointment of experienced and competent employees from public sector and graduate employees to build a strong staff with both a high level of education and operational experience; b) internal, external and on duty training programmes; and c) English language courses for employees.

The AUB and DMMB mentioned that qualified and competent employees play an important role in enhancing the Bank's critical success factors. They confirmed that, at the beginning, the Bank's management adopted a special recruiting policy which is to double its staff by appointing highly experienced and service oriented employees as a key step in developing the Bank's service quality and improving the Bank's reputation by achieving a high level of customer satisfaction. The MPD reported that the use of NFPMs had directed management's attention to adopt new recruiting policies. He stated that management requires prospective employees to provide an experience certificate in banking and high qualifications (such as university qualification).

The ACA and ACMB acknowledged that competition is an influential factor that has driven Bank's management to adopt the most recent management and technological techniques and to improve employees' effectiveness. Bank D's management adopted some human resource strategies to motivate its employees and to develop and improve their performance. The DIA and MMB pointed out that current and future competition has forced Bank D to evaluate and improve its critical success factors. The management has adopted internal, external and on duty training policy. They confirmed that this training policy aims to increase employees' effectiveness. The DMMB and HCAB believed that the training programmes would

drive D's employees to improve their skills and then to improve the Bank's critical success factors which in turn will encourage them to increase their use of NFPMs.

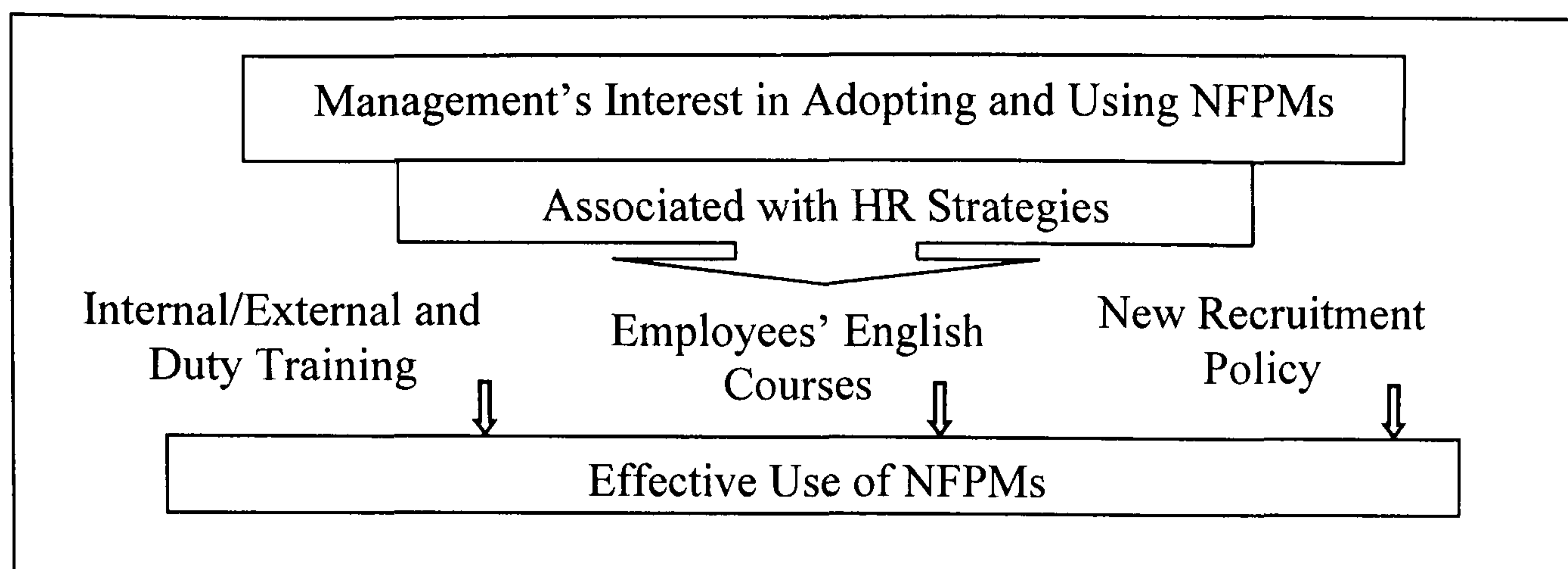
The GMB said that

“I expect that the new human resource strategies will drive Bank D's employees to enhance the Bank's service quality, customer satisfaction and other critical success factors.”

The MMB, DIA and MPD mentioned that the successful use of NFPMs needed employees who have the abilities to work collectively as one family. Therefore, management's strategy of duty training was a tool to create harmony between the Bank's employees to work as a collective group to achieve Bank D's objectives. They confirmed that this kind of training has resulted in developing the capabilities and effectiveness of employees. The DIA added that:

“The Bank's management has adopted a day-by-day job training strategy for the front desk employees. This strategy aims to develop and improve employees' skills and abilities, to increase their sensitivity to the Bank's business and to encourage employees to be sensitive to customers.”

The HCAA and DMMB mentioned that the use of NFPMs needs employees who are service-oriented and it also requires regular advanced training programmes. Therefore, Bank D's management has adopted a new recruiting policy and training programmes which are directed at improving the Bank's services and enhancing the ability of employees which in turn will improve customer satisfaction. Figure 8-8 demonstrates HR strategies that management has adopted to stimulate the use of NFPMs.

Figure 8-8: HR Strategies and the Use of NFPMs

8.6.2 Development of Reward System

The AUB mentioned that from the establishment of the Bank, management has devoted its efforts to encourage the Bank's staff (managers and employees) to concentrate on and use of NFPMs. However, the reward system was not directly connected with the staff's performance even although the management sometimes gives employees small rewards on the basis of NFPMs concerning customer satisfaction, service quality, on-time delivery and others.

The HPDB and MPD pointed out that Bank D uses a fixed salary system with social reward (such as religious occasions) for all employees. They added that it also gives small financial reward to employees who achieved a special level of performance related to service quality, flexibility and customer satisfaction. The HPDB and MPD criticised such a system because it was not announced, obvious and was not fair for all employees and as well it was inconsistent with the Bank's strategy of using NFPMs.

The HCAB and ACA agreed that the Bank's management activated the use of NFPMs that related to service quality and customer satisfaction but it failed to link these measurements with the reward system. They confirmed that the Bank does not have a clear reward system. They described the current reward system as

unsuccessful and suggested that it needs to be linked to the results of NFPMs. The AUB confirmed that the Bank has not got an obvious policy about its reward system which is seen to be one of the main weaknesses undermining the use of NFPMs. The DMMB stressed that there was no obvious link between the reward system and performance although the Bank's management evaluate employees using NFPMs that related to non-financial aspect of performance. The DMMB said that:

“The Bank's management uses employee's efficiency report linked to NFPMs to evaluate employee's performance. However, the result of this report does not link to the employee's reward system. It uses it just to promote employees. Sometimes, management pays a small individual reward to employees who achieved special work related to the Bank's critical success factors.”

The DMMB believed that a reward system should be obvious for all employees and linked to the Bank's objectives. He confirmed that this would create positive results for all the Bank's stakeholders (management, employees, customers and shareholders). He explained that by saying:

“If the reward system was linked to the bank's objectives it would encourage, influence and stimulate employees to work effectively and realise the Bank's objectives because they will be rewarded accordingly which in turn would create a good reputation for the Bank, a good level of customer satisfaction and finally positive results on the Bank's FP (profitability).”

The HPDB thought that the provision of a new reward system was essential and the reward system should link to the results of both FPMs and NFPMs. The MPD and HPDB stated that the Bank's management took a new decision which aims to develop the Bank's reward system. The MPD and HPDB confirmed that in a developed system, employees will be rewarded according to their NFP (employee's annual report) and to their units' FP and NFP. The MPD said:

“The Bank's management is on its way to developing a new reward system that would be connected with the employees' financial and non-financial aspects and according to their units' performance.”

8.6.3 Development of Banking System (Bank's Operating, Information and Reporting System)

The DMMB revealed that Bank D's management has encouraged its units' managers and employees to focus on NFPMs. This concentration on the use of NFPMs has driven it to develop the Bank's operating system and information and reporting system. The DMMB thought that these systems will help employees to perform their tasks in a very quick way which will improve and enhance the service quality, on-time delivery and customer satisfaction. It will also help managers in preparing reports - some of these reports are completely financial, some are non-financial and the rest are a mix of financial and non-financial - which in turn will be more effective and helpful to the executive management.

The HCAA and DMMB mentioned that the Bank's management had developed its operating system and information and reporting system because of the increase in the competition and the management's wish to improve and enhance the Bank's critical success factors. The DMMB pointed out that

“The competitive environment and the development of the Libyan economic environment had caused the Bank's top management to develop the Bank's operating system and information and reporting system. In these systems the Bank's units were linked to provide management with daily updated information which would facilitate its functions and help it to make effective decisions.”

The HPDB pointed out that these systems were developed to improve service quality and on-time delivery and to build a database for every single activity (service), employee and customer. The HPDB added that the Bank's units were linked and, as a consequence, the Bank's units appear as one unit to the Bank's customers. This in turn will improve customer satisfaction. The information and reporting system will help managers and employees to provide all the required reports. Moreover, it will provide management with up-to-date and on-line

information which in turn will provide it by the ability to measure and monitor units' performance. The HAO pointed out that the new system supplied on-time information on units' operational performance, which makes it a high level monitoring system covering the Bank's critical success factors. The HAO believed that this system would give managers the required information which in turn will help them to make effective and timely decisions. The HCAB reported that such a system is critical to enable managers to assess and evaluate their unit's performance and top management to evaluate and assess each unit's performance and also the Bank's performance as one unit. The AUB stated that:

“The management had paid thousands of Dinars for these systems because it wants to provide the best services to customers and on-time to obtain their satisfaction. These systems will provide management with daily information on units' progress and the development of the Bank's performance.”

8.6.4 Development of Management Accounting Information

The HAO and AUB confirmed that the majority of Libyan banks do not have a specific department of MA in their organisational structures. However, they use many MA methods and they look at MA as one of the financial accounting department's tasks. The HAO and AUB reported that in Bank D the accounting office and banking operations department and its related divisions provide the top management with the necessary accounting information. The DMMB, ACMB and ACA mentioned that operational managers and their accountants work together to prepare their unit's budget and their regular operational reports which contain financial and non-financial measurements and information. They then transfer these reports to the banking operations department and accounting office to produce regular reports (weekly, monthly, three monthly, six monthly and yearly) to the Bank's management to guide and direct its decision making function.

The ACMB and HAO pointed out that Bank D uses some management accounting methods and practices including budgeting, cost accounting, financial comparisons, ratio analysis and some non-financial indicators at the operational level (branch and agency) and for the whole Bank as one unit. The ACA stated that:

“There is no management accounting as a separate department nevertheless Bank D uses management accounting methods related to financial statement analysis, financial ratios, budget and some NFPMs.”

The HCAB stated that Bank D’s management has used a number of management accounting methods and practices which aim to improve service quality, customer satisfaction, on-time delivery and community satisfaction. He pointed out that management has implemented management accounting practices such as budgeting. The Bank’s management implements budgets to improve quality, cost and customer satisfaction which in turn requires the use of NFPMs. The HCAA, DMMB, ACMB and ACA stressed that the Bank’s use of management accounting methods and practices such as NFPMs has improved the information in the internal reports that management of the each unit prepared for the executive management. Moreover the preparation of this information depends on managers’ operational experience. The HCAA added that:

“The use of advanced management accounting methods and practices such as NFPMs and benchmarking has increased the amount of the information reported to the management to assist it in developing the Bank’s critical success factors and in the decision making process.”

The HCAB, HAO, AUB and DMMB thought that the use of management accounting methods has developed accounting information reported to the executive management in quality and as well in quantity. They also believed that the adoption of these practices is the first step for the Bank’s management to build a strong basis for its performance appraisal system.

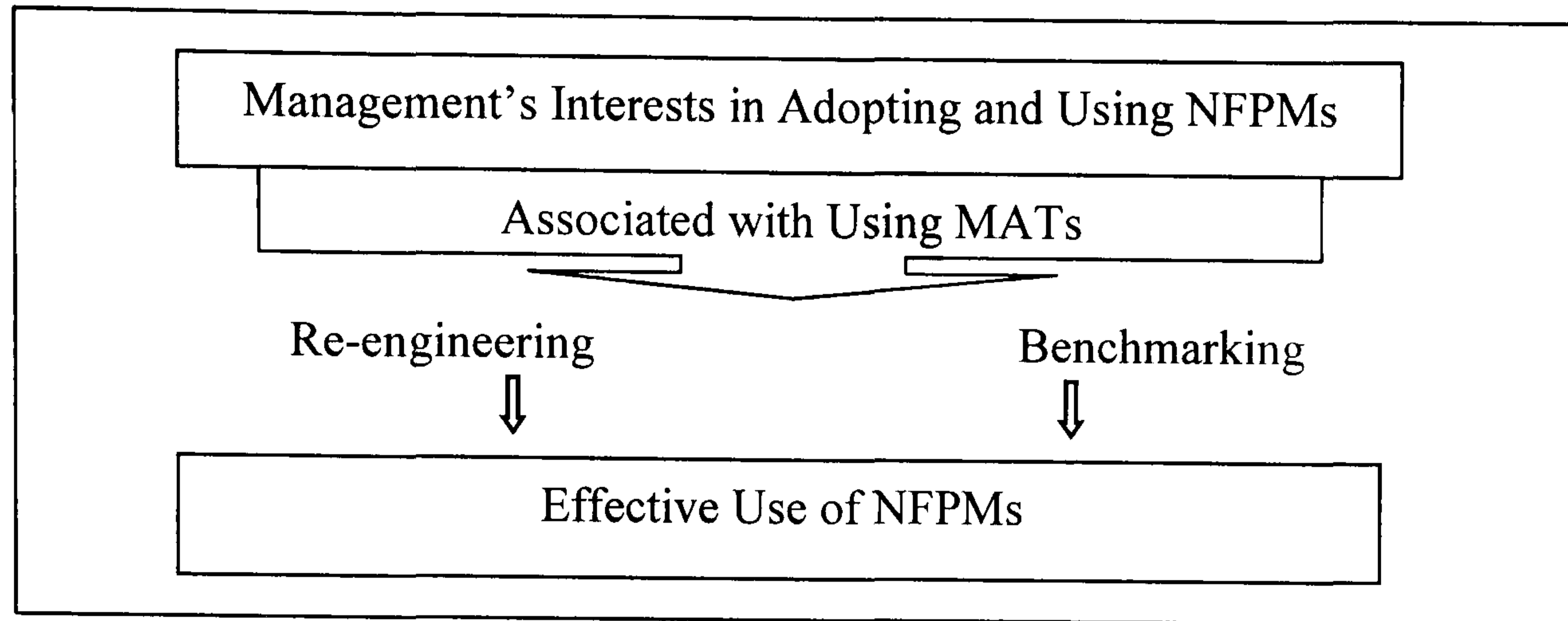
8.6.5 Adoption of advanced Management Practices

The HCAB and AUB stated that although there is no management accounting department, Bank D's management has used a number of advanced management techniques such as benchmarking which aim to improve service quality, customer satisfaction, on-time delivery and community satisfaction. They thought that the benchmarking approach was the main driving force behind the development of the Bank. It was established to realise the Bank's performance evaluation strategy of improving the Bank's service quality. The DMMB pointed out that the improvement of the Bank's critical success factors (such as service quality) can be started by benchmarking against the best banks in the LBS. The DMMB stated that

“Bank D's management is benchmarking against its competitors' services, operational processes, adopted technologies and systems which it thought will lead to improving the Bank's service quality and customer satisfaction.”

The HCAB, HAO and DMMB confirmed that the use of benchmarking technique has increased the use of non-financial information and has enhanced and activated the use of NFPMs.

The DMMB, HCAB and GMB stated that the management of Bank D had developed the procedures of service in terms of time and simplicity to improve the level of quality. They added that this reengineering, on the one hand, assisted employees to function their work effectively. On the other hand, it led to an improvement in the degree of customer satisfaction. The HAO, GMB and AUB concluded that the use of advanced management techniques has assisted the Bank's management by providing it with information concerning the Bank's critical success factors to make effective managerial decisions. Figure 8-9 shows the advanced management techniques that management adopted in conjunction with the use of NFPMs.

Figure 8-9: AMTs and the Use of NFPMs

8.7 CONSEQUENCES OF IMPLEMENTATION AND USE OF NFPMs

Bank D's adoption of NFPMs and the following management strategies have some management, accounting and technology consequences. Table 8-7 summarises the labels which are the main consequences of using NFPMs. These consequences are listed against the interviewees who referred to them. Following Table 8-7 there is detailed discussion of each label in the next subsections from 8.7.1 to 8.7.4.

Table 8-7: Labels for Consequences of Implementation and Use of NFPMs

Interviewees	VIS	IAT	PEFPMs	CE
GMB	√	√	√	
MPD	√	√	√	
AUB	√	√	√	√
HAO	√	√	√	√
HFAD			√	
MMB	√		√	
DMMB	√	√	√	√
HCAB	√	√	√	√
HPDB	√	√	√	√
ACMB	√	√	√	√
DIA		√	√	
HCAA		√	√	
ACA	√	√	√	√

VIS: Variety and Improvement of Services.
 IAT: Introduction of Advanced Technology.
 PEFPMs: Positive Effects on FPMs.
 CE: Capital Expenditure.

8.7.1 Variety and Improvement of Services

The GMB, MMP and DMMB confirmed that there is a direct relationship between the concentration on NFPMs and the development and improvement of the organisation's product range. This relationship was attributed to the nature of NFPMs relating to the organisation's environment and environmental components (such as customer, culture, religion and laws and rules). The HCAB revealed that NFPMs have the ability to reflect the customers' reaction and acceptance or refusal of the organisation's products and they also reflect the customers' needs and expectation. The ACA and AUB confirmed that the use of NFPMs has directed and guided Bank D's management to either improving or adding new services to its range for example the adoption of automatic withdrawal services (credit card) and the improvement of documentary credits.

The HPDB and HAO pointed out that management's interest in customer satisfaction (customers' needs and expectations) motivated it to improve and expand its service range. The HPDB stated that:

“The development of services and the creation of new services are a result of the use of NFPMs especially service quality, delivery and customer satisfaction. Bank D has introduced new services such as the lease of safe-deposit boxes and it is working to introduce others such as automatic withdrawal services (credit cards). These in turn aim to satisfy the Bank's customers.”

The GMB reported that the Bank has developed, improved and expanded its service range with a view to enhancing service quality, generate customer satisfaction and attract new customers. The AUB pointed out that Bank D's management expanded (and it is working to expand) its services because of its interest in and its use of NFPMs. He added that service range has been improved as a result of the Bank's desire to increase its service quality, customer satisfaction and community acceptance. The AUB mentioned that:

“The Bank’s executive management wants to be close to its customers. Therefore, the Bank’s management provides special service to groups of customers such as businessmen. It provides free money delivery with more security to the customer who wants to transport money from the Bank to another place or into the Bank and free consultation services.”

The DMMB, ACMB and HCAB added that the diversification and improvement of Bank D’s service was in response to the Bank’s use of the NFPMs concerning customer satisfaction. They confirmed that the new services would increase customer satisfaction and attract new customers from other banks. The GMB mentioned that the use of NFPMs such as service quality, delivery and customer satisfaction were expected to make the Bank’s service better because this trend had driven the Bank to adopt ATs such as the connection of Bank’s units, SWIFT system and ATMs which aimed to enhance service quality, delivery and diversification of services and then generate customer satisfaction.

8.7.2 Introduction of Advanced Technology

The GMB, DIA and DMMB reported that the Bank has adopted and installed AT related to computer hardware and software on account of improving service quality and delivery and then to increase customer satisfaction. They added that the Bank installed the SWIFT system (telecommunications system) to improve and enhance the service delivery especially the international service (such as documentary credits and transferring funds). They concluded that the introduction of AT was a consequence of the concentration on and the use of NFPMs concerning service quality, delivery and customer satisfaction. The ACMB mentioned that the Bank has introduced ATs aimed at enhancing service quality, delivery and customer satisfaction for the purpose of becoming the best private bank in the Libyan market. The ACMB clarified that:

“The adopted ATs were the consequences of concentrating on the implementation and use of NFPMs.”

The HCAB pointed out that the adoption of AT was necessary for any organisation in a competitive environment to achieve and maintain a high degree of service quality, on-time delivery and customer satisfaction which in turn will give it a competitive advantage. He added that since the Bank was established, it has been in a competitive environment which encouraged its management to use NFPMs which in turn has driven the Bank's management to introduce different ATs such as National Payment System, SWIFT and others. He agreed that there is a relationship between the use of NFPMs and the level of adopted ATs. The AUB stated that:

“The level of adopted ATs is affected by the use of NFPMs. The more an organisation uses NFPMs especially customer satisfaction measurements the more it wants to adopt the best technologies.”

The ACA, HCAA and HAO confirmed that the adoption and use of NFPMs required implementation of AT. The GMB, AUB, DMMB and DIA stated that the adoption of on-line connection computer system would help the Bank's customers to manage their accounts from any unit of the Bank's units. They added that now, the Bank is working to install ATMs and to introduce the National Payment System which in turn will give customers the ability to manage their accounts from any place in Libya and in the world. The AUB and GMB concluded that these projects would not have been achieved without the use of NFPMs and customer-oriented strategies which indicated the necessity of adopting such important projects.

The MPD and HPDB revealed that customers always look for the organisation that provides better service quality and on-time delivery. These indicators strengthen the management's desire to find technologies that might lead to better service. They added that the Bank was new in the market and it was looking to increase its market

share, build its reputation and to be the best in its class. Consequently, it has adopted some ATs aimed at enhancing the Bank's service quality, delivery and customer satisfaction such as SWIFT system and computer systems and equipment. The majority of interviewees agreed that the adoption and use of NFPMs were influencing factors behind the management's strategies to adopt ATs. They added that the adopted AT has improved service quality, on-time delivery and customer satisfaction. The HPDB focused on the results of using NFPMs and said that:

“The use of NFPMs encourages an organisation that wants to be the head of its class to adopt the most ATs in the world.”

8.7.3 Positive Effects on FPMs

The DMMB, MMP, DIA and AUB stressed that management's objective of focusing on NFPMs is to create a good reputation for the Bank and to increase its market share which in turn will improve the Bank's profitability and customers' deposits especially because the Bank was a new organisation in a competitive environment. The HAO, DMMB and HCAB stated that the management was aware about the positive impact of NFPMs on the Bank's long-term profitability because of its long-term operational experience. However, this impact was not during the early stage of concentrating on NFPMs. It took a few years. They confirmed that and added that this technique (NFPMs) needs substantial amount of capital expenditure in the short-term to adopt advanced technological techniques and to train employees how to use and deal with them. They asserted that this in turn could lead to a decrease in short-term profitability but then it will increase gradually.

The GMB, ACMB, ACA and HCAA confirmed that focusing on and measuring activities such as service quality, delivery and customer satisfaction would improve and enhance the organisation's customer satisfaction and loyalty and then the FP (profitability). This in turn would improve the organisation's reputation and would

give a good image of the organisation to its stakeholders (such as community, and shareholders). The GMB supported this point by saying:

“The Bank has concentrated on NFPMs from its establishment and we realise profitability has been increased year-to-year. Therefore, I confirm that there is a positive impact of NFPMs on long-term profitability.”

The HFAD confirmed that the NFPMs are the producers of profitability. The HFAD stated that:

“According to my operational experience in the banking industry, I believe that the concentration on NFPMs lead a bank to improve and achieve good financial results (profitability).”

The HPDB mentioned that the Bank was established in a competitive environment which has driven its management to focus on enhancing service quality, delivery and customer satisfaction because it was convinced that these factors are the main drivers that could support the Bank to survive in such an environment and also they are the real producers of profitability. He added that the Bank has invested in updating computer hardware and software expenditure, however, it has still achieved an increase in its profitability. The HPDB stated that:

“In my experience, I think that, the more the organisation concentrates and uses NFPMs the more it will use advanced technological techniques which in turn would lead it to achieve a higher level of service quality and customer satisfaction and loyalty, and consequently this will certainly lead to an increase in profitability period by period. The management’s interest in non-financial activities and using NFPMs has resulted in an increase in its year-to-year profitability.”

The DMMB, MMP, DIA and AUB argued that there is a direct relationship between the NFPMs and FPMs. The DIA and MMP mentioned that the improvement of the Bank’s critical success factors such as service (product) quality and on-time delivery will enhance customer satisfaction and then strengthen

customer loyalty which in turn will directly lead to an increase in the Bank's profitability. If an organisation's management wants to achieve a profit then it should enhance its product quality and on-time delivery. The AUB stated that:

“A higher level of service quality and on-time delivery will lead to an improvement in customer satisfaction and an increase in customer loyalty, this in turn will enhance the Bank's reputation and raise the Bank's market share and the ultimate result will be better FPMs such as profitability and customers' deposits.”

There is general agreement among interviewees that the ultimate result of using NFPMs was the enhancement of the Bank's reputation, market share and profitability.

8.7.4 Capital Expenditure

The HAO and AUB stated that the concentration on and using NFPMs cost Bank D a relatively large amount of capital expenditure in introducing the ATs and training programmes aimed at building service quality and customer satisfaction. The AUB reported that:

“Building customer satisfaction and gaining community acceptance for a new organisation in a competitive environment were not easy tasks. Bank D's management focused on NFPMs at the beginning, costing it a relatively large amount of capital expenditure.”

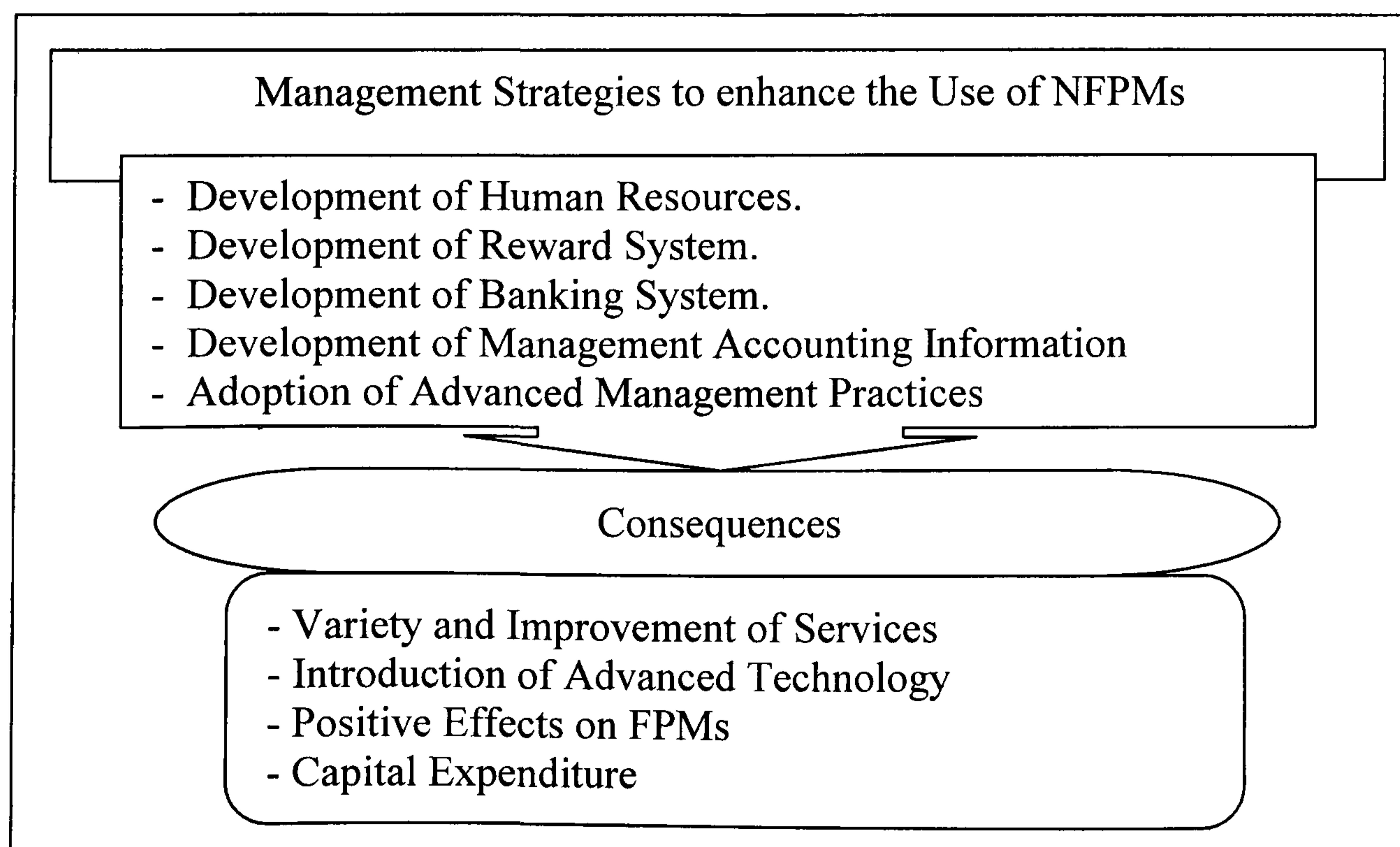
The DMMB asserted that the developments that Bank D has adopted such as the new computer hardware and software, opening new agencies with AT, internal and external training programmes for the staff have cost the Bank thousands of Dinars to enhance the Bank's service quality, satisfy employees, attract customers and obtain community acceptance. He confirmed that this capital expenditure was a foundation stone for using NFPMs which in turn will deliver the best results in terms of the long-term FP (profitability).

The HCAB and ACA pointed out that since the establishment of the Bank the management had spent thousands of Dinars in adopting long-term projects such as adopting and updating computer hardware and software, building new units, redesigning the Bank's organisational structure and other developments which would enhance the Bank's critical success factors such as service quality, customer satisfaction and community acceptance. The ACA stated that:

“The Bank made substantial capital expenditure investing in AT. Also it is still spending capital expenditure for adopting other capital projects such as ATMs which would enhance the Bank's critical success factors.”

The ACMB and HPDB believed that the management's interest in enhancing the Bank's critical success factors to ensure the Bank's long-term success had caused the Bank to use a huge amount of its capital expenditure in applying AT and to provide the best service. They confirmed that the cost was necessary and it will reflect in the long-term profitability. Figure 8-10 shows the management strategies adopted in conjunction with the use of NFPMs and the related consequences.

Figure 8-10: Consequences of Management Strategies Adopted in Conjunction with the Use of NFPMs



8.8 RESEARCHER'S MODEL FOR BANK D

As mentioned earlier, Strauss and Corbin's paradigm (1990 and 1998) model was used in analysing the data of this case study. The model assists the researcher to develop and relate the categories to the main phenomenon under investigation, which is the use of NFPMs. According to this model, labels are grouped and related to the phenomenon under investigation in terms of causal conditions, context, intervening conditions, action/interaction strategies, and consequences. The researcher will be able to generate hypotheses as a consequence of specifying the relationship between the emerging categories by using Strauss and Corbin's paradigm. The researcher will discuss the model components in detail in the following subsections from 8.8.1 to 8.8.5. Figure 8-11 shows the researcher's model for Bank D.

8.8.1 Causal Conditions

The term "causal conditions" is used to refer to the events or happenings that make the phenomenon take place. In this case study a number of events have caused the occurrence of the phenomenon under investigation (NFPMs). These causal conditions which have driven Bank D's management to adopt and use the NFPMs were explained in section three of this case study. These causal conditions included the following:

- Limitations of FPMs.
- Existing and Future Competition.
- Management's Knowledge of Relationship between NFPMs and FPMs.
- Demanding Customers.

8.8.2 Context

The term "context" is used to refer to a particular set of characteristics in which the phenomenon has occurred. The researcher has made adjustment for the context to include mainly internal organisational influences that surround the phenomenon

within the Bank. The researcher named the contextual conditions as internal environmental factors. In section four, the researcher has specified Bank D's internal environmental factors that relate to the use of NFPMs. These internal environmental factors included the following:

- Operational Experience and Competence of Management.
- Level of Management.
- Top Management's Interference.

Internal environmental factors may have a positive or negative effect on the phenomenon. The Bank's management experience and competence positively influenced management's interest in using NFPMs. In this case the researcher has specified that the interference of management could have a positive impact on the use of NFPMs but the over-interference of management could have a negative impact. The internal environmental factors have their effects also in causal conditions such as management operational experience and competence which might facilitate management's knowledge of the relationship between NFPMs and FPMs. They also may enhance Bank D's management strategies, for example the internal environmental factors such as management operational experience and competence may be behind the strategies that management adopted such as the introduction of AT.

8.8.3 Intervening Conditions

Intervening conditions are general conditions that impact on the phenomenon and the strategies that an organisation could implement. The researcher defined intervening conditions as environmental conditions that surround the phenomenon and have an impact on the phenomenon and organisational strategies. The researcher named intervening conditions as external environmental factors. In section five, the researcher has specified several labels representing the external environmental

factors that influenced the implementation of NFPMs. These external environmental factors are:

- Central Bank of Libya's Regulations.
- Weakness of Infrastructure.
- General Public's Lack of Banking Knowledge.

In this case the external environmental factors have impacted on the phenomenon and the Bank's strategies.

8.8.4 Action/Interaction Strategies

Bank D's management generated and used a number of strategies that enhanced the use of NFPMs. In section six, the researcher has specified the action/interaction strategies that Bank D's management has used in response to the use of NFPMs.

Bank D's management strategies included the following:

- Development of Human Resources.
- Development of Reward System.
- Development of Banking System (Operating, Information and Reporting System).
- Development of Management Accounting Information.
- Adoption of Advanced Management Practices.

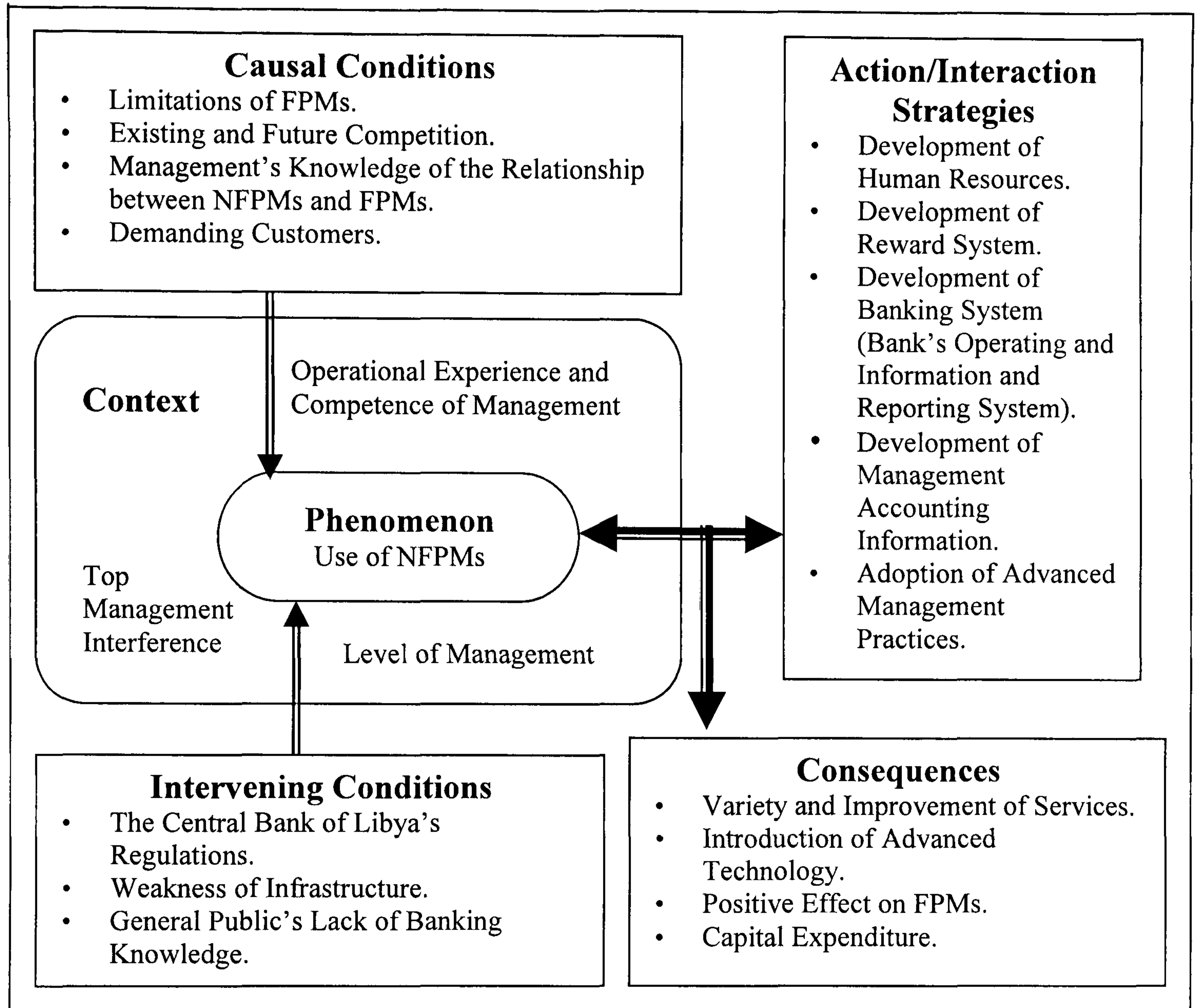
8.8.5 Consequences

Consequences are the outcomes of action/interaction strategies that have been implemented to manage the phenomenon under investigation. In section seven, the researcher has specified a number of consequences emerging from Bank D's management strategies concerning the use of NFPMs. These consequences included the following:

- Variety and Improvement of Services.
- Introduction of Advanced Technology.
- Positive Effects on FPMs.

- Capital Expenditure.

Figure 8- 11: The Researcher Model for Bank D.



8.9 HYPOTHESES

This case study was conducted in a private commercial bank. This Chapter started with the background of the Bank and discussed in-depth the use of NFPMs in the LCBS. The motives for using NFPMs, internal and external environmental factors, action/interaction strategies and related consequences have been discussed in the preceding sections. The researcher used the grounded theory approach developed by Strauss and Corbin (1990 and 1998) during the case analysis. The in-depth analysis processes resulted in an identification of the major relationships between the emerged categories and the phenomenon under investigation. Hypotheses are

generated from these relationships between the emerged categories (see figure 8-11).

The substantive hypotheses that emerged from the analysis are listed below:

- 1) The limitations of FPMs are one of the major motives leading to a bank's use of NFPMs (see subsection 8.3.1 and figure 8-1).
- 2) The competitive environment is one of the main motives for managers in a bank using NFPMs (see subsection 8.3.2 and figure 8-2).
- 3) Management's knowledge of the relationship between NFPMs and FPMs is one of the major motives leading to a bank's use of NFPMs (see subsection 8.3.3 and figure 8-3).
- 4) Demanding customers are one of the major motives leading to a bank's use of NFPMs (see subsection 8.3.4 and figure 8-4).
- 5) Operational experience and competence of management and top management's interference positively affect a bank's use of NFPMs (see subsections 8.4.1 and 8.4.3 and figure 8-6).
- 6) Lower level managers in a bank tend to use NFPMs more than middle and higher level managers do (see subsection 8.4.2 and figure 8-5).
- 7) Top management's over-interference in the operational functions affects negatively a bank's use of NFPMs (see subsection 8.4.3 and figure 8-6).
- 8) Some of the Central Bank's regulations, over-control and interference of the Central Bank in a bank's management, weakness of infrastructure and the general public's lack of banking knowledge affect negatively a bank's use of NFPMs (see subsections 8.5.1, 8.5.2 and 8.5.3 and figure 8-7).
- 9) The development of human resource strategies to be more service-oriented is associated with a bank's use of NFPMs (see subsection 8.6.1 and figure 8-8).
- 10) The development of the reward system to be linked with non-financial performance is associated with a bank's use of NFPMs (see subsection 8.6.2).
- 11) The development of the banking system (operating, information and reporting system) is associated with a bank's use of NFPMs (see subsection 8.6.3).
- 12) The development of a bank's management accounting information is associated with its use of NFPMs (see subsection 8.6.4).
- 13) The adoption of advanced management practices is associated with a bank's use of NFPMs (see subsection 8.6.5 and figure 8-9).

- 14) Use of NFPMs encourages a bank to diversify and improve its range of services (see subsection 8.7.1 and figure 8-10).
- 15) Use of NFPMs encourages a bank to adopt advanced technology (see subsection 8.7.2 and figure 8-10).
- 16) Use of NFPMs improves a bank's profitability, customers' deposits and other FPMs in the long-term (see subsection 8.7.3 and figure 8-10).
- 17) Use of NFPMs encourages a bank to increase its capital expenditure (see subsection 8.7.4 and figure 8-10).

8.10 GENERAL CONCLUSION FROM THE FINDINGS OF THE FOUR CASE STUDIES

The analysis of the data according to the coding procedures of the Strauss and Corbin (1990 and 1998) grounded theory approach and the research objective allowed five main themes to emerge during the four case studies namely, firstly, motives for using NFPMs, secondly, internal environmental factors that influence the use of NFPMs, thirdly, external environmental factors influencing the use of NFPMs, fourthly, strategies that management adopted in conjunction with NFPMs and fifthly, consequences of implementation and use of NFPMs. These themes appeared in the hypotheses emerging from the four case studies. The next Chapter will provide general background information about the four case studies and explain the procedures followed in the development of the formal hypotheses (main findings of this research study).

CHAPTER 9

CROSS CASE ANALYSIS

9.0 INTRODUCTION

The four case studies conducted for this research study and presented in Chapters five to eight were analysed based on the grounded theory approach informed by Strauss and Corbin (1990, 1998). The use of grounded theory and case studies in this research study enabled the researcher to go to the research site without having any hypothesis, to analyse the data according to a structured set of coding procedures and to allow hypotheses to emerge from the data of each case study. According to Strauss and Corbin (1990 and 1998) the hypotheses that have emerged from each case study would be considered as substantive theory. In this Chapter the cross case analysis of the four case studies is undertaken to formulate the formal hypotheses by comparing the similarities and differences of the findings of the four case studies. These formal hypotheses can be tested in future research.

Section one of this Chapter summarises some background information about the four case studies. The researcher's cross case analysis will be discussed in section two. Section three examines the substantive hypotheses which relate to the motives for adopting and using NFPMs. Section four analyses the substantive hypotheses which relate to the internal environmental factors that have an influence on the use of NFPMs. Section five discusses the substantive hypotheses which relate to the external environmental factors that affect the Banks' use of NFPMs. Section six discusses the substantive hypotheses of the four case studies concerning the management strategies adopted in conjunction with the use of NFPMs. Section seven outlines the substantive hypotheses that related to the consequences of management strategies. The researcher's model for all four case studies in terms of Strauss and

Corbin's paradigm will be presented in section eight. Finally, a general summary of the whole Chapter is presented in the last section.

9.1 CASE STUDIES' BACKGROUND INFORMATION

The case studies (referred to in this Chapter as Bank A, B, C and D) were analysed individually in Chapters 5, 6, 7 and 8. Table 9-1 gives comparative information on the interviews and interviewees. Table 9-2 summarises the characteristics of the case studies including establishment date, total investments, total assets, shareholders' equity, capital adequacy and size in terms of the number of employees and branches and agencies. Furthermore, Table 9-3 shows some internal characteristics for each case study such as ownership, environment and management.

Table 9-1: Detailed Information about Interviews and Interviewees

Case Study	On-site Period	Number of Interviewees	Number of Interviews	Interviewees' Experience	Interviewee's Job		
					Manager/ Deputy Manager	Accountant	Auditor
A	Over 7 Weeks	13	16	More than 3 Years	10	2	1
B	Over 7 Weeks	17	18	More than 3 Years	11	2	4
C	Over 6 Weeks	17	20	More than 3 Years	13	1	3
D	6 Weeks	13	15	More than 3 Years	10	2	1

Table 9-2: Characteristics of the Four Banks

Case Study	Establishment Date	Total Investments (Million LD)	Total Assets (Million LD)	Shareholders' Equity (Million LD)	Capital Adequacy	Size of Bank	
						No of Employees	No of Branches and Agencies
A	In the mid 1990s	Above 30	Under 2000	Under 50	Between 8%-12%	Under 300	Under 50
B	In the beginning of 1970s	Under 30	Over 2000	Above 100	Over 12%	Over 2000	Over 50
C	In the late 1960s	Under 30	Over 2000	Above 100	Over 12%	Over 2000	Over 50
D	In the late 1990s	Under 30	Under 2000	Under 50	Between 8%-12%	Under 300	Under 50

See Appendix: 3-4 for the Average Exchange Rates between the Libyan Dinar (LD) and the UK Pound (£).

Table 9-3: Internal Aspects of the Four Banks

Case Study	Kind of Ownership	Environment	Management	Chairman is also General Manager	Use of NFPMs	Bank's Operational Boundaries
A	Private	Competitive	Stable	Yes	Used/ No Model	Different areas in the Libyan Market
B	Public/State	Transition from Monopolistic to Competitive	Stable	Yes	Operational Measurements/ No Model	Different areas in the Libyan Market
C	Public/State	Transition from Monopolistic to Competitive	Stable	Yes	Used/ No Model	Different areas in the Libyan Market
D	Private	Competitive	Stable	No	Operational Measurements/ No Model	Tripoli

9.2 CROSS CASE ANALYSIS

The researcher will compare the final findings (substantive hypotheses) of the four case studies in terms of similarities and differences in order to develop a representative theoretical framework and formulate a formal theory. Similarities among the four case studies will be taken as hypotheses that emerge from these case studies and therefore give a strong basis for the emerging theory. Differences need more consideration and a definite strategy. Therefore, any hypothesis mentioned in more than two case studies will be developed to be a formal hypothesis. Any hypothesis mentioned within only one case study will remain as a substantive hypothesis and will not be considered as a part of the formal theory. However, any hypothesis mentioned in two case studies is controversial and requires from the researcher more review before being carried forward to become a formal hypothesis. Therefore, the researcher will look for any evidence within the other two case studies that would strengthen or weaken the development of this substantive hypothesis to become a formal hypothesis. If the researcher finds no contradictory evidence in the other two case studies then this hypothesis will be considered as a formal hypothesis.

On the other hand, if the researcher finds conflicting evidence against this hypothesis in another case study then the hypothesis would stay as a substantive hypothesis and would then be a subject for future research. The above is the researcher's strategy which will help her to work on a clear basis during her cross case analysis.

9.3 FORMAL HYPOTHESES OF THE MOTIVES FOR USING NFPMS

In this section the researcher will identify the similarities and differences between the four case studies concerning the motives for using NFPMS in order to produce a set of formal hypotheses emerging from the four case studies' substantive hypotheses. Table 9-4 shows the major causal conditions labels that have been stated by interviewees in the four case studies.

Table 9-4: Major Causal Conditions Labels

No	Labels	Case Study			
		A	B	C	D
1	Limitations of FPMs	√	√	√	√
2	Competitive Environment	√	√	√	√
3	Management's Knowledge of the Relationship between NFPMS and FPMs	√	√	√	√
4	Demanding Customers	√	√	√	√
5	Nature of Banking Industry	√	√		
6	Market Strategy	√			

9.3.1 Similarities of the Motives for Using NFPMS

The similarities of the substantive hypotheses that the researcher identified in this section are the limitations of FPMs, competitive environment, management's knowledge of the relationship between NFPMS and FPMs and demanding customers. These hypotheses have unanimous agreement in the four case studies as being motives for a bank's use of NFPMS. Each hypothesis will be discussed in more detail in the following subsections from 9.3.1.1 to 9.3.1.4.

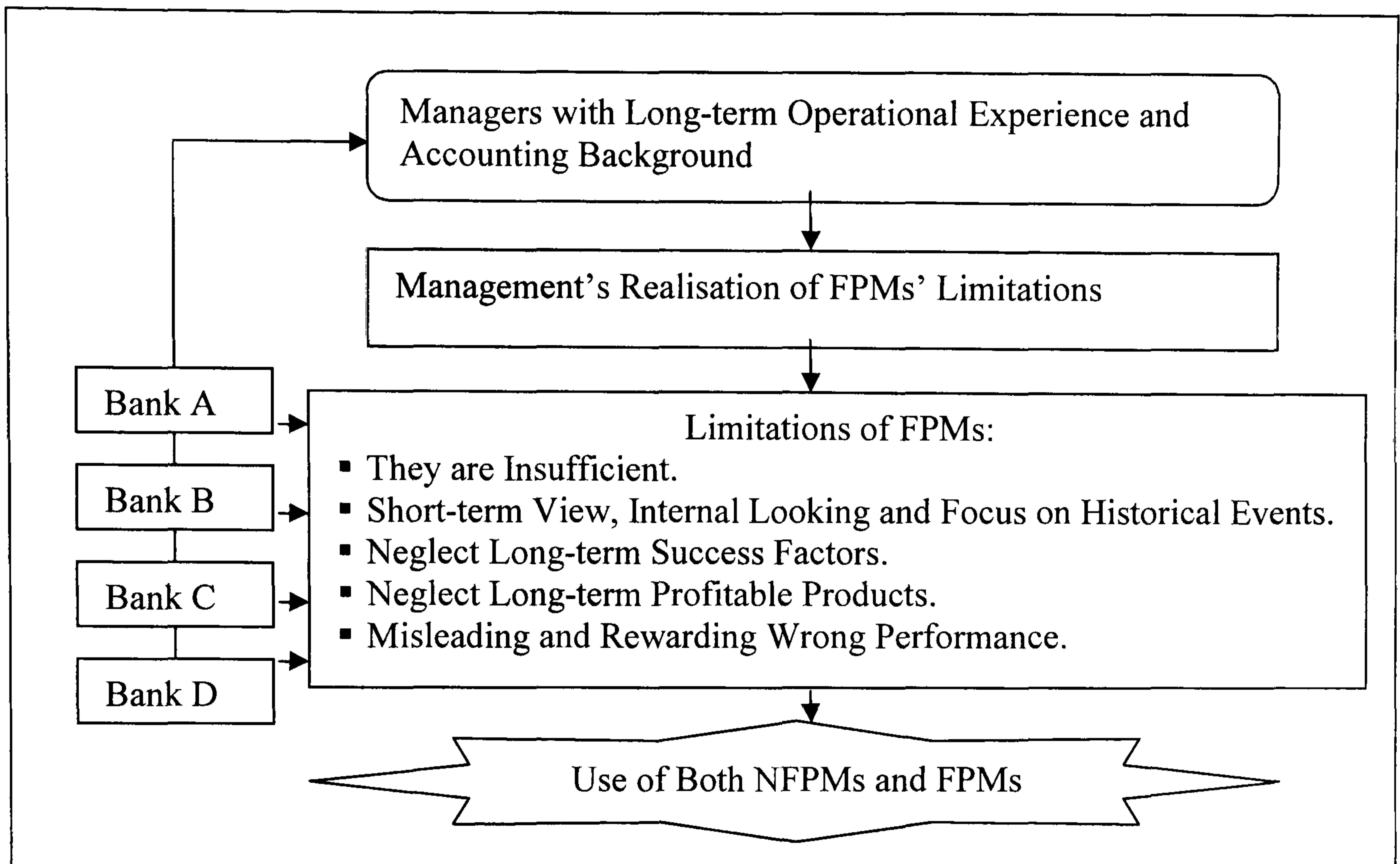
9.3.1.1 Limitations of FPMs

Many interviewees in the four case studies stated that FPMs are insufficient measurements for assessing the real performance of a bank in the new competitive environment. The interviewees in the four case studies criticised the FPMs as a short-term view, internal looking, misleading and rewarding wrong performance, focusing too much on historical events and neglecting long-term profitable projects. They confirmed that FPMs do not evaluate and monitor the bank's critical success factors and they thought that NFPMs (being forward looking) are more suitable for assessing, evaluating and monitoring the bank's real performance in a competitive environment. The majority of interviewees across the four case studies asserted that managers' long-term experience in the banking industry and their accounting background helped them to understand and realise the deficiencies of FPMs which encouraged them to use NFPMs.

The above evidence from the four case studies indicated that the limitations of FPMs influenced the use of NFPMs. Therefore, the first formal hypothesis is:

H₁ *“The limitations of FPMs are one of the major motives leading to a bank's use of NFPMs.”*

Figure 9-1 summarises manager's understanding of FPMs' limitations and the use of NFPMs.

Figure 9-1: Limitations of FPMs and the Use of NFPMs

9.3.1.2 Competitive Environment

The competitive environment played a significant role in encouraging the use of NFPMs as mentioned by the interviewees in the four case studies. The Libyan banking market had changed from monopoly (or semi-competitive with five SCB) to be more competitive through allowing businessmen to open private banks and through reducing both government ownership and protection for the SCBs. This competition enhanced the four Banks' desire to focus on developing their strategies for improving their critical success factors such as service quality, customer satisfaction and on-time delivery and measuring them using NFPMs. Moreover, Libya is preparing to join the WTO in 2007 which is expected to make the environment more aggressive. Therefore, the CBL wished to develop the banking market by amending some banking laws and regulations and issuing new ones.

There was more than one type of competition as mentioned by interviewees in the four case studies. The establishment of Bank A has made the environment more

competitive. In Bank A there were three types of competition mentioned by the interviewees namely the existing competition, future international competition and internal competition. Bank A's interviewees confirmed that the forthcoming future international competition has encouraged Bank A's strategy to be focused on its long-term success drivers to counter any foreign competitor.

Bank B and Bank C used to work within a monopolistic market (that was dominated by the SCBs) until the establishment of the private banks which have made the market more competitive. The interviewees of Bank B mentioned that there were two types of competition namely the existing and future international competition. The interviewees of Bank C divided the competition into three types namely the existing competition, future international competition and internal competition. Bank B's and Bank C's interviewees confirmed that the future international competition will be more aggressive because of the entry of foreign banks into the Libyan banking market. They also registered their fears of future international competition that was coming with Libya's agreement to affiliate to the WTO.

Bank D was established in a competitive environment. Bank D's interviewees also confirmed their fears of the local and future international competition which were the main motives for the Bank's use of NFPMs. Therefore, the local and future international competition has encouraged the four Banks' managements to concentrate on aspects such as service quality, on-time delivery, customer satisfaction, employee satisfaction and community acceptance and measure them using NFPMs.

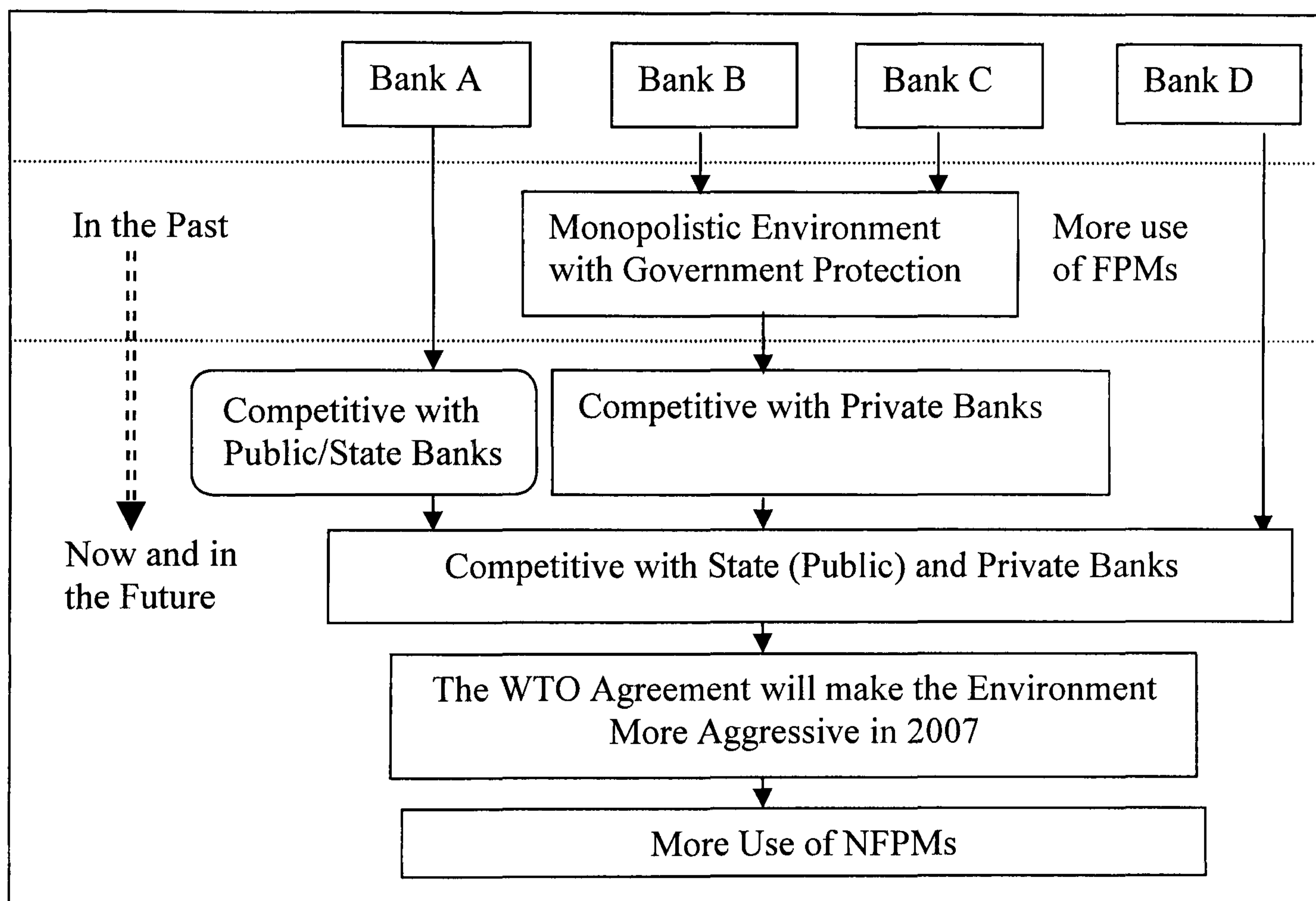
The interviewees across the four case studies believed that there is a relationship between the kind of environment and the kind of PMs - a monopoly encourages management to use FPMs. They confirmed the more competitive the environment

becomes the more management needs to use more and more NFPMs. In all four case studies the majority of interviewees regarded competition as the main driver for their Banks using NFPMs. Therefore, the second formal hypothesis is:

H₂ *“A more competitive environment is one of the main motives for managers in a bank using NFPMs.”*

Figure 9-2 summarises the relationship between the market environment for Banks A, B, C and D and their use of NFPMs.

Figure 9-2: Market Environment and Performance Measurements



9.3.1.3 Management's Knowledge of the Relationship between NFPMs and FPMs

The management's knowledge of the relationship between NFPMs and FPMs was a major issue that was mentioned by interviewees in all four case studies. They believed that the positive relationship between NFPMs and FPMs was the main driver that has encouraged managers to use NFPMs. Moreover, the majority of

interviewees who mentioned this motive across the four case studies had a general consensus about managers' awareness of the positive impact of NFPMs (such as service quality and customer satisfaction) on FPMs (such as profitability and customers' deposits) and this was attributed to their stability, to their long-term operational experience, to their visits to correspondent banks and to modern practices in the banking industry.

The majority of Bank A's and Bank C's interviewees highlighted the educational level, competency and long-term operational experience of the Chairmen/General Managers within banks inside and outside Libya which have played a great role in their understanding of the relationship between NFPMs and FPMs which in turn helped them to encourage their Banks' managers and employees to focus on NFP and to use NFPMs.

The top management's understanding of the relationship between NFPMs and FPMs was a controversial subject among the interviewees of case study B. Some of the interviewees reported that top managers were unable to understand the relationship between NFPMs and FPMs at an early stage because of their limited operational experience. The majority of the Directors came from outside the banking sector and did not have sufficient operational experience to understand such a relationship easily. However, recently, the Board of Directors understood and absorbed the positive relationship between NFPMs and FPMs. This understanding convinced top management of the importance of using NFPMs. Top management's knowledge of the relationship between NFPMs and FPMs was attributed to its competitors who use such measurements and have achieved outstanding financial results, to the visits to correspondent banks and modern practices.

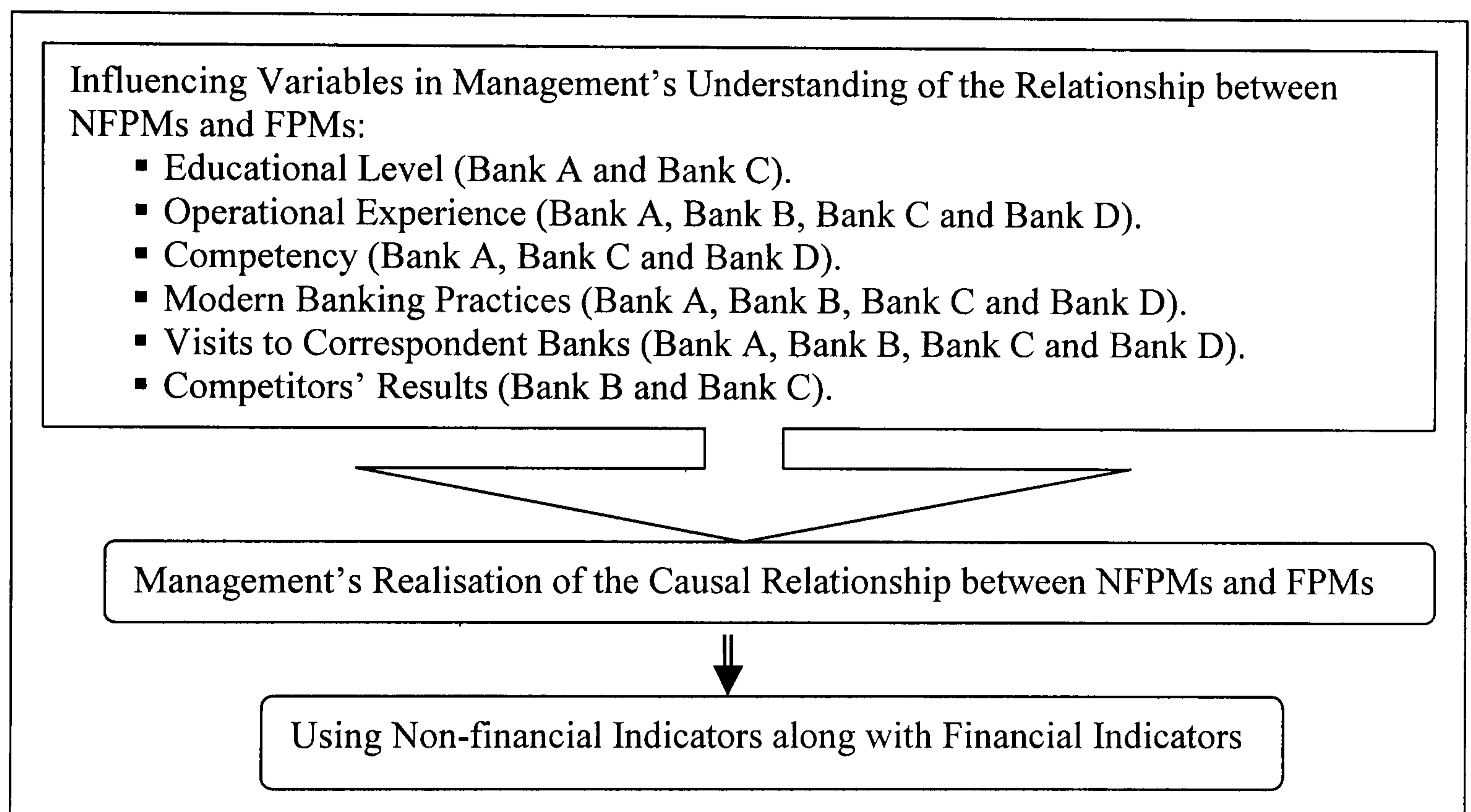
The above evidence indicated that the majority of the interviewees across the four case studies believed that the managers' recognition of the NFPMs' causal

relationship with FPMs was a main driver encouraging the use of NFPMs. Therefore, the third formal hypothesis is:

- H₃** *“Management’s knowledge of the relationship between NFPMs and FPMs is one of the major motives leading to the use of NFPMs in a bank.”*

Figure 9-3 demonstrates the influencing variables in management’s appreciation of the relationship between NFPMs and FPMs and the use of NFPMs.

Figure 9-3: Management’s Appreciation of the Relationship between NFPMs and FPMs



9.3.1.4 Demanding Customers

The change in customers’ attitudes and behaviour was one of the most important issues mentioned by the interviewees across the four case studies as a motive for using NFPMs. The interviewees mentioned that since the late 1990s, customers’ attitudes and behaviour have changed significantly from being simplistic to being more demanding. This change in customers’ behaviour was attributed to the changes in the Libyan economic environment, openness of society and TV channels.

On one hand, the interviewees in the four case studies suggested that in a competitive environment with demanding customers, organisations should specify their customers' needs and expectations and use more service oriented measurements of performance (NFPMs) to enhance their reputation in the market and increase their market share. On the other hand, they confirmed that the appearance of demanding customers motivated the Banks' managements to direct their strategies towards customers' needs and expectations and to develop their management, accounting and technological systems to be more advanced. In Bank B interviewees clarified that the traditional banking system was designed a long time ago without any care for customers' needs and expectations and, therefore, was financially oriented. However, the new regulations and strategies of the CBL have encouraged the management of the Bank to update its banking system to provide the latest banking services in the world and to be able to achieve customer satisfaction because customers no longer are simple and customer satisfaction is a critical factor for long-term success.

From the interviewees' point of view across the four case studies the managements of these Banks believe that the use of NFPMs is an appropriate technique for dealing with those more demanding customers. Consequently, they decided to increase the use of NFPMs.

Finally, the interviewees across the four case studies agreed there were changes in customers' behaviour which have resulted in the appearance of demanding customers who in turn shifted managers' attention to use NFPMs and accordingly the fourth formal hypothesis is:

H₄ *“Demanding customers are one of the major motives leading to the use of NFPMs in a bank.”*

9.3.2 Differences in the Motives for Using NFPMs

Across the four case studies, the researcher found two hypotheses (related to the motives for using NFPMs) emerging from only one or two case studies (see Table 9-4). One of these hypotheses is market strategy which emerged from only one case study (Bank A). According to the researcher's cross case analysis, this hypothesis will not become a formal hypothesis but it will remain as a substantive hypothesis for its case study. The second hypothesis emerged from two case studies namely Bank A and Bank B. This hypothesis concerns the nature of the banking industry which will be discussed in more detail in the following subsection to decide whether it will become a formal hypothesis or not according to the researcher's cross case analysis.

9.3.2.1 Nature of Banking Industry

The nature of the banking industry was considered to be one of the motives for using NFPMs as mentioned by the interviewees of case studies, A and B. Bank A is private and it was established more than 10 years ago in a competitive environment. Bank B is public and it was working in a monopolistic or semi-competitive environment for a long time and from the mid 1990s its environment had changed to be more competitive. The interviewees of Bank A and Bank B who mentioned this motive asserted that there is a relationship between the nature of the banking industry and the use of NFPMs. Bank A's interviewees emphasised that the nature of the banking industry is service oriented and depends on human resources and this forced Bank A's management to be very aware about achieving a high level of quality, on-time delivery, customer satisfaction and loyalty and employee satisfaction and loyalty. Therefore, the nature of the banking industry is one of the motives for using NFPMs. Bank B's interviewees confirmed that the banking industry is one of the industries that depends on the services provided by human being to human being. The success

and failure of this industry depends on the level of customer satisfaction and employee satisfaction. Therefore, the nature of the banking industry demands the use of NFPMs.

Bank C's and Bank D's interviewees did not mention that the nature of the banking industry is a motive for using NFPMs. Although they mentioned that the banking industry is service oriented and mainly depends on both customer and employee satisfaction and loyalty during their discussion about other points but not as a motive for the use of NFPMs.

This substantive hypothesis arose from two Banks, A and B, and there is no contradictory evidence in the other two Banks, C and D, about such a hypothesis. Therefore, this hypothesis will be accepted as a formal hypothesis. The fifth formal hypothesis is:

H₅ *“The nature of the banking industry as a service oriented industry is one of the major motives leading to the use of NFPMs in a bank.”*

9.4 FORMAL HYPOTHESES OF INTERNAL ENVIRONMENTAL FACTORS AFFECTING THE USE OF NFPMs

In this section the researcher will discuss the similarities and differences between the four case studies concerning the internal environmental conditions that influence the use of NFPMs in order to generate a set of formal hypotheses from the four case studies' substantive hypotheses according to the researcher's cross-case analysis. Table 9-5 summarises the major internal environmental conditions mentioned by interviewees in the four case studies.

Table 9-5: Major Internal Environmental Conditions

No	Labels	Case Study			
		A	B	C	D
1	Level of Management	√	√	√	√
2	Operational Experience of Management	√	√	√	√
3	Competence of Management	√	√	√	√
4	Management's Authority		√	√	
5	Top Management's Interference	√		√	√
6	Stability of Management	√	√	√	
7	Collective working group	√		√	
8	Top Management's Over-interference				√
9	Flexible Organisational Structure	√			
10	Long-term Objectives	√			

9.4.1 Similarities of the Internal Environmental Conditions Affecting the Use of NFPMs

The researcher identified across all four case studies three similar internal environmental factors that either have negative or positive influences on the use of NFPMs. These similarities are level of management, operational experience of management and competence of management which have agreement in the four case studies as being internal environmental conditions affecting a bank's use of NFPMs. Each condition will be discussed in more detail in the following subsections from 9.4.1.1 to 9.4.1.3.

9.4.1.1 Level of Management

The interviewees in all four case studies agreed that there is a relationship between a manager's position in a bank's hierarchy and the type of PMs used. The interviewees across the four case studies mentioned that NFPMs are used throughout the Banks' management levels. However, this use depends on each management level's characteristics which influence its preferences for a specific type of performance appraisal measurement. As one goes up to the top of the hierarchy, one finds that these managers depend more heavily on FPMs and use fewer NFPMs. Conversely, as one goes down to the lower management levels, these managers heavily use NFPMs.

They clarified that the lower (operational) management concentrates on non-financial information and measurement because this level is dealing directly with the introduction of services and communicates directly with customers. The middle level management uses more non-financial measurements than financial ones because of its work with operational units and the executive management uses a balance between NFPMs and FPMs but it tends to depend more on the FPMs because it deals directly and indirectly with the stakeholder groups (such as shareholders).

The above evidence indicated that the interviewees who mentioned this internal environmental factor across the four case studies had a general consensus that the level of management affects the type of PM used. Therefore, the researcher will accept level of management as a formal internal environmental condition influencing the use of NFPMs.

9.4.1.2 Operational Experience of Management

The majority of the interviewees across the four case studies agreed that the operational experience of management was an internal environmental factor influencing the use of NFPMs and they confirmed that there is a direct relationship between managers' operational experience and the adoption and use of NFPMs. They stated that wide operational experience of managers (operational, middle and executive) – that they developed from their work in different divisions and administrative levels in the banking sector over the long-term - was behind the creation of a suitable organisational environment for understanding the use of NFPMs. Operational experience enables managers to understand their operations and detailed processes and then how these should be measured. The interviewees concluded that operational experience of managers has a positive effect on the determination of their Banks' critical success factors and on their use of NFPMs. At

the same time, the interviewees confirmed that a lack of operational experience encourages managers to focus on FPMs and pay no or only a little attention to NFPMs.

The Chairman/General Manager's operational experience was a controversial subject among the interviewees. Bank A's, Bank C's and Bank D's Chairman/General Manager all have worked with banks for a long-time in different operational departments and administrative levels before each one became Chairman/General Manager. Therefore, they were described as possessing a lot of operational experience combined with a management and accounting background which led them to pay attention to these operational measurements (NFPMs) and use them in assessing and evaluating the performance of their Banks' units. Bank B's Chairman/General Manager, when he started with this Bank as Chairman/General Manager, at that time, he did not have sufficient operational experience to understand the detailed procedures of the banking business because he came from outside the banking sector. This Chairman/General Manager's lack of operational experience had caused his management to rely on FPMs. This characteristic negatively affected the Bank's use of operational measurements in the past but this Bank's interviewees confirmed that this Chairman/General Manager has been in post now for more than 13 years and has developed his operational experience in the banking world and recently he has used more NFPMs.

From the interviewees' point of view the operational experience of management influenced its use of NFPMs. A management with long-term operational experience would implement more NFPMs. Conversely, a management with little operational experience would rely on FPMs. A's, B's, C's and D's interviewees agreed that the wide and long-term operational experience of management had a positive impact on the use of NFPMs. Therefore, the researcher concludes that operational experience

had a positive impact on management's use of NFPMs and, therefore, it will be carried forward as a formal internal environmental condition influencing the use of NFPMs.

9.4.1.3 Competence of Management

The interviewees across the four case studies believed that there was a direct relationship between the competence of management and its interest in adopting NFPMs. They asserted that management's competence played an essential role in its interest in adopting the newest technology and services in the banking industry to increase quality of service and customer satisfaction which led to more use of NFPMs.

The majority of the interviewees across the four case studies confirmed that these managers, who spent time moving through the operational divisions and administrative levels developing themselves, were viewed as competent managers and this competence helped them to understand the advanced management, accounting and technological practices. It helped them to realise that NFPMs are good measurements to evaluate organisational performance.

In all four case studies the majority of interviewees agreed that the competence of management had a positive effect on their Banks' use of NFPMs. Therefore, the researcher considers the competence of management as a formal internal environmental condition influencing the use of NFPMs.

9.4.2 Differences in the Internal Environmental Conditions Affecting the Use of NFPMs

Across the four case studies, the researcher identified seven hypotheses emerging from only one, two or three case studies and related to the internal environmental conditions affecting the use of NFPMs (see Table 9-5). Three of them were

mentioned in only one case study. These are top management's over- interference (Bank D), flexible organisational structure (Bank A) and long-term objectives (Bank A) which will not be forwarded as formal conditions but they will remain as substantive conditions for their case studies. Two further differences were mentioned in three case studies. These are top management's interference (Banks A, C and D) and stability of management (Banks A, B and C) and both will be forwarded as formal conditions. The remaining two substantive internal environmental conditions were mentioned in two case studies. These two are management's authority (Bank B and Bank C) and collective working group (Bank A and Bank C). The researcher will apply her cross case analysis to decide whether they will be forwarded as formal internal environmental conditions for a bank's use of NFPMs or not. Each condition will be discussed in more detail in the following subsections from 9.4.2.1 to 9.4.2.4.

9.4.2.1 Authority of Management

The authority of management was considered to be one of the internal environmental conditions affecting the use of NFPMs as mentioned by the interviewees in two case studies (Bank B and Bank C). The interviewees of Bank B and Bank C who mentioned this condition asserted that managements of these Banks suffered from limited authority because of their subordination to the CBL and the Central Bank is also an important shareholder of these Banks. This limited authority had affected adversely the Bank's systematic use of NFPMs from an early stage.

Bank C's interviewees mentioned that, although the Bank's management has limited authority in managing and developing the Bank and although the Central Bank forced it to use FPMs in evaluating performance, Bank C was using some NFPMs in evaluating its units' performance for internal purpose without publishing these results. Bank B's interviewees mentioned that middle and operational

managers' operational experience and competence led them to use NFPMs to evaluate the performance of their units and in daily decision making. However, this use was unsystematic and just within their units.

The interviewees in Bank B and Bank C also emphasised that, recently, the CBL's new regulations and strategies gave the State banks' managements more authority to manage and develop their banks. This authority that managements now have, combined with their operational experience and competence, has played a big role in the implementation of advanced management, accounting and technological techniques aimed at improving and developing the Banks' critical success factors which in turn encouraged the Banks' managements to use NFPMs more systematically.

Bank A's and Bank D's interviewees did not mention the authority of management as an internal environmental condition affecting the use of NFPMs. This may be because they are private banks, just controlled by the CBL, and it may be that their Board of Directors has got wider authority than the State banks.

From the above discussion the authority of management as an internal environmental condition influencing the use of NFPMs was mentioned in two Banks, B and C, and there was no contradictory evidence in the other two Banks, A and D, about such a condition. Therefore, the authority of management will be accepted as a formal internal environmental condition affecting the use of NFPMs.

9.4.2.2 Top Management's Interference

Top management's interference was considered to be one of the internal environmental conditions influencing the use of NFPMs as mentioned by the interviewees in three case studies (Bank A, Bank C and Bank D). They confirmed that the Chairman/General Manager's interest in the Bank's long-term success

factors such as service quality, on-time delivery and customer satisfaction have driven him and his management to interfere in a lot of the operational processes. They thought this interference has encouraged the Bank's managers and employees to enhance the Bank's critical success factors and to use more NFPMs. The interviewees in these case studies attributed this interference to top managers' operational experience and competence and their management and accounting background which were behind their knowledge of the causal relationship between NFPMs and long-term FPMs and then their persistence in implementing these measurements (NFPMs).

In one case study (Bank D) a few interviewees referred to the over-interference of the General Manager that could sometimes negatively impact on the use of NFPMs. They mentioned that he interferes in the way that employees have to execute their tasks which hinders the employee's innovation and affects negatively employee satisfaction which in turn negatively impacts on customer satisfaction. Possibly, the General Manager's over-interference is because of the size of the Bank which is relatively small compared with the other three Banks and also may be because the Bank is still new and the General Manager thought that his interference is necessary at this stage. However, the majority of Bank D's interviewees confirmed that the General Manager's interference was an influencing factor behind the use of NFPMs.

Bank B's interviewees did not mention that top management interference is an internal environmental factor affecting the use of NFPMs and this may be because they were not facing noticeable interference from the Chairman/General Manager. From previous discussion this internal environmental condition is mentioned in three case studies (Bank A, Bank C and Bank D). Therefore, the researcher will accept top

management interference as a formal internal environmental condition affecting the use of NFPMs.

9.4.2.3 Stability of Management

The stability of management played a significant role in encouraging the use of NFPMs as mentioned by the interviewees in three case studies (Bank A, Bank B and Bank C). They confirmed that there is a relationship between the stability of management and the kind of PMs to be used.

The Libyan banks' recruiting policy for employees is appointments for the long-term and the Directors serve for a term of three years and it is permissible to reappoint the Chairman and members of the Board. The recruiting policy for (operational, middle and executive) managers is that they should spend a relatively long time working in the banking sector moving from one operational division to another and from one administrative level to another.

The interviewees in three case studies (Bank A, Bank B and Bank C) believed that management should be stable for the relatively long-term to work effectively because the stability of management is one of the fundamental factors encouraging managers to adopt a long-term vision and strategies which force them to take account of NFPMs. However, the short-term approach could drive managers to concentrate mainly on the activities that enhance their units' short-term financial figures (profitability) and reduce expenditure. They mentioned that the more stable management is, the more likely it is to concentrate on NFPMs. On the contrary, unstable management that just manages the organisation for the short-term – even if it has a good level of operational experience and competence - would focus more on FPMs and pay less attention to service quality and other non-financial factors

because these factors need more capital expenditure and their resulting positive effect on profitability needs a long time to appear.

Bank D's interviewees did not mention that the stability of management is an internal environmental factor affecting the use of NFPMs, although the Board of Directors have remained unchanged since the establishment of the Bank and the majority of the Bank's managers have been relatively stable during the life of the bank. This may be because the Bank is still relatively new in the Libyan banking market compared with the other three Banks.

From the interviewees' point of view the stability of management influenced its use of NFPMs. A's, B's and C's interviewees agreed that the more stable management is, the more likely it is to use NFPMs. Therefore, the stability of management will be forwarded as a formal internal environmental condition affecting the use of NFPMs.

9.4.2.4 Collective Working Group

The interviewees in Bank A and Bank C mentioned that their Banks' managements have encouraged the employees to work together as a collective team in each unit of the Bank and in the whole Bank because they think that a collective group is an influencing factor for enhancing the Bank's service quality, strengthening the bank's relationship with its customers and achieving competitive advantage. The interviewees confirmed that the idea of a collective working group was an influencing factor for creating a healthy organisational environment to use NFPMs.

Bank B's and Bank D's interviewees did not mention that the collective working group was an internal environmental condition affecting the use of NFPMs. This could be attributed to the Chairman/General Manager's characteristics. Bank A and Bank C have a Chairman/General Manager with a high level of education and wide

and long-term experience with banks in Libya and abroad. However, Bank B's and Bank D's Chairman/General Manager do not have a higher qualification and their experience is just within Libyan banks. Bank D's interviewees mentioned that their Bank's management has encouraged the employees to work together as a collective team in each unit of the bank and in the whole bank during their discussion about other points but not as an internal environmental condition affecting the use of NFPMs.

From the above discussion the collective working group was an important factor behind the enhancement of a bank's environment to encourage the use of NFPMs as mentioned by the interviewees in two Banks A, and C, and there was no contradictory evidence in the other two Banks, B and D, about such a condition. Therefore, the researcher will accept the collective working group as a formal internal environmental condition affecting the use of NFPMs.

Finally, from the discussion of this section the researcher can formulate the sixth, and seventh formal hypotheses concerning the internal environmental conditions affecting the use of NFPMs as follows:

- H₆** *“Lower level managers in a bank tend to use NFPMs more than middle and higher level managers do.”*
- H₇** *“Operational experience of management, competence of management, management with more authority, top management's interference, stability of management, and collective working group positively affect a bank's use of NFPMs.”*

9.5 FORMAL HYPOTHESES OF EXTERNAL ENVIRONMENTAL FACTORS AFFECTING THE USE OF NFPMs

In this section the researcher will discuss the similarities and differences between the four case studies concerning the external environmental conditions that influence the use of NFPMs in order to define a set of formal hypotheses from the four case studies' substantive hypotheses according to the researcher's cross-case analysis. Table 9-6 presents the major external environmental conditions mentioned by the interviewees in the four case studies.

Table 9-6: Major External Environmental Conditions

No	Labels	Case Study			
		A	B	C	D
1	Some of the Central Bank's Old Regulations.	√	√	√	√
2	Over-control and Interference of the Central Bank	√	√	√	√
3	New Regulations and Strategies of the Central Bank	√	√	√	
4	Information Shortage	√	√	√	
5	Weakness of Infrastructure	√		√	√
6	Traditional Educational System	√	√	√	
7	State Ownership		√	√	
8	General Public's Lack of Banking Knowledge	√			√
9	Uncertainty of Economic Environment	√		√	
10	Financial Mentality of Shareholders	√			

9.5.1 Similarities of the External Environmental Conditions Concerning the Use of NFPMs

The researcher identified the similarities of the substantive external environmental conditions that either have negative or positive influences on the use of NFPMs. Some of the Central Bank's old regulations and the over-control and interference of the Central Bank were similar conditions that have unanimous agreement in the four case studies. Each condition will be discussed in more detail in the following subsections in 9.5.1.1 and 9.5.1.2.

9.5.1.1 Some of the Central Bank's Old Regulations

The majority of the interviewees within the four case studies agreed that some of the State's old legislation and the Central Bank's old regulations were one of the external environmental factors that hindered the use of NFPMs. They asserted that some of the State's legislation and the Central Bank's regulations [such as the labour law number (15)1982 for the public banks and the regulation that prevents public organisations from opening accounts in private banks] restricted the development of a bank's critical success factors and in turn negatively impacted on management desire for using NFPMs at an early stage. In addition, the interviewees confirmed that such legislation and regulations encouraged management to use and depend on FPMs.

The interviewees' opinion was that some of the Central Bank's regulations are no longer suitable and negatively affect the management intention to implement and use NFPMs. Bank A and Bank D started working in a competitive market, whereas, for Bank B and Bank C, their environment had changed from monopolistic to competitive. This competitive environment helped managements to recognise that such legislation and regulations obstructed them from developing their Banks' critical success factors and use of NFPMs.

From the interviewees' point of view some of the Central Bank's old regulations had a negative effect on the management intention to implement and use NFPMs, therefore, the researcher considers some of the Central Bank's old regulations as a formal external environmental condition adversely affecting the use of NFPMs.

9.5.1.2 Over-control and Interference of the Central Bank

The majority of the interviewees across the four case studies agreed that the CBL's over-control and interference in directing banking transactions were one of the

external environmental factors that hindered the use of NFPMs. The interviewees in the four case studies mentioned many examples of the CBL's over-control and interference. For example, the Board of Directors of a bank has to get approval from the Central Bank to introduce any service, to open any new unit, to introduce any technique that aims to develop the bank and to set the services' price. The interviewees confirmed that the Central Bank's over-control and interference in the management of a bank hindered management's ability to enhance service quality and delivery and to satisfy its customers. The interviewees asserted the Central Bank's over-control and interference in the management of a bank as an external environmental factor affecting the use of NFPMs because they perceived their managements suffering from too much interference and over-control from the Central Bank's management.

From the interviewees' point of view the Central Bank's over-control and interference have negatively influenced the development of a bank's critical success factors and in turn the use of NFPMs. Therefore, the researcher considers the Central Bank's over-control and interference as a formal external environmental condition adversely affecting the use of NFPMs.

9.5.2 Differences in the Internal Environmental Conditions Concerning the use of NFPMs

Across the four case studies, the researcher found eight hypotheses emerging from only one, two or three case studies relating to the external environmental conditions that either negatively or positively influenced the use of NFPMs (see Table 9-6). One of these external environmental conditions was mentioned only in one case study (Bank A) namely the financial mentality of shareholders and, therefore, this substantive hypothesis will not be forwarded as a formal hypothesis but it will

remain as a substantive condition for its case study according to the researcher's cross-case analysis. Four further external environmental conditions were mentioned in three case studies. These conditions were the Central Bank's new regulations and strategies, (Banks A, B and C), information shortage (Banks A, B and C), weakness of infrastructure (Banks A, C and D), and traditional educational system (Banks A, B and C) and all will become formal conditions according to the researcher's cross-case analysis. The remaining three conditions were mentioned in two case studies. These three were State ownership (Bank B and Bank C), general public's lack of banking knowledge (Bank A and Bank D) and uncertainty of economic environment (Bank A and Bank C). The researcher will apply her cross case analysis to decide whether they will be forwarded as formal internal environmental conditions for a bank's use of NFPMs or not. Each condition will be discussed in more detail in the following subsections from 9.4.2.1 to 9.4.2.7.

9.5.2.1 New Regulations and Strategies of the Central Bank

The new regulations and strategies of the Central Bank were considered to be one of the external environmental conditions influencing the use of NFPMs as mentioned by the interviewees in three case studies (Bank A, Bank B and Bank C). The interviewees mentioned that since the 1990s, the new management of the Central Bank with its service-oriented mentality and the development of some of the State's legislation and strategies and the Central Bank's regulation [such as discharging the Bank's employees from decree (15)1982, the decree (1)1993, the affiliation to the WTO and Basle II which made the environment more competitive and it will be even more competitive in the near future] have encouraged the Banks' managements to adopt advanced management, accounting and technological practices such as NFPMs. The interviewees concluded that the new regulations and strategies of the

Central Bank were important factors in the trend towards adopting NFPMs for long-term success. However, D's interviewees mentioned that the new regulations and strategies of the Central Bank still had some ambiguity and contradiction which in turn negatively influenced the use of NFPMs.

From previous discussion, the new regulations and strategies of the Central Bank were mentioned in three Banks A, B and C as an external environmental condition that positively affected the use of NFPMs. Although, Bank D's interviewees mentioned to the contrary, the researcher will accept the new regulations and strategies of the Central Bank as a formal external environmental condition that influenced the use of NFPMs according to her cross-case analysis.

9.5.2.2 Information Shortage

The information shortage was considered to be one of the external environmental conditions that have a negative impact on the use of NFPMs as mentioned by the interviewees in three case studies (Bank A, Bank B and Bank C). The interviewees of these case studies pointed out that Libya as a developing country suffers from a lack of market, customers, economic and political information and this lack of information had a negative impact on managements' ability to implement and use ATs and AMPs such as NFPMs and prevented organisations from obtaining the advantages of such advances.

Bank A's interviewees reported that this Bank is working in a competitive environment where the information is very important. However, Bank A's management was aware of the absence of reliable information resources providing up-to-date and valid information and therefore, from the beginning, it established its own information system to provide it with the required information to perform effectively and in turn it facilitated the use of NFPMs.

Bank B's and Bank C's interviewees mentioned that these Banks were used to working in a monopolistic environment. However, the monopolistic environment had changed to a more competitive environment. In such an environment, information about customers, markets and new projects is very important. Therefore, the managements of these Banks recently tried to build up their own information system. Moreover, they reported that the Central Bank has signed a contract with the International Bank to establish a large information and banking system which will link all the Libyan banks together with the Central Bank and stock market to provide information which would enhance the implementation of NFPMs.

Bank D has been working in a competitive environment since it was established. Its interviewees did not mention the shortage of information as an external environmental condition influencing the use of NFPMs and that could be because it is new in the market and it has its required information and also that could be attributed to the size of its operations which are still small compared with the other three Banks and therefore, it does not face this problem.

From the above discussion the shortage of information was mentioned in three Banks A, B and C as an external environmental condition that had negatively influenced the use of NFPMs. Accordingly, the shortage of information will be accepted as a formal external environmental condition affecting the use of NFPMs.

9.5.2.3 Weakness of Infrastructure

A major problem facing management in adopting and using NFPMs was the weakness of infrastructure (i.e. electricity and telecommunications system) as mentioned by interviewees in three case studies (Bank A, Bank C and Bank D). Therefore, the weakness of infrastructure (electricity and telecommunications system) was considered to be one of the external environmental conditions that have

influenced the use of NFPMs. The interviewees in the three case studies confirmed that Libya as a developing country is suffering from a weakness of infrastructure (electricity and telecommunications system) which negatively impacts on management's interest in using NFPMs.

Bank A's interviewees reported that, since the establishment of the Bank, the management realised that the implementation of NFPMs needs a suitable technological environment which Libya is lacking. Therefore, the senior management tried to get over this problem by adopting the latest international technology. Bank C's and Bank D's interviewees also confirmed the managements of their Banks have tried to overcome the weakness of electricity and communications system by adopting the latest international technology. They believed that such development will help the Banks' managements to enhance the use of NFPMs.

The interviewees in the three case studies (Bank A, Bank B and Bank C) agreed that the weakness of infrastructure (i.e. electricity and telecommunication system) in the Libyan environment has a negative influence on management's use of NFPMs. Based on the interviewees' opinion the researcher will accept the weakness of infrastructure as a formal external environmental condition that hindered a bank's use of NFPMs.

9.5.2.4 Traditional Educational System

The educational system was considered to be an external environmental condition that affected the implementation of NFPMs as mentioned by interviewees in three case studies (Bank A, Bank B and Bank C). The interviewees in these case studies confirmed that the educational system including the financial and managerial educational system is very traditional and is not harmonious with the development of

life in the world today. They believed that this educational system was one of the main reasons for the stakeholders' financial oriented perspective (employees, customers and shareholders) which in turn impeded a bank's management during the process of developing its bank and adopting advanced management, accounting and technological practices such as the implementation of NFPMs.

The interviewees in the three case studies argued that the traditional educational system was an impediment which had a negative impact on using NFPMs. Therefore, the researcher will accept the traditional educational system as a formal external environmental condition affecting the use of NFPMs.

9.5.2.5 State Ownership

The State ownership phenomenon was considered to be one of the external environmental conditions that impacted on the use of NFPMs as mentioned by interviewees in two case studies, Bank B and Bank C, which are completely owned by the State via the CBL. The interviewees in Bank B and Bank C pointed out that the State ownership phenomenon restricted the Board of Directors' authority to manage and develop the Bank's critical success factors. They clarified that State ownership affects the Bank's strategies which in turn impeded management's interest in adopting the advanced management and technological practices such the use of NFPMs. Moreover, the State ownership had sheltered the Banks' managements from competition and encouraged them to adopt traditional financial performance evaluation such as profitability rather than long-term critical success factors such as service quality, on-time delivery and customer satisfaction. Therefore, they confirmed that State ownership has been a significant factor that had a negative influence on management's interest in using NFPMs. This may be because the nature

of the State ownership - which is determined by the legislation that reflects the regime's political and economic options - does not allow any debate about change.

Bank A's and Bank D's interviewees did not talk about the State ownership because these Banks are private. However, Bank A's interviewees did talk about the financial mentality of shareholders as an external environmental factor that could have a negative impact on management concern for using NFPMs. The interviewees mentioned that the shareholders' belief that the adoption of advanced management techniques and the use of NFPMs are a waste of money and effort could have a negative influence on the identification and development of the Bank's critical success factors such as quality and customer satisfaction. On the other hand, they confirmed that the Bank has a Chairman/General Manager with long-term experience and competence who always persuades the Bank's shareholders of the benefits of the adoption of any new useful ATs. This also may be because of the free discussion between the management of a private bank and its shareholders which is missed in the relationship between the Central Bank and the State banks.

Bank D's interviewees did not talk about the ownership phenomenon as an internal environmental condition affecting the use of NFPMs and this may be because the Bank's management was not facing noticeable influence from the shareholders in managing and developing the Bank.

From the above evidence the State ownership negatively affects the use of NFPMs and there was no contradictory evidence from Bank A's and Bank D's interviewees about such a condition and accordingly the researcher will accept State ownership as a formal external environmental condition affecting the use of NFPMs.

9.5.2.6 General Public's Lack of Banking Knowledge

The general public's lack of banking knowledge was considered to be one of the external environmental conditions affecting the use of NFPMs as mentioned by interviewees in two case studies, Bank A and Bank D, which are private banks. The interviewees pointed out that the main problem with the public was their lack of knowledge of the banking business which in turn represented an obstacle to the adoption and use of NFPMs. The interviewees confirmed that the openness of society and the traditional educational system have created a group of customers who are demanding but with little knowledge of the banking industry. This group of customers has created an obstacle that negatively affects the management's interest to assess and evaluate its NFP such as customer satisfaction. Therefore, the interviewees of Bank A and Bank D concluded that the public's lack of knowledge of banking business was one of the main external environmental factors that had negatively influenced the use of NFPMs. Bank A's and Bank D's interviewees' opinion may be because these Banks are private and new in the Libyan environment and they have more authority to deal with groups of customers - especially the new businessmen - than the State banks.

Bank B's and Bank C's interviewees did not explicitly mention the general public's lack of banking knowledge as an influencing condition on the use of NFPMs but they emphasised that the educational system was an important factor that affected a bank's stakeholders and then the use of NFPMs.

Based on Bank A's and Bank D's interviewees' point of view, the general public's lack of banking knowledge negatively affects the use of NFPMs and there was no contradictory evidence from Bank B's and Bank C's interviewees about such a condition and, therefore, the general public's lack of banking knowledge will be accepted as a formal external environmental condition affecting the use of NFPMs.

9.5.2.7 Uncertainty of Economic Environment

The uncertainty of the economic environment was considered to be one of the external environmental conditions that enhanced the implementation of NFPMs as mentioned by interviewees in two case studies, Bank A and Bank C. The interviewees in Bank A and Bank C reported that the Libyan economic environment is no longer stable because of the new trends in the Libyan environment such as the State's new economic laws and policies which led to the appearance of competition, US sanctions which had negatively affected organisations' profitability, the openness of society and globalisation. The interviewees confirmed that the uncertain economic environment was behind managers' concentration on non-financial information and the use of NFPMs. The interviewees also emphasised that in a certain and stable economic environment, FPMs were suitable measurements to assess and evaluate the Banks' performance. However, the recent economic uncertainty had driven the managers to think about something to be used to build their Banks' long-term survival namely NFPMs.

The interviewees within Bank A and Bank C emphasised the substance of the uncertainty of the economic environment in enhancing the use of NFPMs. Bank B's and Bank D's interviewees did not mention the uncertainty of the economic environment as an external environmental condition affecting a bank's use of NFPMs. This could be attributed to the interviewees' and managers' background and their understanding of the surrounding economic environment.

For Bank A's and Bank C's interviewees the uncertain economic environment is an influencing factor that encouraged the management of their Banks to use NFPMs and there was no contradictory evidence in the other two Banks, B and D, related to the uncertainty of the economic environment. Accordingly, the researcher will accept

the uncertainty of the economic environment as a formal external environmental condition influencing a bank's use of NFPMs.

Finally, from the discussion of this section the researcher can formulate the eighth and ninth formal hypotheses concerning the external environmental conditions influencing the use of NFPMs as follows:

H₈ *“New regulations and strategies of the Central Bank and the uncertainty of the economic environment positively affect a bank's use of NFPMs.”*

H₉ *“Some of the Central Bank's old regulations, over-control and interference of the Central Bank, information shortage, weakness of infrastructure, traditional educational system, State ownership and the general public's lack of banking knowledge negatively affect a bank's use of NFPMs.”*

9.6 FORMAL HYPOTHESES OF STRATEGIES THAT MANAGEMENT USED IN CONJUNCTION WITH NFPMS

This section will discuss the similarities and differences in the substantive hypotheses of the management strategies that management used in conjunction with NFPMs across the four case studies in order to develop the related formal hypotheses. The researcher found that several hypotheses were similar and others were different across the four case studies according to her cross-case analysis. Table 9-7 summaries the major management strategies used in conjunction with NFPMs in the four case studies.

Table 9-7: Major Management Strategies

No	Labels	Case Study			
		A	B	C	D
1	Development of Human Resources	√	√	√	√
2	Development of Reward System	√	√	√	√
3	Development of Operating, Information and Reporting System (Banking System)	√	√	√	√
4	Development of Management Accounting Information		√	√	√
5	Development of Organisational Structure	√	√	√	
6	Adoption of Advanced Management Practices	√		√	√
7	Adoption of Internal Competition	√			

9.6.1 Similarities of Management Strategies

The researcher identified three management strategies used in conjunction with NFPMs that have consensus agreement across the four case studies. These similarities are human resource strategies, reward system and operating, information and reporting system (banking system) and they will become formal hypotheses as a result of the consensus of the interviewees across the four Banks. Each strategy will be discussed in more detail in the following subsections from 9.6.1.1 to 9.6.1.3

9.6.1.1 Development of Human Resources

Across the four case studies interviewees confirmed that investment in human resources is one of the most important critical success factors for an organisation and they agreed that the development of human resources strategies was one of the management strategies used in conjunction with NFPMs. The interviewees emphasised that the change in the Libyan economic environment generally and in the banking environment particularly (from monopolistic to competitive) has encouraged a bank's management to develop the bank's human resource strategies to be more service-oriented. The human resources strategies include the internal and external training programmes, recruitment policies, employees' meetings, employees' studying for qualifications (diploma, masters and doctoral degrees) and English language courses as mentioned by interviewees.

The internal and external training programmes were mentioned by the interviewees in the four case studies as a strategy to increase employees' concerns toward service quality, customer satisfaction and other critical success factors. However, the interviewees in Bank A, Bank B and Bank C paid great attention to the training programmes organised by their Banks' training centres in enhancing the use of NFPMs. They clarified that the training programmes that were provided by the

Training Centre run by the CBL were theoretical, traditional, financially oriented and inconsistent with a competitive environment. Therefore, the Boards of Directors of these Banks opened their own training centres to provide training programmes that are directed at developing the skills and abilities of employees to improve the services and to achieve the highest possible customer satisfaction.

The new service-oriented recruitment policies were mentioned by the interviewees across the four case studies as a management strategy that would enhance service quality and customer satisfaction and encourage the use of NFPMs.

The employees' meetings are used in Bank A as a management strategy in conjunction with the use of NFPMs. The employees studying for qualifications is another strategy that Bank C's management adopted as an important step to build qualified and competent employees who would be instrumental in enhancing long-term success. The English language courses are used in Bank C and Bank D as a human resources strategy to enhance employees' knowledge which in turn encourages the use of NFPMs.

Based on the above discussion the use of NFPMs has encouraged a bank's management to improve the employees' level by adopting service-oriented human resource strategies. Therefore, the tenth formal hypothesis is:

H₁₀ *“The development of human resource strategies to be more service-oriented is associated with a bank's use of NFPMs.”*

9.6.1.2 Development of Reward System

The development of the reward system was considered to be one of the most important management strategies that management adopted in conjunction with the enhancement of the use of NFPMs as mentioned by the interviewees in the four case studies.

Bank A's top management recognises the importance of concentration on NFPMs in achieving future success. It built its reward system to be more oriented toward NFPMs as confirmed by the interviewees. Bank A evaluates and assesses employees' performance based on non-financial aspects of their performance (service quality, on-time delivery, flexibility, teamwork and customer satisfaction) resulting in each employee's annual efficiency and performance appraisal report and then it pays an annual bonus to its employees according to the "output" of their annual reports. It also rewards the Bank's units based on the results of both NFPMs and FPMs. Therefore, Bank A's reward system was built to be consistent with influencing the use of NFPMs.

Before 2003 Bank B and Bank C used to use both an official and unofficial reward system as mentioned by interviewees. Bank B's and C's units used to be rewarded on the results of FPMs and some NFPMs and also employees used to be rewarded according to the findings of each employee's annual report which is completely based on each employee's NFP until the new labour law number (15)1982 was established which changed the income system to the fixed salary without any kind of other reward for all the Libyan employees. Meanwhile, Bank B's and Bank C's management continued to reward their staff using an unofficial reward system as a way to encourage them to do their best and achieve the bank's objectives.

However, from 2003, the interviewees pointed out that in light of the changes in the economic environment, the State's new legislation, strategies and policies drove the managements of public banks to focus again on quality of service and customer satisfaction. The interviewees emphasised that the legislation – such as law (1)2005 - has given the managements of the commercial banks more authority to manage their banks and has allowed the managements to establish new basic regulations and

prepare a new reward system. The interviewees stated that studies are under way to prepare a new reward system compatible with the new strategies of the banking sector that aim to improve quality of service, customer satisfaction and employee satisfaction.

Bank D uses an unofficial reward system based on fixed salary income with social reward for all employees and small financial rewards to employees who achieved a special level of performance related to service quality, flexibility and customer satisfaction as mentioned by the interviewees. They described the current reward system as unsuccessful and it needs to be linked to NFPMs for all staff. The interviewees confirmed that, recently, the Bank's management took a new decision which aims to develop the Bank's reward system to be consistent with the Bank's strategy of using NFPMs for achieving long-term success. They asserted that in a developed system, employees will be rewarded according to their NFP and managers will also be rewarded on the basis of their units' FP and NFP.

From the above discussion the interviewees across the four case studies believed that the management's direction toward encouraging employees to use NFPMs for long-term success in a competitive environment has driven it to develop its reward system to be consistent with its strategy of using these measurements. Therefore, the researcher will adopt the management strategy of the reward system as a formal hypothesis. Then the eleventh formal hypothesis is:

H₁₁ *“The development of the reward system to be linked with non-financial performance and to be more service-oriented is associated with a bank's use of NFPMs.”*

9.6.1.3 Development of Operating, Information and Reporting System (Banking System)

Across the four case studies the interviewees agreed that the development of a bank's operating system and related information and reporting system was a management strategy associated with the encouragement of the use of NFPMs.

Bank A's interviewees revealed that the management has updated the Bank's banking system to increase the efficiency of the services provided to customers, to maintain its leading role in the LBS by improving the quality of services offered to customers, and to develop the Bank's network and its administration in order to support the Bank's present and future objectives and enhance the Bank's critical success factors. This system covers all services the Bank provides at present, as well as any it would provide in the future. This system has also been designed to provide the periodic reports of financial and non-financial information and has been designed to produce the data and information in graphic format and statistics which give an indication of future performance. It also enables management to assess and evaluate the progress of its service quality, customer satisfaction, delivery and the development of the Bank's competitive factors.

Bank B's interviewees pointed out the concentration on NFPMs has led the management to develop the Bank's operating system, information and reporting system (the banking system) and build specialised systems to provide units' management with daily updated information. This system was created to assist the Bank's management and employees to perform their job effectively and to enhance the quality of service. B's interviewees confirmed that this system has a database for every customer and it also provides management with all reports that contain financial and non-financial information which in turn give managers an indication of performance.

Bank C's management adopted an advanced modern banking system for several reasons: for providing new services that the banking market has not provided; for improving the way that these services were provided; for building a database for all types of services, customers and employees; for providing regular reports about banking services, customers and employees in the Bank's units to use in developing services; and for providing financial and non-financial information to the top management to assist it in making effective managerial decisions. The interviewees emphasised that the development of the banking system would improve the Bank's critical success factors such as service quality, on-time delivery and customer satisfaction.

Bank D's operating system and information and reporting system was developed and enhanced the use of NFPMs. The interviewees mentioned that these systems will help employees to perform their tasks in a very quick way which will improve and enhance the service quality, on-time delivery and customer satisfaction. It built a database for every single activity (service), employee and customer. The information and reporting system will provide the management with daily updated financial and non-financial information which in turn will provide management with the ability to measure and monitor units' performance and help it to make effective and timely decisions.

From the above evidence, the researcher will accept the management strategy of developing a bank's operating, information and reporting system in conjunction with its use of NFPMs as a formal hypothesis. Then the twelfth formal hypothesis is:

H₁₂ *“The development of the banking system (operating, information and reporting system) is associated with a bank's use of NFPMs.”*

9.6.2 Differences in Management Strategies

In Table 9-7 the researcher found four hypotheses emerging from only one or three case studies relating to the management strategies adopted in conjunction with the use of NFPMs. These differences are development of management accounting information, development of organisational structure, adoption of advanced management practices and internal competition. The adoption of internal competition strategy was mentioned only in one case study (Bank A) and, therefore, this substantive hypothesis will not be forwarded as a formal hypothesis. Each of the remaining strategies was mentioned in three case studies and all will become formal conditions according to the researcher's cross-case analysis. These hypotheses will be discussed in more detail in the following subsections from 9.6.2.1 to 9.6.2.3.

9.6.2.1 Development of Management Accounting Information

The development of a performance appraisal system was considered to be one of the management strategies adopted in conjunction with the use of NFPMs as mentioned by the interviewees in three case studies (Bank B, Bank C and Bank D). The interviewees in the three case studies stated that the Libyan banks do not have a specific department of MA in their organisational structures. However, they use many MA methods and they look at MA as one of the financial accounting department's tasks. The interviewees in the three case studies clarified that the Banks' MA methods include budgeting, financial comparisons, cost accounting, ratio analysis, FPMs and some non-financial indicators for each unit of a bank (branches and agencies) and for the bank as one unit.

The interviewees mentioned that the new regulations of the Central Bank made the banking environment more competitive which in turn encouraged the Banks' managements to use NFPMs. The interviewees confirmed that the use of NFPMs and

benchmarking has improved the MAI in the internal reports provided to the executive management in each unit. They believed that the development of MAI is associated with the concentration on non-financial activities and the use of NFPMs.

The interviewees suggested that the successful implementation of NFPMs needs an independent MA department with qualified management accountants to design, evaluate and report in a timely fashion on these measurements which in turn would assist management in making effective decisions. They also confirmed that such a department would enhance the adoption of advanced management techniques such as benchmarking and the development of an integrated performance appraisal system.

From the interviewees' point of view the use of MA methods (such as budgeting, NFPMs and benchmarking) has caused an improvement in the MAI and this use is the first step for a bank's management to build its integrated performance evaluation system. Therefore, the researcher will accept the management strategy of the development of MAI in conjunction with the use of NFPMs as a formal hypothesis. Then the thirteenth formal hypothesis is:

H₁₃ *“The development of a bank's management accounting information is associated with its use of NFPMs.”*

9.6.2.2 Development of Organisational Structure

The development of organisational structure was considered to be one of the management strategies for encouraging the use of NFPMs as mentioned by the interviewees in three case studies (Bank A, Bank B and Bank C).

Bank A's interviewees mentioned that the Board of Directors had taken a decision about the development of its organisational structure by adding a new department which was the “banking services and systems” and a new division which was “banking service marketing” as a result of the concentration on NFPMs. A's interviewees confirmed that these units are service oriented units and they will use

more NFPMs related to quality of service and customer satisfaction. The interviewees believed that they will provide an effective performance evaluation of service quality and degree of customer satisfaction that will support management in the decision-making function.

Bank B's interviewees pointed out that the new circumstances in the Libyan environment have driven the management to use the NFPMs for future success and this led Bank B's management to create an appropriate organisational structure by adding new departments and divisions such as e-telecommunication department, risk department, credit cards division and budgeting division. In addition a detailed job description system was introduced to be in line with the new advances that Bank B adopted to achieve its new strategies and objectives. B's interviewees thought that the new organisational structure will provide a compatible organisational environment for non-financial measurements such as quality of service and customer satisfaction.

C's interviewees reported that with new competition, new strategies and the new regulations and decisions of the CBL, the top management had taken a decision about adjusting its organisational structure to be consistent with the Bank's new activities and environment. It established new departments which are electronic banking services department, banking marketing department and risk management department and it planned to open others such as customer relations division. C's interviewees confirmed that these units are service oriented units and they will use more NFPMs related to quality of service, employees' competence and customer satisfaction to improve and enhance the Bank's services.

From the interviewees' point of view the development of a bank's organisational structure is a management strategy associated with the encouragement of the use of NFPMs. Then the fourteenth formal hypothesis is:

H₁₄ *“The development of a bank’s organisational structure is associated with its use of NFPMs.”*

9.6.2.3 Adoption of Advanced Management Practices

The interviewees in three case studies (Bank A, Bank C and Bank D) concluded that the adoption of AMPs was a strategy adopted in conjunction with the use of NFPMs. The interviewees in three case studies indicated that the purposes of the adopted AMPs were to develop and improve quality of service, customer satisfaction, on-time delivery, employee satisfaction and community acceptance. These AMPs that these Banks have implemented include TQM, benchmarking, the re-engineering of processes and procedures of banking services, marketing studies of a bank’s services and customers, internal evaluators and ghost shoppers as mentioned by the interviewees.

TQM is used in Bank A and is going to be used in Bank C because of its relationship with improving service quality and to assess and evaluate the compatibility between the optimal degree of quality and cost. The benchmarking technique is used in three case studies as mentioned by the interviewees to catalyse a management of any organisation to assess and evaluate its performance and then benchmark its performance against the best organisation in its industry and then the results are used in planning and developing a bank’s strategies. The interviewees confirmed that the use of the benchmarking technique has increased the use of non-financial information and has enhanced and activated the use of NFPMs. The re-engineering of the processes and procedures of banking services was adopted in Bank A, Bank C and Bank D to reach the highest quality in terms of time and simplicity. The interviewees mentioned that the re-engineering technique has enhanced the employees’ performance and has improved customer satisfaction. The periodic marketing studies of services and customers were used in Bank C to supply

its management with essential information to develop its services and create customers' loyalty. The internal evaluators and ghost shoppers were used in Bank C as advanced methods to evaluate branches and agencies and then to develop the bank's critical success factors.

Based on the above evidence, A's, C's and D's interviewees agreed that the use of advanced management techniques was a management strategy adopted in conjunction with the use of NFPMs. Then the fifteenth formal hypothesis is:

H₁₅ *“The adoption of advanced management practices is associated with a bank's use of NFPMs.”*

9.7 FORMAL HYPOTHESES OF THE CONSEQUENCES OF IMPLEMENTATION AND USE OF NFPMs

This section will discuss the similarities and differences between the substantive hypotheses of the consequences of implementation and use of NFPMs across the four case studies in order to develop the related formal hypotheses. The researcher identified several hypotheses that were similar and others were different across the four case studies according to her cross-case analysis. Table 9-8 summarises the consequences of using NFPMs as mentioned in the four case studies.

Table 9-8: Consequences of Using NFPMs

No	Labels	Case Study			
		A	B	C	D
1	Variety and Improvement of Services	√	√	√	√
2	Introduction of Advanced Technology	√	√	√	√
3	Positive Effects on FPMs	√	√	√	√
4	Capital Expenditure	√	√	√	√
5	Effectiveness of Management Decisions	√			
6	Effectiveness of Budget			√	

In Table 9-8, two consequences were each mentioned only in one case study namely the effectiveness of management decisions in Bank A and effectiveness of

budget in Bank C and, therefore, these substantive hypotheses will not be forwarded as formal hypotheses according to the researcher's cross-case analysis. The remaining consequences were mentioned in all four case studies and they will be discussed in more detail in the following subsection.

9.7.1 Similarities of the Consequences of Implementation and Use of NFPMs

The researcher identified four consequences of the use of NFPMs that have unanimous agreement across the four case studies. These similarities are variety and improvement of services, introduction of AT, positive effects on FPMs and capital expenditure and they will become formal hypotheses as a result of the consensus of the interviewees across the four case studies. Each consequence will be discussed in more detail in the following subsections from 9.7.1.1 to 9.7.1.4.

9.7.1.1 Variety and Improvement of Services

Across the four case studies interviewees agreed that the increase in services provided is a result of the bank's adoption of NFPMs. The interviewees emphasised that there was a positive relationship between the use of NFPMs and the variety of services. They attributed this relationship to the nature of NFPMs which are outward looking indicators and have the ability to link an organisation more closely with its environment.

A's interviewees mentioned that the service mixture had developed as a result of the Bank's policy that aimed to increase its share in the market through enhancing quality of service, delivery, customer satisfaction, and community acceptance. Bank A's assortment of services consists of conventional banking services and many new services such as travellers' cheques in Libyan Dinars; touch-screen services; international currency deposits; various credit card and cash machines; telephone banking; handicapped, ladies, and older customers' agency (Drive-in banking);

young people's banking agency; businessmen branches and complementary services to the regular service for the business centres customers.

B's interviewees emphasised that the Bank's management expanded its product range with the purpose of enhancing service and customer satisfaction. The interviewees gave examples of new products that have been introduced to the Bank's range such as international currency deposits; various credit cards and cash machines; free consultation services for customers and internet banking.

C's interviewees stated that the management's use of NFPMs that related to service quality and customer satisfaction and its reliance on customers' needs and requirements have driven it to add new services to its traditional banking products such as international currency deposits; banking cards and cash machines; various credit cards and prepaid cards; billing system and businessmen's branches and it is working to introduce others such as internet banking and phone banking.

D's interviewees pointed out that the management's interest in customer satisfaction (customers' needs and expectations) motivated it to improve and expand its service range. It improved the procedures of documentary credits, it added a new service which is the lease of safe-deposit boxes and it is working to introduce others such as automatic withdrawal services (credit card).

Based on the above evidence there was general agreement among the interviewees across the four case studies which indicated that the diversification of services range is a result of using NFPMs. Therefore, the researcher will adopt this consequence as a formal hypothesis. Then the sixteenth formal hypothesis is:

H₁₆ *“Use of NFPMs encourages a bank to diversify and improve its range of services.”*

9.7.1.2 Introduction of Advanced Technology

The use of NFPMs played a significant role in encouraging a bank's management to introduce ATs. The interviewees across the four case studies emphasised that the ATs adopted were a result of the advances in the Libyan economic environment and banking market which have encouraged the Bank's managements to focus on NFPMs concerning quality of service, on-time delivery and customer satisfaction.

The ATs that were adopted in the four case studies related to software and hardware and to the bank equipment which aimed to enhance the level of service quality and on-time delivery and then to increase customer satisfaction. A's ATs include SWIFT system, internet banking, home banking, ATMs, mobile phone banking, the connection of the branches, agencies and headquarters and other advances. Also, A's premises are modern and up-to-date and equipped with the latest telecommunications technology and instrumentation and international banking system.

Bank B's ATs include SWIFT system and the Bank is working at introducing the ATMs and the prepaid cards (in Dollars). Also Bank B's management rebuilt some banking premises and equipped them with modern equipment.

Bank C's ATs adopted include the SWIFT system, ATMs and the prepaid cards (in Dollars) and the Bank is working at introducing mobile banks, internet banking and phone banking and the electronic connection of the branches, agencies and headquarters.

D's ATs include SWIFT system and its branches and agencies were equipped by computers with advanced network systems and on-line connection. Also, the Bank is working to install the ATMs.

From the above discussion the majority of interviewees concluded that the introduction of AT was an outcome of the concentration on non-financial activities

and the use of NFPMs concerning service quality, delivery and customer satisfaction. The interviewees across the four case studies also agreed that there is a relationship between the use of NFPMs and the level of ATs. Therefore, one consequence of using NFPMs is the introduction of AT and this will be developed as a formal hypothesis. Then the seventeenth formal hypothesis is:

H₁₇ *“Use of NFPMs encourages a bank to adopt advanced technology.”*

9.7.1.3 Positive Effects on FPMs

Across the four case studies interviewees believe that NFPMs have a direct cause-effect relationship with FPMs. The interviewees emphasised that there is a direct and strong relationship between the improvement of a bank’s critical success factors and the FPMs such as profitability and customers’ deposits. One interviewee clarified this relationship by given this example. If any organisation considers seriously its critical success factors (quality of service, on-time delivery and employee satisfaction and loyalty) by dedicating its resources to achieve customer satisfaction and community acceptance through providing a high level of service quality and on-time delivery and by adopting AT then it will achieve gradual improvement in its year-to-year profitability, customers’ deposits, and other FPMs.

From the interviewees’ point of view quality of service, on-time delivery, customer satisfaction and loyalty, employee satisfaction and loyalty, and community acceptance are influencing factors that have a positive affect on long-term profitability and success. That is, the improvement of these factors has positively impacted on a bank’s reputation and development which are then reflected year-to-year in an increase in the bank’s FPMs such as profitability. However, this impact would not be at early stage of concentrating on NFPMs but will take a few years. They confirmed that this technique (NFPMs) needs a substantial amount of capital

expenditure in the short-term to adopt advanced technological techniques and to train employees how to use NFPMs and others. They asserted that this in turn could lead to a decrease in short-term profitability but then it will increase gradually.

There was general agreement among interviewees across the four case studies that the ultimate result of using NFPMs was the enhancement of a Bank's long-term profitability. Based on the above discussion, the consequence of using NFPMs leading to a positive impact on long-term profitability, customers' deposits, and other FPMs will be developed as a formal hypothesis. Then the eighteenth formal hypothesis is:

H₁₈ *“Use of NFPMs improves a bank's profitability, customers' deposits and other FPMs in the long-term.”*

9.7.1.4 Capital Expenditure

Across the four case studies interviewees asserted that the use of NFPMs had caused an increase in capital expenditure that was spent in achieving the NFPMs' requirements and the related management strategies aimed at enhancing service quality and building customer satisfaction and community acceptance. However, this increase will reflect gradually in the bank's long-term profitability.

A's interviewees mentioned that the Bank's management incurred capital expenditure for adopting advanced technologies and practices which were a result of improving quality of service, customer satisfaction, employee satisfaction, and community acceptance.

B's interviewees mentioned that management's interest in enhancing the quality of service and in building customer satisfaction cost it additional capital expenditure that was spent on redesigning its organisational structure, establishing the Bank's training centre and adopting the latest ATs. However, this capital expenditure will

contribute to increasing the Bank's market share, enhancing the Bank's reputation and achieving long-term profitability for the Bank.

C's interviewees mentioned that the adoption of NFPMs encouraged management to adopt advanced management practices and technologies which were considered to be important for achieving future success especially after the changes that had occurred in the Libyan economic environment. This strategy has cost the Bank a relatively large amount of capital expenditure. However, it will increase in future the Bank's customers' deposits and profitability.

D's interviewees stated that the concentration on using NFPMs cost the Bank a relatively large amount of capital expenditure in introducing the ATs and training programmes aimed at building service quality and customer satisfaction. They confirmed that this capital expenditure was a foundation stone for using NFPMs. However, it will deliver results in terms of the long-term FP (profitability).

The interviewees' view was that the use of NFPMs had caused the bank to invest in capital expenditure. Therefore, the occurrence of capital expenditure as a consequence of using NFPMs will be carried forward as a formal hypothesis. Then the nineteenth formal hypothesis is:

H₁₉ *“Use of NFPMs leads to an increase in a bank's capital expenditure.”*

9.8 RESEARCHER'S MODEL FOR ALL FOUR CASE STUDIES

The Strauss and Corbin paradigm (1990 and 1998) model was used in analysing the data of this research. Accordingly, the researcher has developed her model for all four case studies. The model components in terms of causal conditions, context, intervening conditions, action/interaction strategies, and consequences are summarised below from 9.8.1 to 9.8.5. Figure 9-4 shows the researcher model for all four case studies. This model represents the investigated phenomenon (the use of

NFPMs) and the formal hypotheses for all four case studies which include the motives for using NFPMs, the environmental factors that have impacted on it, the management strategies adopted in conjunction with the use of NFPMs and the consequences.

9.8.1 Causal Conditions

The formal causal conditions of adopting and using the NFPMs were explained in section three of this Chapter and are:

- Limitations of FPMs.
- Competitive Environment.
- Management's Knowledge of Relationship between NFPMs and FPMs.
- Demanding Customers.
- Nature of Banking Industry.

9.8.2 Context

In section four, the researcher has specified the formal internal environmental factors that relate to the use of NFPMs. These formal internal environmental factors are:

- Level of Management.
- Operational Experience of Management.
- Competence of Management.
- Management's Authority.
- Top Management's Interference.
- Stability of Management.
- Collective Working Group.

However, the researcher found that the operational experience of management, competence of management, management authority, top management's interference, management stability and collective working group positively influenced management's interest in using NFPMs.

9.8.3 Intervening Conditions

In section five, the researcher found the formal external environmental factors that influenced the implementation of NFPMs. These formal external environmental factors are:

- Some of the Central Bank's Old Regulations.
- Over-control and Interference of the Central Bank.
- New Regulations and Strategies of the Central Bank.
- Information Shortage.
- Weakness of Infrastructure.
- Traditional Educational System.
- State Ownership.
- General Public's Lack of Banking Knowledge.
- Uncertainty of Economic Environment.

The new regulations and strategies of the Central Bank and the uncertainty of the economic environment positively influenced management's interest in using NFPMs. However, some of the Central Bank's old regulations, the over-control and interference of the Central Bank, information shortage, weakness of infrastructure, traditional educational system, State ownership and the general public's lack of banking knowledge negatively affected management's use of NFPMs.

9.8.4 Action/Interaction Strategies

These include strategies in managing the phenomenon under investigation. In section six, the researcher has specified the action/interaction strategies that management has adopted in conjunction with the use of NFPMs. These strategies are:

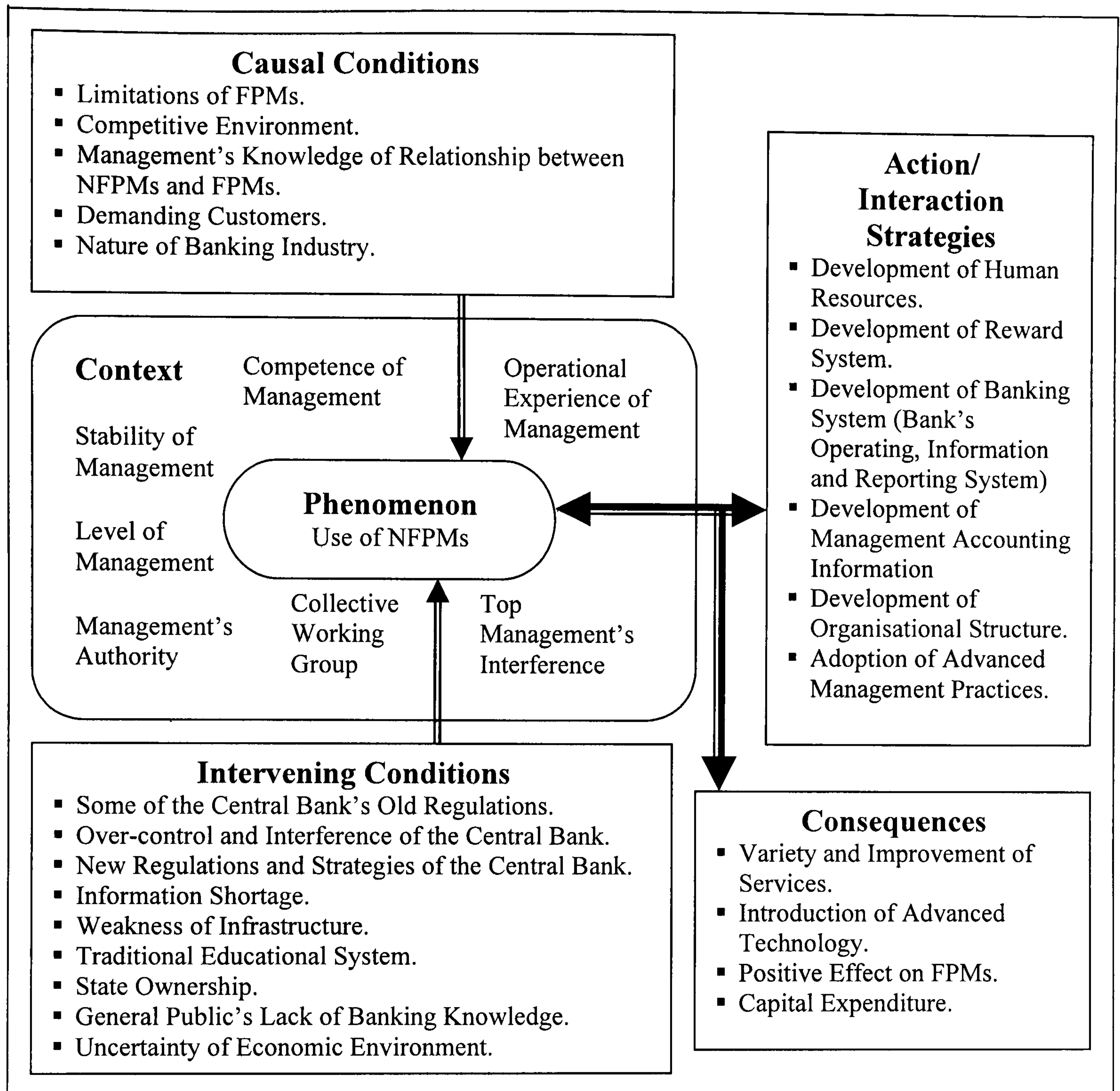
- Development of Human Resources.
- Development of Reward System.
- Development of Banking System (Bank's Operating, Information and Reporting System).

- Development of Management Accounting Information.
- Development of Organisational Structure.
- Adoption of Advanced Management Practices.

9.8.5 Consequences

Consequences are the outcomes of action/interaction strategies that have been implemented to manage the phenomenon under investigation. In section seven, the researcher has specified a number of consequences from the use of NFPMs. These consequences are:

- Variety and Improvement of Services.
- Introduction of Advanced Technology.
- Positive Effects on FPMs.
- Capital Expenditure.

Figure 9- 4: Researcher's Model for All Four Case Studies

9.9 CONCLUSION

This Chapter provided an overview of the four case studies and discussed the similarities and differences between the substantive hypotheses that have emerged from all four case studies and finally the above model has been developed. In the next Chapter an overview of the thesis, the links between the findings discussed in this Chapter and the existing literature presented in Chapter 2, the main limitations of this research project, recommendations for future research and finally a summary of the research findings will be discussed.

CHAPTER 10

SUMMARY AND CONCLUSIONS

10.0 INTRODUCTION

The aim of the material produced in the previous Chapters was to explore and investigate the use of NFPMs in the LCBS. Having provided in the previous Chapters the literature review, Libya and its commercial banking environment, the methodology and data collection method adopted in this research project, as well as the empirical work of the four case studies, the main objective of this concluding Chapter is to link the research project findings with the literature review. Further objectives of this Chapter are to discuss the main limitations of this research project and to provide directions for future research.

This Chapter is divided into five sections. The overview of the researcher's theoretical and empirical work through the previous nine Chapters is summarised in the first section. The second section discusses the main limitations of this study. The link between the findings (formal hypotheses) that emerged from this research project (discussed in Chapter 9) and the existing literature (presented in Chapter 2) is summarised in the third section. The recommendations for future research are presented in the fourth section. The last section provides a summary of the main contribution of this research project.

10.1 OVERVIEW OF THE RESEARCH PROJECT

The main issue addressed in this thesis is the use of NFPMs in the LCBS. In particular, it sought insights about the types of NFPMs used in this context, the motives of using these measurements, the internal and external environmental factors

influencing the use of NFPMs, the management strategies used in conjunction with NFPMs and the consequences of these strategies and the NFPMs.

Chapter one is an introduction to this research project. It provides a brief background of the research area, discusses the objectives and the importance of this research project, explains the empirical phases and gives an overview of all the Chapters.

Secondly, in order to attain the research objectives, the first focus of this research project is to review the relevant literature which is discussed in Chapter 2. It gives a valuable and essential source of information about the phenomenon being studied. The purpose of this Chapter is to enhance the researcher's sensitivity and to allow her to keep an open mind (but not an empty mind) during the case studies.

Thirdly, the historical, political, economic, social, cultural and financial aspects of Libyan society and the background about the Libyan Commercial Banks' environment [where the four case studies were conducted (two State owned banks and two private banks)] are presented in Chapter 3. The State's policies and the development plans of Libya, which originated from the Kingdom regime, are analysed. The changes in the political, economic and social aspects over the years are highlighted. Furthermore, a descriptive analysis of the organisational context of and the developments in the commercial banks are provided in Chapter 3.

Fourthly, Chapter 4 discusses and justifies the research methodology and methods used. The researcher identified this research to be on the interpretive side of Burrell and Morgan's paradigm (1979) which in turn impacted on the research methodology and methods. The researcher's main aim (which is to explore the use of NFPMs in the LCBS without any purpose of creating any changes in the phenomenon) and the researcher's beliefs that social reality is subjective and is the product of human cognition are behind the selection of the interpretive paradigm. In

this study the use of qualitative methodology is argued to be a better way of exploring and understanding NFPMs in their organisational context. The research also advocates using an interpretive approach as appropriate for finding out why these Banks use these measurements, what types of measurements are used and what factors positively or negatively influenced the use of these measurements.

To explore and investigate the phenomenon in its real-life context, a case study approach, with semi-structured interviews, was adopted as the appropriate research method to explore in detail the use of NFPMs within the context of the LCBS. It offered the possibility of a deeper understanding of the phenomenon's aspects from the point of view of the participants. Grounded theory principles (Strauss and Corbin's approach) guided the conduct of the case studies and analysis of data. This avoided the researcher from a priori theorising and other types of bias that could influence the insights being investigated and enabled her to study this unexplored area in Libya and understand the relationships between real-life variables. The researcher used grounded theory to have an in-depth and comprehensive understanding of the use of NFPMs in the LCBS. This is a different environment from that on which most of the literature on NFPMs is based.

During the empirical work of this research project a semi-structured interview approach was used with very open-ended questions. Moreover, the researcher asked for explanations and examples which in turn gave the researcher the flexibility to explore the phenomenon in-depth.

Each interview was analysed by identifying the points made by the interviewee. The researcher then identified and summarised the main points made by interviewees and these points were compared in order to organise the ideas that emerged from the data. Points of similarity (mentioned by more than two interviewees) were gathered and labelled. These labels were logically related to the data and provided a

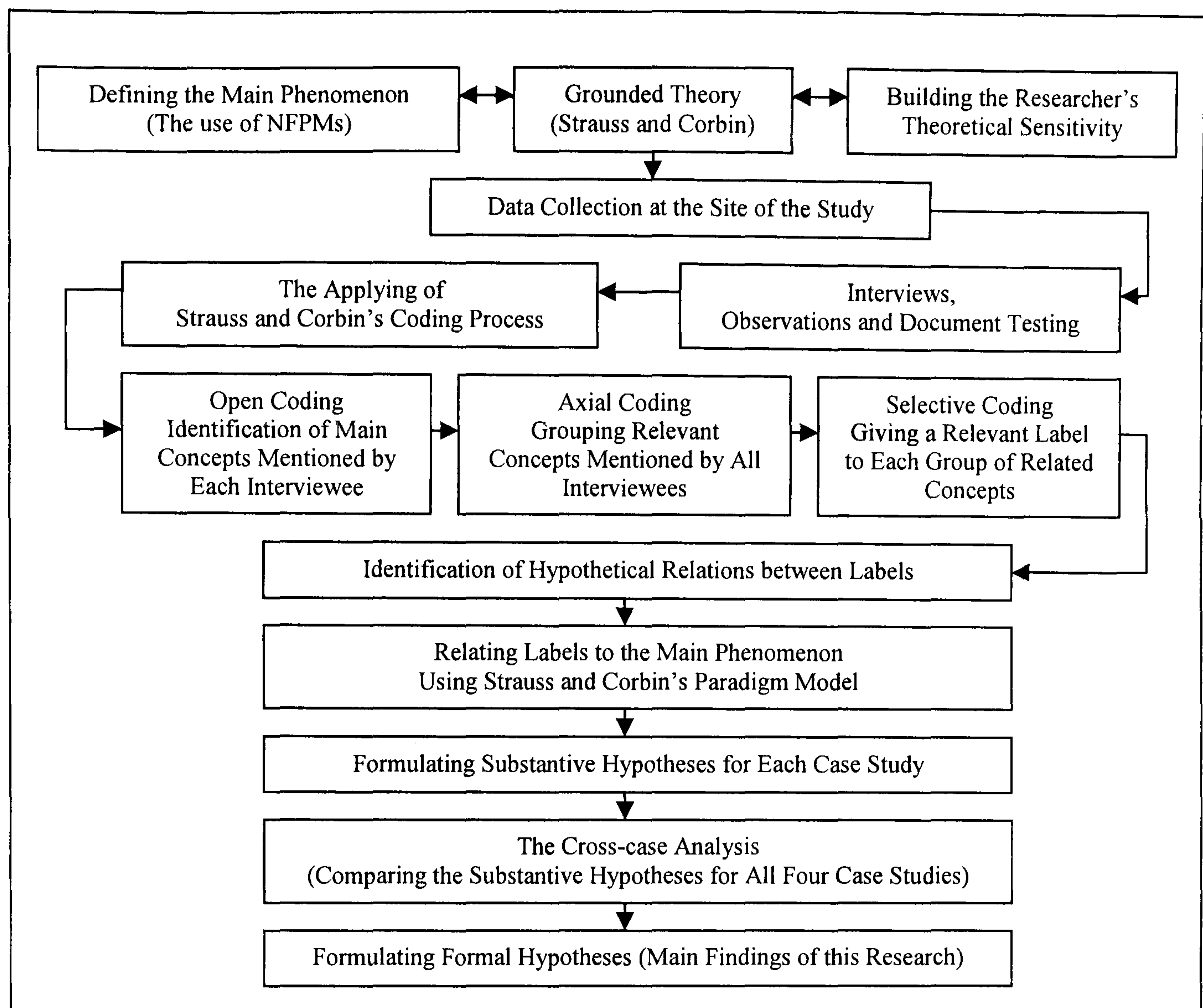
reasonably precise description for the data. Later these labels were grouped in appropriate categories to accomplish the researcher's model for each case study according to Strauss and Corbin's Paradigm. This model was the conclusion of the detailed analytical procedures which in turn enabled the researcher to understand the relationships between causal conditions, contextual conditions, intervening conditions, action/interaction strategies and the consequences. Understanding the relationships between these elements enabled the researcher to develop the substantive hypotheses for each case study.

A grounded theory approach to four case studies (two State owned banks and two private banks) and individual analysis for each case study are presented in Chapters 5 to 8. Furthermore, there are descriptive analyses of the organisational contexts of each Bank.

Fifthly, the cross-case analysis of the substantive hypotheses of the four case studies and the nineteen formal hypotheses that emerged from the similarities and differences between the four case studies are discussed in Chapter 9. The formal hypotheses are the main findings of this research project. Figure 10-1 represents the process for developing the formal hypotheses.

Finally, in this concluding Chapter 10, the research project's formal hypotheses (Chapter 9) will be summarised and related to the literature review (Chapter 2). Further, this Chapter presents the limitations of the study and the suggestions for future research.

Figure 10-1: The Development Process for the Formal Hypotheses



10.2 LIMITATIONS OF THE RESEARCH PROJECT

This research study has investigated in-depth the use of NFPMs in the commercial banks in Libya and developed a relevant formal theory. However, there are, as in any type of research, some limitations that the researcher encountered in it and they are presented below.

- Approximately seven weeks were spent at each of the first two case studies (Bank A and Bank B) and six weeks at each of the other two case studies (Bank C and Bank D). This period could be considered insufficient for the researcher to conduct interviews, test documents and observe the full picture of the phenomenon under investigation. Time and cost constraints were influencing factors that affected the researcher's ability to spend more time.

- The research project focused only on four Libyan case studies in the commercial banks and did not include other banks from the Libyan banking sector and/or other organisations and institutions from other sectors. Moreover, the four case studies are conducted in the commercial banks excluding private commercial banks less than five years old. The amount of work involved prevented the researcher from expanding the research setting.
- The researcher conducted four case studies and during the cross case analysis she faced a problem with the substantive hypotheses that emerged from two case studies whether she has to keep these hypotheses as substantive hypotheses or to develop them into formal ones. Logically, if the substantive hypothesis is mentioned in four or three case studies then it is developed into a formal hypothesis and if it is mentioned in only case then it cannot be developed into a formal hypothesis. Therefore, the researcher decided upon a particular strategy. That is, if the substantive hypothesis is mentioned in two case studies then she has to go back to the other two case studies and if there is no contradictory evidence then the substantive hypothesis becomes a formal hypothesis.
- The results of each case study are substantive hypotheses which represent the specific case study. Moreover, the formal hypotheses that emerged from the cross case analysis of the four case studies are connected to these case studies. “The purpose of case study is not to represent the world, but to represent the case” (Stake, 1994, p. 245). Therefore, the use of four case studies in this research as a small sample is not sufficient for the statistical generalisation for the population of the commercial banks as a whole (Denzin, 1983; Scapens, 1990; Guba and Lincoln, 1981; Yin, 1994; Athinson and Shaffir, 1998). Miles and Huberman (1994) suggested that, to enhance the generalisability of the

phenomenon under investigation, the researcher should build a cross case analysis chapter. However, multiple case studies (four case studies) provided better evidence than a single case study for developing a formal theory (Eisenhardt, 1991). Moreover, this research project is a first attempt to explore the use of NFPMs in commercial banks in Libya and by its grounded theory approach produced insights into the use of NFPMs in these Banks. These insights (formal hypotheses) can be tested in larger scale studies of the whole population in the future when statistical generalisations can be made.

- The adoption of the interpretive approach (grounded theory), the case study method and the use of interviews as the main method in collecting the data led to another limitation which is the conscious and unconscious bias of both the researcher in the collection of data, coding and interpretation and the interviewees in providing such data. In order to limit this subjective bias and also to aid validity and reliability, firstly, multiple sources of data were used namely interviews, observation and document examination (Mckinnon, 1988; Bonoma, 1985). Secondly, the researcher concentrated on the theoretical sampling techniques of Strauss and Corbin's grounded theory to validate her coding procedures. Understanding how reality was constructed from the participants' point of view was the aim of this interpretive approach to social inquiry (Hopper and Powell, 1985; Chua, 1986; Morgan, 1988).

10.3 LINKS BETWEEN THE FORMAL HYPOTHESES (MAIN FINDINGS) AND THE LITERATURE

The use of Strauss and Corbin's grounded theory procedures in analysing the data collected from the four case studies led to nineteen formal hypotheses emerging

about the use of NFPMs. These hypotheses apply to commercial banks in the LBS (see the research project formal hypotheses at the end of this Chapter).

Strauss and Corbin (1998) suggested that, when researchers finished their analysis, they could go back to the literature comparing what emerged from their cases with the existing literature to confirm their findings. Strauss and Corbin (1998, p. 51) stated that “the literature can be used to confirm findings”. The link between the formal hypotheses and the literature provides some support for the existing knowledge about the use of NFPMs in the banking sector.

After the main findings (formal hypotheses) of this research project emerged from the cross-case analysis, the researcher started to link the research project formal hypotheses with the literature to explore and identify the relationships between these hypotheses and the existing literature. These links are presented in the following subsections.

10.3.1 Motive for Using NFPMs

In terms of the motives for using NFPMs in the LCBS this research project provides evidence about:

10.3.1.1 Limitations of FPMs

In terms of the limitations of FPMs this research project provides evidence about the deficiencies of the traditional FPMs as one of the motives for adopting the NFPMs. This result is consistent with previous findings or statements in the literature (see, for example, Fisher, 1992; Brancato, 1995; Ittner and Larcker, 1998b; Neely, 1999; Alenizi, 2002; Kanji, 2002). Fisher (1992) and Brancato (1995) concluded in their studies that the limitations of the traditional FPMs are one of the main three reasons for adopting NFPMs. Ittner and Larcker (1998b) stated that the inadequacies of the

traditional FPM system drove many organisations to place greater emphasis on NFPMs.

10.3.1.2 Competitive Environment

The evidence from the case studies suggested that the competitive environment is one of the motives that played a significant role in the use of NFPMs. This finding is in agreement with previous findings or statements in the literature (see, for example, Fitzgerald et al., 1991; Fisher, 1992; Brancato, 1995; Hemmer, 1996; Brignall, 1997; Ittner and Larcker, 1998b; Neely, 1999; Alenizi, 2002; Hussain and Hoque, 2002; Kanji, 2002; Abdel-Maksoud, 2006). Fitzgerald et al. (1991) suggested that the selection of PM in the service sector is influenced by the competitiveness in the environment. Fisher (1992) and Brancato (1995) in their studies found that one of the three reasons for NFPMs emerging is competitive pressures. Hussain and Hoque (2002) studied what factors affected the design and use of NFPMs. They found that competition is one of the institutional forces that influenced the banks to implement a particular PMS.

However, the research finding from this project introduced the competitive environment as a motive to use NFPMs in more detail by explaining the relationship between the type of market environment (such as monopoly; transition to competition; competition, open environment and globalisation) and the use of NFPMs from the interviewees' point of view.

10.3.1.3 Management's Knowledge of the Relationship Between NFPMs and FPMs

This study provides evidence that management's knowledge of the positive relationship between NFPMs and FPMs is one of the main drivers to use NFPMs. This research finding linked this perception to the management characteristics and

backgrounds. The interviewees in the four case studies attributed managers' awareness of this relationship to management stability, to managers' long-term operational experience, to their visits to correspondent banks and to modern practices in the banking industry.

Bank A's and Bank C's interviewees confirmed that the educational level, competency and long-term operational experience of the Chairmen/General Managers within banks inside and outside Libya played a great role in their understanding of the relationship between NFPMs and FPMs which in turn helped them to encourage their Banks' managers and employees to focus on NFP and to use NFPMs. In the literature, several surveys result show that management training and experience have a positive correlation with the use of more sophisticated measurements of performance (such as NFPMs) which led to the success of an organisation in a changing environment (Birnberg and Wilner, 1986; Mendoza and Bescos, 2001).

10.3.1.4 Demanding Customers

The interviewees in the four case studies pointed out that the appearance of demanding customers with increased marketing knowledge (a result of the changes in the Libyan economic environment, openness of society and TV channels) drove the Banks to use more service oriented measurements of performance (NFPMs) to enhance their reputation in the market and increase their market share. On the other hand, the interviewees confirmed that the appearance of demanding customers motivated the Banks' managements to direct their strategies towards customers' needs and expectations and to develop their management, accounting and technological systems to be more advanced.

The above finding about demanding customers in a competitive environment being one of the motives for using NFPMs, is consistent with previous findings or statements in the literature (see, for example, Kaplan, 1983, 1984; Neely, 1999; Alenizi, 2002). Neely (1999), in his study about the PM revolution, pointed out that increased customer awareness is a key driver behind PM development. Alenizi (2002) found that the customer change phenomenon is a cause for changing the type of PM to include customer satisfaction.

10.3.1.5 Nature of Banking Industry

The research project provides evidence about the nature of the banking industry as a motive leading to the use of NFPMs. This nature requires Banks to determine and understand their critical factors which are necessary to achieve long-term success.

The interviewees of Bank A (private) and Bank B (State owned) confirmed that there is a relationship between the nature of the banking industry and the use of NFPMs. Bank A's interviewees emphasised that the nature of the banking industry is service oriented and depends on human resources and this forced Bank A's management to be very aware about achieving a high level of quality, on-time delivery, customer satisfaction and loyalty and employee satisfaction and loyalty. Bank B's interviewees confirmed that the banking industry is one of the industries that depends on the services provided by human being to human being. The success and failure of this industry depends on the level of customer satisfaction and employee satisfaction.

In the literature, authors (such as Fitzgerald et al., 1991; Lynch and Cross, 1991; Brignall and Ballantine, 1996; and Kaplan and Norton, 1997) emphasised the need to use multidimensional PM in the service sector in general. Fitzgerald et al. (1991) demonstrated that service organisations need a balanced range of PMs linked to the

type of service, their competitive environment and their chosen strategy. Hussain and Hoque (2002) examined what factors affected the design and use of NFPMs in four Japanese banks. They found that several institutional forces influenced the banks to implement a particular PMS. These forces are economic constraints, the central bank's regulatory control, accounting standards/financial legislation, management's strategic focus, bank size, competition and organisational tendency to copy the best practices from others.

The above finding partially supports the argument that service organisations need a balanced range of PMs linked to the type of service. However, as far as the researcher is aware, the finding from this project, that the nature of the banking industry is a driver of the use of NFPMs, is not found elsewhere in the literature.

10.3.2 Internal Environmental Factors Affecting the Use of NFPMs

In terms of the internal environmental factors affecting the use of NFPMs in the LCBS this research project provides evidence about:

10.3.2.1 Level of Management

The evidence from the case studies was that NFPMs are used throughout the Banks' management levels. That is, there is a relationship between a manager's position in a bank's hierarchy and the type of PMs used. This finding is in agreement with previous findings or statements in the literature (see, for example, Nanni et al., 1990 and 1992; Lynch and Cross, 1991; Brignall, 1997; Alenizi, 2002). Nanni (1990) suggested that every management level should have different PMs. Lynch and Cross (1991) in their model divided the organisation into different levels (including strategic and operational functions) and they suggested different FPMs and NFPMs in terms of measuring performance at different levels.

Moreover, the researcher's finding clarified that the lower (operational) managers concentrate more on non-financial information and measurement and the middle level managers also use more non-financial measurements than financial ones. However, the top managers use a balance between NFPMs and FPMs but tend to depend more on the FPMs.

10.3.2.2 Operational Experience of Management

In terms of the operational experience of management this research project finding confirms that there is a direct relationship between managers' operational experience and the adoption of NFPMs.

From the interviewees' point of view the operational experience of management influenced the use of NFPMs. The wide operational experience of managers would create a suitable organisational environment for understanding the NFP and then the use of NFPMs. It enables managers to understand their operations and detailed processes and then how these processes should be measured. They confirmed that a management with long-term and wide operational experience would implement more NFPMs. Conversely, a management with little operational experience would rely on FPMs.

The above finding is consistent with previous findings or statements in the literature (see, for example, Birnberg and Wilner, 1986; Mendoza and Bescos, 2001; Alenizi, 2002; Silvola, 2005). Brinberg and Wilner (1986), Mendoza and Bescos, (2001) and Alenizi (2002) in their studies confirmed that managers' experience has a positive relationship with the use of NFPMs.

10.3.2.3 Competence of Management

This research project provides evidence that there is a positive relationship between the competence of management and its interest in using NFPMs.

The interviewees across the four case studies confirmed that managers, who spent time moving through the operational divisions and administrative levels developing themselves, were viewed as competent managers and this competence helped them to understand the advanced management, accounting and technological practices. It helped them to realise that NFPMs are good measurements to evaluate organisational performance.

The above finding is in agreement with previous findings or statements in the literature. For example, Alenizi (2002) in his study confirmed that managers' competency has a positive relationship with the use of NFPMs.

10.3.2.4 Authority of Management

In terms of the authority of management this research project provides evidence that management authority affected the use of NFPMs. The interviewees of Bank B and Bank C asserted that managements of these Banks suffered from limited authority which had affected adversely the Bank's systematic use of NFPMs from an early stage. They attributed this limited authority to the type of ownership in these two cases which is State ownership. They confirmed that although the Central Bank forced them to use FPMs in evaluating performance, they used some NFPMs in evaluating their units' performance for internal purpose without publishing these results.

They emphasised that, recently, the CBL has given SCBs' managements more authority to manage and develop their banks. This authority combined with their operational experience and competence, has played a big role in the implementation of advanced management, accounting and technological techniques aimed at improving and developing the Bank's critical success factors which in turn encouraged the management to use NFPMs more systematically.

The researcher did not find in her literature review any support for this particular finding about the authority of management affecting the use of NFPMs. This finding established a relationship between the level of management's authority and the type of PMs to be used. This result may be attributed to the political, cultural and economic aspects of the Libyan environment.

10.3.2.5 Top Management's Interference

This research project provides evidence that top management's interference influenced the use of NFPMs. The interviewees in Bank A, Bank C and Bank D confirmed that the Chairman/General Manager's interest in the Bank's long-term success factors such as service quality, on-time delivery and customer satisfaction have driven him and his management to interfere in a lot of the operational processes. This interference has encouraged the Bank's managers and employees to enhance the Bank's critical success factors and to use more NFPMs. The interviewees in these case studies attributed this interference to top managers' operational experience and competence and their management and accounting background which were behind their knowledge of the causal relationship between NFPMs and long-term FPMs and then their persistence in implementing these measurements (NFPMs).

This finding established that the interference of management in day-to-day processes positively affected the use of NFPMs. The researcher did not find in her literature review any agreement to support this finding. However, Neely (1994) did mention that PM assists managers to make good intervention when the organisational performance is deteriorating.

10.3.2.6 Stability of Management

This study provides evidence that the stability of management played a significant role in encouraging the use of NFPMs. The interviewees in Bank A, Bank B and Bank C confirmed that there is a relationship between the stability of management and the kind of PMs to be used. They believed that management should be stable for the relatively long-term to work effectively because this stability encourages managers to adopt a long-term vision and strategies which force them to take account of NFP and use the related measurements. They mentioned that the more stable management is, the more likely it is to concentrate on and develop NFP and use the related NFPMs. On the contrary, unstable management that just manages the organisation for the short-term – even if it has a good level of operational experience and competence - would focus more on FPMs and pay less attention to service quality and other non-financial factors.

The researcher did not find in her review of Western literature any support for this finding that the stability of management encouraged the use of NFPMs. However, Alenizi (2002) in his study confirms that there is a correlation between the use of NFPMs and management stability in the service companies in Arab Countries. It may be that this finding about stability of management encouraging the use of NFPMs is one of the differences between Western and Arab countries.

10.3.2.7 Collective Working Group

This research project provides evidence that the collective working group is an important factor encouraging the use of NFPMs. Bank A's and Bank C's interviewees mentioned that a collective group is an influencing factor for enhancing the bank's service quality, strengthening the bank's relationship with its customers

and achieving competitive advantage. They confirmed that the idea of a collective working group is a factor encouraging the use of NFPMs.

This finding established that collaborative working between managers and staff in a bank positively affected the use of NFPMs. However, the researcher did not find in her literature review any support for this finding.

10.3.3 External Environmental Factors Affecting the Use Of NFPMs

In terms of the external environmental factors affecting the use of NFPMs in the LCBS this research project provides evidence about:

10.3.3.1 Some of the Central Bank's Old Regulations

This study provides evidence that some of the State's old legislation and the Central Bank's old regulations hindered the use of NFPMs [such as the labour law number (15)1982 for the public banks and the regulation that prevents public organisations from opening accounts in private banks]. These old regulations restricted the development of a bank's critical success factors and in turn negatively impacted on management's desire for using NFPMs. The interviewees confirmed that such legislation and regulations encouraged management to use and depend on FPMs.

This finding is attributed to the Libyan political and economic environment with its own specific characteristics. The appearance of competition in the Libyan banking market was an incentive for Banks' managements to recognise that such legislation and regulations were no longer suitable and negatively affected their intention to develop their Banks' critical success factors and to use NFPMs. Again the researcher did not find in her literature review any support for this finding that some legislation and regulations hindered the use of NFPMs.

10.3.3.2 Over-control and Interference of the Central Bank

The interviewees in the four case studies mentioned many examples of the over-control and interference of the CBL. For example, the Board of Directors of a bank has to get approval from the Central Bank to introduce any service, to open any new unit, to introduce any technique that aims to develop the bank and to set the services' price. The interviewees confirmed that the Central Bank's over-control and interference in the management of a bank hindered management's ability to enhance service quality and delivery and to satisfy its customers.

This research project provides evidence from the interviewees' point of view that the Central Bank's over-control and interference in the management of a bank negatively affected the use of NFPMs. The researcher did not find in her literature review any support for this finding.

10.3.3.3 New Regulations and Strategies of the Central Bank

The interviewees mentioned that since the 1990s, the new management of the Central Bank with its service-oriented mentality and development of some of the State legislation and strategies and the Central Bank regulations [such as discharging the Bank's employees from decree (15)1982, the decree (1)1993, the affiliation to the WTO and Basle II which made the environment more competitive and it will be even more competitive in the near future] have encouraged the Banks' managements to adopt advanced management, accounting and technological practices such as NFPMs.

This research project provides evidence from the interviewees' point of view that the new regulations and strategies of the Central Bank played a significant role in the trend towards improving and developing NFP and adopting NFPMs for long-term success. This finding is in agreement with previous findings or statements in

the literature. For example, Hussain and Hoque (2002) found that the control and regulation of the Central Bank in Japan impacted on management's planning and establishment of a long-term strategy to improve and measure NFP.

10.3.3.4 Information Shortage

This study provides evidence that information shortage had a negative impact on the use of NFPs. Bank A's, Bank B's and Bank C's interviewees pointed out that Libya as a developing country suffered from a lack of information which had a negative impact on the ability of organisations' managements to implement and use ATs and AMPs such as NFPs and prevented organisations from obtaining the advantages of such advances.

Bank A's interviewees reported that the Bank's management was working in a competitive environment and was aware of the absence of reliable information resources providing up-to-date and valid information and, therefore, from the beginning, it established its own information system to provide it with the required information to perform effectively and in turn it facilitated the use of NFPs.

Bank B's and Bank C's interviewees mentioned that in a competitive environment, information about customers, markets and new projects is very important and therefore, the managements of these Banks recently tried to build their own information system. Moreover, they reported that the Central Bank had signed a contract to establish a new banking system which will link all the Libyan banks together with the Central Bank and stock market to provide information which would encourage the implementation of NFPs.

This research finding established that, within the Libyan environment (which is changing to a more competitive environment) the availability of information is an important environmental factor affecting the use of NFPs. The researcher did not

find in her literature review any support for this finding that an information shortage can have a negative impact on the use of NFPMs.

10.3.3.5 Weakness of Infrastructure

In terms of infrastructure this study provides evidence that the weakness of infrastructure (i.e. electricity and telecommunication system) in the Libyan environment has a negative influence on management's use of NFPMs.

Bank A's interviewees reported that, since the establishment of the Bank, the management realised that the implementation of NFPMs needs a suitable technological environment which Libya is lacking. Therefore, the senior management tried to overcome this problem by adopting the latest international technology. Bank C's and Bank D's interviewees also confirmed that the managements of their Banks have tried to overcome the weakness of electricity and telecommunications system by adopting the latest international technology. They believed that such development will help the Banks' managements to enhance the use of NFPMs.

This research finding established that, within the Libyan environment, the availability of a good infrastructure is an important environmental factor to encourage the use of NFPMs. The researcher did not find in her literature review any support for this finding.

10.3.3.6 Traditional Educational System

This research project provides evidence that the traditional educational system had a negative impact on using NFPMs.

Bank A's, Bank B's and Bank C's interviewees confirmed that the educational system including the financial and managerial educational system is very traditional and is not harmonious with the development of life in the world today. They believed

that this educational system was one of the main reasons for the stakeholders' financially oriented perspective (employees, customers and shareholders) which in turn impeded a bank's management during the process of developing its bank and adopting advanced management, accounting and technological practices such as the implementation of NFPMs.

This research finding established that, in the Libyan environment, the educational system is an important environmental factor affecting management's preference for the type of PM to be used. The researcher did not find in her literature review any support for this finding.

10.3.3.7 State Ownership

This study provides evidence that State ownership had a negative influence on management's interest in using NFPMs.

The interviewees in Bank B and Bank C, which are completely owned by the State via the CBL, pointed out that State ownership restricted the authority of the Boards of Directors to manage and develop the Banks' critical success factors. They clarified that State ownership affected the Banks' strategies which in turn impeded managements' interest in adopting advanced management and technological practices such the use of NFPMs. Moreover, State ownership had sheltered the Banks' managements from competition and encouraged them to adopt traditional financial performance evaluation such as profitability rather than long-term critical success factors such as service quality, on-time delivery and customer satisfaction.

This research finding established that State ownership is an important environmental factor affecting management's preference for the type of PM to be used. The researcher did not find in her literature review any support for this finding.

10.3.3.8 General Public's Lack of Banking Knowledge

This research project provides evidence that the general public's lack of banking knowledge had negatively influenced the use of NFPMs.

Bank A's and Bank D's interviewees confirmed that the openness of society and the traditional educational system had created a group of customers who were demanding but with little knowledge of the banking industry. This group of customers had created an obstacle that negatively affected management's interest in assessing and evaluating its NFP such as customer satisfaction.

This research finding established that, in the Libyan environment, the general public's lack of banking knowledge is an environmental factor that affected adversely the use of NFPMs. The researcher did not find any support for this finding in her literature review.

10.3.3.9 Uncertainty of Economic Environment

This research project provides evidence that the uncertainty of the economic environment enhanced the implementation of NFPMs as tools to be used to build a bank's long-term survival. Bank A's and Bank C's interviewees reported that the uncertain economic environment (which was caused by the State's new economic legislation and policies which led to the appearance of competition, US sanctions which had negatively affected organisations' profitability, the openness of society, and globalisation) had encouraged managers to concentrate on NFP and using NFPMs.

In the literature, Chenhall and Morris (1986) and Chong and Chong (1997) confirmed in their studies that the high levels of uncertainty drive managers to rely heavily on NFPMs. Hoque (2001) argued that NFPMs are better suited for measuring performance under the effects of various sources of uncertainty.

Conversely, Lynch and Cross (1991) found that organisations facing a high level of economic uncertainty are likely to use FPMs to a greater extent than NFPMs. Similarly, Hussain and Hoque (2002) concluded that in Japanese banks the uncertainty of economic conditions increased managers' attention to improve and measure FP while they paid less attention to the improvement and measurement of NFP.

The literature shows that there is conflicting evidence about the uncertainty of economic environment and the type of PMs to be used. Some of the studies confirmed this research project's finding, namely the uncertainty of the economic environment enhanced the implementation of NFPMs. Other studies found contradictory results. Therefore, this research project finding is consistent with the first group of studies that suggested that the uncertainty of the economic environment encouraged the use of NFPMs.

10.3.4 Strategies that Management used in Conjunction with NFPMs

In terms of the management strategies that are associated with the use of NFPMs in the LCBS this research project provides evidence about:

10.3.4.1 Development of Human Resources

Based on the interviewees' point of view, this research project provides evidence that the use of NFPMs has encouraged a bank's management to improve the employees' skills by adopting service-oriented human resource strategies.

The interviewees confirmed that the change in the Libya economic environment generally and in the banking environment particularly has encouraged a bank's management to concentrate on and compete on NFP which in turn has encouraged it to develop its human resource strategies to be more service-oriented. These human resources strategies include the internal and external training programmes,

recruitment policies, employees' meetings, employees' studying for qualifications and English language courses.

This finding is in agreement with previous findings or statements in the literature (see, for example, Guzzo et al., 1985; Bartel, 1994; Nilsson and Rapp, 1999; Alenizi, 2002). Nilsson and Rapp (1999) discovered that company employees changed their behaviour from comparing and analysing consequences to asking about measurements and strategies they should be following. Guzzo et al. (1985) and Bartel (1994) reported that training programmes and goal setting had a positive effect on human resource productivity. They suggested that a company should let human resources contribute to developing any new management strategy because they think this will encourage the implementation to be successful.

10.3.4.2 Development of Reward System

This research project provides evidence that the development of the reward system was the most important management strategy that management adopted in conjunction with the use of NFPMs. From the interviewees' point of view across the four case studies the management's direction toward encouraging employees to use NFPMs for long-term success in a competitive environment has driven it to develop its reward system to be consistent with its strategy of using these measurements.

The relationship between NFPMs and the incentive reward systems has been studied by many researchers (such as Eccles, 1991; Anderson et al., 1994; Kaplan and Norton, 1996; Ittner et al., 1997; Ittner and Larcker, 1997, 1998b and 2002; Srinivasan, 1997; Banker, 2000; Kald and Nilsson, 2000; Malmi, 2001; Johnston et al., 2002). Eccles (1991) suggested that including NFPMs in bonuses and other rewards will improve an organisation's performance. Anderson et al. (1994) found a number of organisations actively using some form of customer satisfaction

measurements in developing, monitoring, and evaluating product and service offering, as well as in evaluating, motivating and compensating employees. Ittner et al. (1997) found that companies pursuing an innovation-oriented prospector strategy tend to place relatively greater weight on NFP in their annual bonus contract. Srinivasan (1997) and Banker et al. (2000) reported that the perceived improvement of both NFP and FP was realised when organisations implemented an incentive reward system that contained NFPMs. William M. Mercer Inc. conducted a study of executive compensation practices at 1,400 organisations and found that 35% of them used customer satisfaction measurements in defining executive compensation and another 33% planned to do so (Journal of Accountancy, May 1993).

Conversely, Ittner and Larcker (1998b) concluded that although there are calls for greater emphasis on NFPMs in internal PMSs, relatively little evidence exists on the impact of including NFPMs in performance evaluation and incentive compensation. Kald and Nilsson (2000) reported that in Nordic organisations, PMs (financial and non-financial) did not play a large role in the determination of bonuses, but such organisations still used subjective evaluation criteria to reward managers.

The literature shows that there is conflicting evidence of the association between NFPMs and reward systems. Some of the studies confirmed the research project finding, namely the development of the reward system as a strategy in conjunction with the use of NFPMs. Other studies found contradictory results or the absence of such a relationship. Therefore, this research project finding is consistent with the first group of studies that suggested that there is an association between NFPMs and the reward system.

10.3.4.3 Development of Operating, Information and Reporting System (Banking System)

This study provides evidence that the development of a bank's operating system and related information and reporting system was a management strategy associated with the use of NFPMs.

The interviewees emphasised that the updating of the bank's banking system is to increase the efficiency of the services provided to customers, to provide daily updated information which would assist the management and employees to perform their job effectively, to support the bank's present and future objectives and to enhance the bank's critical success factors such as service quality, on-time delivery and customer satisfaction..

This finding is partially supported by the previous findings in the literature. Ballantine et al. (1998) in their study confirmed that the multidimensional performance system relies on the information systems' infrastructure. Kald and Nilsson (2000) reported that the use of NFPMs should be integrated with other systems of planning and control by an advanced MIS.

This finding also revealed that the development of a bank's operating, information and reporting system was influenced by the changes in a bank's environment. Privatisation, opening of society, globalisation and the affiliation to the WTO require Banks' managements to understand their critical success factors and to improve and develop their systems to improve their competitiveness. Therefore, this finding of an association between the development of the banking system and the use of NFPMs in the Libyan environment is at least partially supported by pervious findings or statements in the literature.

10.3.4.4 Development of Management Accounting Information

This research project provides evidence that the development of MAI is associated with the use of NFPMs. Bank B's, Bank C's and Bank D's interviewees confirmed that the use of MA methods (such as budgeting, NFPMs and benchmarking) has caused an improvement in the MAI in the internal reports.

In the literature, the implementation of new technologies and philosophies of production management such as computer integrated manufacturing, flexible manufacturing systems, just in time, optimised production technology and TQM, require timely detailed process information that is not available from aggregate accounting data (Johnson, 1992; Kaplan, 1983; Ghalayini and Noble, 1996). Many studies focused on the relationship between MA and NFPMs. These studies found that when organisational philosophies move to an external orientation (customer satisfaction) in order to gain competitive advantage, MA moves away from a traditional "cost analysis" to strategic MA using a combination of non-financial information together with financial information (Kaplan, 1983; Atkinson, 1998; Chenhall, and Langfield-Smith, 1998; Ittner and Larcker, 1998b). Ballantine et al. (1998) in their study confirmed that the multidimensional PMS relies on developing MAI. Brignall (1997) mentioned that organisations that begin to use NFPMs usually need to develop their management accounting systems. Cobb (1993) found that organisations adopting advanced techniques tended to move from centralised, monthly reporting in mainly financial terms to decentralised, daily or weekly reporting of operational indicators. This finding that the development of MAI is associated with the use of NFPMs is consistent with previous findings or statements in the literature.

10.3.4.5 Development of Organisational Structure

This research project provides evidence that the development of organisational structure is associated with the use of NFPMs.

Bank A's, Bank B's and Bank C's interviewees pointed out that the new circumstances in the Libyan environment have driven managements to concentrate on NFP and to use the NFPMs for future success and this in turn led the Banks' managements to create an appropriate organisational structure by adding new departments and divisions. They thought that the new organisational structure will provide a compatible organisational environment for non-financial measurements such as quality of service and customer satisfaction.

In the literature, Hoque (2001) mentioned that managers change their organisations' structure and cultures to become more effective and efficient, for the purpose of obtaining a larger market share and guaranteeing the survival of the organisation. Senior (1997) suggested that changes in organisations stem from many different sources: temporal (relating to the historical development of an organisation and industry cycles) and external and internal (political/ legal change, economic conditions, or technological developments). He stated that organisations change their structures for successful performance. Therefore, the literature supports this finding of the development of organisational structure being associated with the use of NFPMs.

10.3.4.6 Adoption of Advanced Management Practices

This study provides evidence that the adoption of advanced management practices (AMPs) is associated with the use of NFPMs.

Bank A's, Bank C's and Bank D's interviewees indicated that the purposes of adopting AMPs were to develop and improve quality of service, customer

satisfaction, on-time delivery, employee satisfaction and community acceptance. They confirmed that the use of AMPs has encouraged the use of NFPMs.

This finding is in agreement with previous findings or statements in the literature (see, for example, Kaplan, 1983; Drucker, 1990; Albright and Roth, 1992; Fisher, 1992; Johnson, 1992; Banker et al., 1993; Chenhall, 1993; Ezzamel, 1994; Johnson, 1994; Abernethy and Lillis, 1995; Brancato, 1995; Neely, 1995 and 1999; Ghalayini and Noble, 1996; Perera et al., 1997; Itter and Larcker, 1995, 1998a and 1998b; Brignall et al., 1999; Hoque and Alam, 1999; Vaivio, 1999). Neely (1999) mentioned that the new management practices (i.e. computer integrated manufacturing, flexible manufacturing systems, just in time, optimised production technology, benchmarking, and TQM) had influenced the PMS to include more NFPMs.

Chenhall (1997) stated that the relation between TQM and an organisation's performance is stronger if NFPMs are used as an essential part of management evaluation. Ittner and Larcker (1998a) mentioned that TQM requires greater emphasis on customers' requirements and customers' satisfaction with the organisation's products or services, leading to greater emphasis on non-financial measurements, such as complaints and customer satisfaction. Kaplan (1983), Drucker (1990), Hall (1990) and Chenhall (1997) suggested that traditional FPMs are not suitable for TQM settings which require more precise measurement to ensure that quality of process is in control and can be continuously improved. This finding that the adoption of AMPs is associated with the use of NFPMs is supported by previous findings or statements in the literature.

10.3.5 Consequences of Implementation and Use of NFPMs

In terms of the consequences of management's strategies and the use of NFPMs in the LCBS this research project provides evidence about:

10.3.5.1 Variety and Improvement of Services

This research project provides evidence that there is a positive relationship between the use of NFPMs and the improvement in services and the increase in the variety of services offered.

Across the four case studies interviewees attributed this relationship to the nature of NFPMs which are outward looking indicators and have the ability to link an organisation more closely with its environment. They emphasised that the use of NFPMs that related to service quality and customer satisfaction and the reliance on customers' needs and requirements have motivated the Banks' managements to improve and expand their service range.

This finding is in agreement with previous findings or statements in the literature (see, for example, Macbeth and Neil, 1991; Neely, 1999). Neely (1999) mentioned that flexibility is an important element of NFPMs which enhance service within the current competitive environment. Macbeth and Neil (1991) stated that flexibility (as measured by NFPM) has the ability to change the product mix quickly, reduce production lead times and introduce products more rapidly and cheaply.

10.3.5.2 Introduction of Advanced Technology

This research project provides evidence that there is an interrelationship between the use of NFPMs and the technologies adopted. However, this finding is different from previous findings and statement in the literature.

The interviewees across the four case studies emphasised that the ATs adopted were a result of the advances in the Libyan economic environment and banking

market which have encouraged the Bank's managements to focus on NFP concerning quality of service, on-time delivery and customer satisfaction.

In the literature, Banker et al. (1993), Abernethy and Lillis (1995) and Ittner and Larcker (1998b) provided empirical evidence that advanced manufacturing technology have a strong association with NFPMs. Perera et al. (1997) suggested that changing manufacturing technology to emphasise quality and flexibility is associated with changes in PMSs to place greater emphasis on NFPMs. He concluded that management preferences for a specific PM are influenced by the technologies adopted. Neely (1999) found that the introduction of AT was one of the reasons that demonstrated the inadequacies of FPMs and necessitated the use of NFPMs.

From previous statements, these studies introduced conflicting evidence with this research project finding about the type of the relationship between the AT adopted and the use of NFPMs. The literature confirms that the AT adopted is a cause for using NFPMs. However, this research project found that the AT adopted is, at least partly, an outcome of the use of NFPMs – in other words, the interviewees considered that the use of NFPMs encouraged the introduction of ATs.

10.3.5.3 Positive Effects on FPMs

This research project provides evidence that there is a direct and strong relationship between the use of NFPMs and a bank's long-term profitability and customers' deposits and other FPMs.

Some interviewees clarified this relationship by given an example such as the following. If any organisation considers seriously its critical success factors (quality of service, on-time delivery and employee satisfaction and loyalty) by dedicating its resources to achieve customer satisfaction and community acceptance through providing a high level of service quality and on-time delivery and by adopting AT,

then it will achieve gradual improvement in its year-to-year profitability, customers' deposits, and other FPMs.

Generally the relationship between NFPMs and profitability is explored in the literature (see for example, Buzzell et al., 1975; Buzzell and Gale, 1987; Lothian, 1987; Lynch and Cross, 1991; Cross and Lynch, 1992; Fornell, 1992; Kaplan and Norton, 1992; Rust and Anthony, 1993; Singleton-Green, 1993; Anderson, 1994, 1997; Huselid, 1995; Thorne, 1995; Srinivasan, 1997; Ittner and Larcker, 1998a, 1998b, 2003; Banker et al., 2000; Alenizi, 2001; Said et al., 2003; Epstein et al., 2004). Epstein et al. (2004) examined the implications of PMSs (which included FPMs and NFPMs at different levels in organisations) on economic performance. They found evidence that PMSs supported by strict control mechanisms improve organisational profitability, while PMSs with poor cascading and a lack of alignment to compensation do not.

Ittner and Larcker (2003) found that organisations that adopted NFPMs produced significantly higher returns on assets and return on equity over a five-year period. Said et al. (2003) reported that the adoption of NFPMs improved organisations' future accounting and market returns. Alenizi (2001) found that NFPMs had a positive impact on long-term profitability. Banker et al. (2000) found that NFPMs (such as customer satisfaction) are significantly associated with future FP. Srinivasan (1997) studied the relationship between FPMs and NFPMs in hotels. He found that customer satisfaction measurements were significantly associated with future FP as measured by revenues and profit. Huselid (1995) conducted a study on the impact of human resource management practices in nearly one thousand US organisations and found that there was an economically and statistically significant impact on employee turnover and productivity and short-term and long term corporate FPMs. Anderson et al. (1994) in their study of the performance

consequences of customer satisfaction in 77 Swedish organisations in the manufacturing sector found that customer satisfaction was positively connected with accounting return on investment.

Anderson et al. (1997) found positive connections between customer satisfaction and return on investment in Swedish manufacturing organisations, but weaker or negative connections in service organisations. Ittner and Larcker's (1998a) studied if NFPMs were leading indicators of companies' FP using customer satisfaction. They did not find evidence of an association between these measurements and the profitability.

As shown previously, these studies introduced conflicting evidence of the relationship between the NFPMs and profitability. Some of the studies confirmed the research project finding, namely that NFPMs have a positive influence on profitability. Other studies found contradictory results or the absence of such a relationship. Therefore, this research finding is consistent with the first group of studies that suggested that there was a positive association between the use of NFPMs and improved profitability.

10.3.5.4 Capital Expenditure

This research project provides evidence that the use of NFPMs had caused the bank to invest in capital expenditure to achieve the NFPMs' requirements and the related management strategies aimed at enhancing service quality and building customer satisfaction and community acceptance.

The interviewees mentioned that management's interest in enhancing the quality of service and in building customer satisfaction meant additional capital expenditure that was spent on redesigning its organisational structure, establishing the bank's training centre and adopting the latest ATs which were considered to be important

for achieving future success especially after the changes that had occurred in the Libyan economic environment. In the literature, there is some evidence consistent with the research project finding that the use of NFPMs leads to an increase in capital expenditure (see, for example, Ittner and Larcker, 1998b; Alenizi, 2002). Ittner and Larcker (1998b) suggested that the implementation of the BSC could be costly. Alenizi (2002) in his study found that the use of NFPMs tended to result in high capital expenditure

10.4 RECOMMENDATIONS FOR FUTURE RESEARCH

The present study is a first attempt to investigate the use of NFPMs in commercial banks in Libya and to develop a formal theory based on this phenomenon. This project used a grounded theory methodology and the case study method. Each case study produced its own substantive hypotheses and the cross-case analysis produced nineteen formal hypotheses. These hypotheses form the basis for future research. Libyan commercial banks' managements could take these hypotheses as a guide for developing an integrated PMS if they wish to develop banks' performance in the Libyan environment. Moreover, during the development of this theory many possibilities for future research were revealed including the following:

- The formal hypotheses that emerged from analysing the four case studies by comparing the similarities and differences are considered as the main findings of this research study. These hypotheses can be tested in large-scale studies covering the Libyan commercial banks and the LBS.
- Some differences in the findings between the four case studies may become similarities and not appear as differences if more case studies are conducted. Therefore, more case studies need to be conducted.

- This exploratory study involved the LBS and, in particular, the commercial banks. A similar study could be undertaken to examine this phenomenon in other parts of the LBS such as the specialised banks.
- The use of NFPMs has not been researched in other parts of the Libyan service sector (such as health, education, hotels, insurance and communication), or in the Libyan manufacturing sector. Specifically, there is a need for future research to provide a broad overview of the use of NFPMs in the Libyan service sector and/or each of the other Libyan economic sectors. The findings of those studies would help to describe the state of the use of NFPMs in these sectors and provide an opportunity for comparing the findings and determine the similarities and differences in the use of NFPMs between these sectors in Libya.
- The present study was conducted when Libya was entering a transitional period as a result of the affiliation to the WTO, the process of privatisation, the ending of the US and UN sanctions, implementation of the National Payment System and other economic changes. Therefore, there is a need for future work to study the state of the use of NFPMs in Libya after passing through this stage of development to find if there are any further changes.
- Testing the research project's hypotheses in Libya and other countries would also enable a comparison to be made. That would help to determine whether or not there are any findings specifically related to the Libyan environment and also, whether or not there are any cultural, economic and political factors influencing the use of NFPMs.

10.5 SUMMARY

This research project endeavoured to investigate the use of NFPMs in the Libyan commercial banks by examining four selected Banks. The research project provides a portrayal of the use of NFPMs within a developing environment.

This section summaries the main contribution of this research project in terms of the motives for using NFPMs; the internal environmental factors; the external environmental factors; the management strategies in relation to the use of NFPMs and the consequences of NFPMs and the associated management strategies.

Regarding the motives for using NFPMs, this research project finds five motives for a bank to use such measurements. These motives are:

- Limitations of FPMs (H₁).
- Competitive environment (H₂).
- Management's knowledge of the relationship between NFPMs and FPMs (H₃).
- Demanding customers (H₄).
- Nature of the banking industry (H₅).

The limitations of FPMs; competitive environment; management's knowledge of the relationship between NFPMs and FPMs and demanding customers are in agreement with the findings or statements in the literature. In addition, this research project establishes a relationship between the nature of the banking industry (as a motive) and the use of NFPMs.

Concerning the impact of internal environmental factors on the use of NFPMs, this research project provides evidence that there is an interaction between the use of NFPMs and various internal environmental factors. These internal environmental factors are:

- Level of management (H₆).
- Operational experience of management (H₇).
- Competence of management (H₇).

- Authority of management (H₇).
- Top management's interference (H₇).
- Stability of management (H₇).
- Collective working group (H₇).

The level of management; operational experience of management; competence of management and stability of management are in agreement with the findings or statements in the literature. The authority of management and stability of management are related to the political and economic environment in Libya. Moreover, this research project finds that there are relationships between top management's interference and collective working group (as internal environmental factors) and the use of NFPMs.

As regards the external environmental factors, this research project provides evidence about the influence of some external environmental factors on the use of NFPMs. These external environmental factors are:

- Some of the Central Bank's old regulations (H₉).
- Over-control and interference of the Central Bank (H₉).
- New regulations and strategies of the Central Bank (H₈).
- Information shortage (H₉).
- Weakness of infrastructure (H₉).
- Traditional educational system (H₉).
- State ownership (H₉).
- General public's lack of banking knowledge (H₉).
- Uncertainty of economic environment (H₈).

The new regulations and strategies of the Central Bank and the uncertainty of the economic environment are in agreement with the findings or statements in the literature, but the researcher did not find any support in the literature for the other factors and at least some of these factors may related to the Libyan environment.

Concerning the management strategies, this research project provides evidence about the management strategies adopted in conjunction with the use of NFPMs.

These management strategies are:

- Development of human resources (H₁₀).
- Development of reward system (H₁₁).
- Development of a bank's operating, information and reporting system (H₁₂).
- Development of management accounting information (H₁₃).
- Development of organisational structure (H₁₄).
- Adoption of advanced management practices (H₁₅).

All these findings are in agreement with the findings or statements in the literature.

Regarding the consequences of the management strategies adopted in conjunction with the use of NFPMs, this research project finds a number of consequences. These consequences are:

- The use of NFPMs leads to an improvement in a bank's services and an increase in its range of services offered (H₁₆).
- The use of NFPMs is expected to encourage a bank's management to introduce advanced technology (H₁₇).
- The use of NFPMs in a bank can have a positive impact on long-term profitability (H₁₈).
- The use of NFPMs is expected to cause an increase in a bank's capital expenditure (H₁₉).

These first, third and fourth consequences are in agreement with the findings or statements in the literature but the above second consequence is contrary to previous research findings in the literature. The literature suggests that the use of advanced technology is a cause for using NFPMs. Conversely, this research project finds that one consequence of using NFPMs is the adoption of advanced technology.

The above discussion is based on this research project's formal hypotheses that emerged from the data collected from four case studies. These formal hypotheses (which together with the model developed from the four case studies, are the main contribution of this research project) reveal insights and enhance our understanding of the nature of NFPMs in the Libyan banking environment. The following are the formal hypotheses of this research project:

- H₁** The limitations of FPMs are one of the major motives leading to a bank's use of NFPMs
- H₂** A more competitive environment is one of the main motives for managers in a bank using NFPMs.
- H₃** Management's knowledge of the relationship between NFPMs and FPMs is one of the major motives leading to the use of NFPMs in a bank.
- H₄** Demanding customers are one of the major motives leading to the use of NFPMs in a bank.
- H₅** The nature of the banking industry as a service oriented industry is one of the major motives leading to the use of NFPMs in a bank.
- H₆** Lower level managers in a bank tend to use NFPMs more than middle and higher level managers do.
- H₇** Operational experience of management, competence of management, management with more authority, top management's interference, stability of management, and collective working group positively affect a bank's use of NFPMs.
- H₈** New regulations and strategies of the Central Bank and the uncertainty of the economic environment positively affect a bank's use of NFPMs.
- H₉** Some of the Central Bank's old regulations, over-control and interference of the Central Bank, information shortage, weakness of infrastructure, traditional educational system, State ownership and the general public's lack of banking knowledge negatively affect a bank's use of NFPMs.
- H₁₀** The development of human resource strategies to be more service-oriented is associated with a bank's use of NFPMs.
- H₁₁** The development of the reward system to be linked with non-financial performance and to be more service-oriented is associated with a bank's use of NFPMs.

- H₁₂** The development of the banking system (operating, information and reporting system) is associated with a bank's use of NFPMs.
- H₁₃** The development of a bank's management accounting information is associated with its use of NFPMs.
- H₁₄** The development of a bank's organisational structure is associated with its use of NFPMs.
- H₁₅** The adoption of advanced management practices is associated with a bank's use of NFPMs.
- H₁₆** Use of NFPMs encourages a bank to diversify and improve its range of services.
- H₁₇** Use of NFPMs encourages a bank to adopt advanced technology.
- H₁₈** Use of NFPMs improves a bank's profitability, customers' deposits and other FPMs in the long-term.
- H₁₉** Use of NFPMs leads to an increase in a bank's capital expenditure.

REFERENCES

REFERENCES

- Abbas, H. W. (1987), Industrial Development and Migrant Labour in Libya, PhD. Thesis, Manchester University, UK.
- Abernethy, M. A. and Lillis, A. M. (1995), "The Impact of Manufacturing Flexibility on Management Control System Design", Accounting Organizations and Society, Vol. 20, No. 4, pp. 241-258.
- Abuarrosh, M. M. (1996), A Cross-Cultural Study of Locus of Control and Self-Esteem as Related to Sociological Factors Among Libyan and British Postgraduate Students, PhD. Thesis, Manchester University, UK.
- African Development Bank (1995), Development Research and Policy Department, African Development Report 1994, Abidjan.
- Al-Arbah, S. A. (1985), The Banking System in Socialist People's Libyan Arab Jamahiriya, 1st ed., The Institute of Banking Business and Management Publishing, Al-Dar Arabia for Cyclopaedia, Beirut, Lebanon.
- Al-Baih, Abdu-Almanaim (1970), "The Banks in Libya: How Were They Established and How Were They Libyanised and Some Suggestions", Journal of Studies in Economy and Trade, Vol. 6, No. 1, pp. 1-36.
- Albright, T. L. and Roth, H. (1992), "The Measurements of Quality Costs: An Alternative Paradigm", Accounting Horizons, (June), pp. 15-27.
- Alenizi, F. (2001), Non-financial performance measurement: Four grounded theory case studies in the service sector, PhD. Thesis, University of Dundee, Scotland.
- Al-Farsi, A. H. (2002), Development and Diversity of Income Resources of Libyan Economy: the Partnership with the Private Sector (the Domestic), Paper Presented at a Conference on Economic development in Libya: Past and Present, (December 14-16), Tripoli.
- Al-Zini, A. SH. (2002), "The Evaluation of the Strategies and Objectives in the previous Development Plans", Paper Presented at a Conference on Economic development in Libya- the Past and Present, (December 14-16), Tripoli.
- American Accounting Association (1971), "Report of the Committee on Non-Financial Measures of Effectiveness", The Accounting Review, Vol. 46, (Supplement): 165-211.

- Anderson, E. W. and Sullivan, M. (1993), "The Antecedents and Consequences of Customer Satisfaction for Firms", Marketing Science, Vol. 12, pp. 125-143.
- Anderson, E. W., Fornell, C. and Lehmann, D. R. (1994), "Customer Satisfaction, Market Share and profitability: findings from Sweden", Journal of Marketing, Vol. 58, (July), pp. 53-66.
- Anderson, E. W., Fornell, C. and Rust, R. T. (1997), "Customer Satisfaction, Productivity, and Profitability: Differences between goods and services", Marketing Science, Vol. 16, No. 2, pp. 129-145.
- Ansell, Meredith O. and El-Arif, Ibrahim (1972), The Libyan Revolution, The Oleander Press, Stoughton, Wisconsin.
- Anthony, R. N. (1965), Planning and Control Systems: A Framework for Analysis, Division of Research, Graduate School of Business Administration, Harvard University, Boston.
- Antony, J. and Banuelas, R. (2001), "A strategy for Survival", Manufacturing Engineer, Vol. 80, No. 3, pp. 119- 121.
- Argyris, C. and Kaplan, R. S. (1994), "Implementing New Knowledge: The Case of Activity-Based Costing", Accounting Horizons, Vol. 8, No. 5, pp. 447-464.
- Arthur Andersen and Co. (1994), Customer Satisfaction Strategies and Tactics, Arthur Andersen, Chicago.
- Artinian, B. (1982), "Conceptual Mapping: The Development of the Strategy", West Journal of Nurse Research, Vol. 4, No. 4, pp. 379-393.
- Atkinson, A. A. (1997), "Linking Performance Measurement to Strategy", Journal of Strategic Measurement, (August/September), pp. 5-13.
- Atkinson, A. A. (1998), "Strategic Performance Measurement and Incentive Compensation", European Management Journal, Vol. 16, No. 5, pp. 552-561.
- Atkinson, A. A., Waterhouse, J. H. and Wells, R. B. (1997), "A Stakeholder Approach to Strategic Performance Measurement", Sloan Management Review, (Spring), pp. 25-37.
- Atkinson, H. and Brown, J. (2001), "Rethinking Performance Measure: assessing progress in UK hotels", International Journal of Contemporary Management, Vol. 13, No. 3, pp 128-136.
- Bait El-Mal, M. M., Smith, C. H. and Taylor, M. E. (1973), "The Development of Accounting in Libya", The International Journal of Accounting, Education and Research, Vol. 8, No. 2, (Spring), pp. 83-101.

- Ballantine, J., Brignall, S. and Modell, S. (1998), "Performance Measurement and Management in Public Health Services: A Comparison of UK and Swedish Practice", Management Accounting Research, Vol. 9, pp. 71-94.
- Banker, R. D., Potter, G. and Schroeder, R. G. (1993), "Reporting Manufacturing Performance Measures to Workers: An Empirical Study", Journal of Management Accounting Research, Vol. 5, (Fall), pp. 33-55.
- Banker, R. D., Potter, G. and Srinivasan, D. (2000), "An Empirical Investigation of an Incentive Plan that Includes Non-financial Performance Measures", The Accounting Review, Vol. 75, No. 1 (January), pp. 65-92.
- Banks, R. L. and Wheelwright, S. C. (1979), "Operations Versus Strategy – Trading Tomorrow for Today", Harvard Business Review, (May/June), pp. 112-120.
- Barden, P. (2003/04), "Balanced Scorecard Provides ROI", Financial Management, (December/January), P. 4.
- Barden, P. (2004), "Non-prescription Remedy", Financial Management, (April), pp. 26-27.
- Bartel, A. P. (1994), "Productivity Gains from the Implementation of Employees Training Programs", Industrial Relations, Vol. 33, pp. 411-425.
- Barua, A., Kriebel, C. H. and Mukhopadhyay, T. (1995), "Information Technologies and Business Value: An Analytical and Investigation", Information Systems Research, (March), pp. 3-23.
- Bearden, W. O., Malhotra, M. K. and Uscategui, K. H. (1998), "Customer Contact and the Evaluation of Service Experiences: Propositions and Implications for the Design of Service", Psychology and Marketing, Vol. 15, Issue 8, pp. 793-809.
- Bearman, P. J. (1986), Qadhafi's Libya, Zed Books, London.
- Berliner, C. and Brimson, J. A. (1988), Cost Management for Today's Manufacturing: The CAM-I Conceptual Design, Harvard Business School Press, Boston.
- Berry, R. H., Crum, R. E. and Waring, A. (1993), Corporate Performance Evaluation in Banking Lending Decisions, CIMA, London.
- Bhimani, A. (1993), "Performance Measures in UK Manufacturing Companies", Management Accounting, pp. 20-23.
- Birchard, B. (1994), "The Call for Full Disclosure", CFO: the Magazine for Senior Financial Executives, (December), pp. 30-42.

- Birnberg, J. G., Turopolec, L. and Young, S. M. (1983), "The Organisational Context of Accounting", Accounting, Organizations and Society, Vol. 8, No. 2/3, pp. 111-129.
- Bititci, U., Carrie, A. and McDevitt, L. (1997), "Integrated Performance Measurement Systems: A Development Guide", International Journal of Operations & Production Management, Vol. 17, No. 5, pp. 522-534.
- Bititci, U., Mendibil, K., Nudurupati, S., Turner, T. and Garengo, P. (2004), "The Interplay between Performance Measurement, Organisational Culture and Management Styles", Paper from the Fourth International Conference on Performance Measurement, (July 28-30), pp 107-114, Edinburgh, UK.
- Bititci, U., Turner, T. and Begemann, C. (2000), "Dynamics of Performance Measurement System", Journal of Operations & Production Management, Vol. 20, No. 6, pp. 692-704.
- Bititci, U., Turner, T. and Bourne, M. (2000), "Performance Measurement Process v. Model", Paper from the Second International Conference on Performance Measurement, Past, Present, Future, University of Cambridge, (July), pp. 48-55.
- Blumer, H. (1969), Symbolic Interactionism: Perspective and Method, Prentice-Hall, Englewood Cliffs, New Jersey.
- Bocci, F. (2004), "A Comment We", Perspectives on Performance, Vol. 3, Iss. 1/2, pp. 20-21.
- Bourne, M., Mills, J., Wilcox, M., Neely, A. and Platts, K. (2000), "Designing, Implementing and Updating Performance Measurement Systems", International Journal of Operations & Production Management, Vol. 20, No. 7, pp. 754-771.
- Bourne, M., Neely, A., Platts, K. and Mills, J. (2002), "The Success and Failure of Performance Measurement Initiatives", International Journal of Operations & Production Management, Vol. 22, No. 11, pp. 1288-1310.
- Brancato, C. K. (1995), "New Performance Measures - A Research Report", Report Number, 1118-95-RR. The Conference Board, New York.
- Brignall, S. (1997), "A Contingent Rationale for Cost System Design in Services", Management Accounting Research, Vol.8, pp. 325-346.
- Brignall, S., Fitzgerald, L., Johnston, R. and Markou, E. (1999), Improving Service Performance: A Study of Step-Change versus Continuous Improvement, CIMA, London.

- Brignall, T. J. and Ballantine, J. (1996), "Interactions and Trade-offs in Multi-dimensional Performance Measurement", Paper Presented at a Conference on Strategic Management Accounting, (May 10-11), University of Alberta, Alberta, Canada.
- Brinberg, J. and Wilner, N. (1986), "Methodological Problems in Functional Fixation Research: Criticism and Suggestions", Accounting, Organizations and Society, Vol. 11, No. 1, pp. 71-80.
- Bromwich, M. (1990), "The Case for Strategic Management Accounting: the Role of Accounting Information for Strategy in Competitive Markets", Accounting, Organizations and Society, Vol. 15, No. 1/2, pp. 27-45.
- Bromwich, M. and Bhimani, A. (1989), Management Accounting: Evolution not Revolution, CIMA, London.
- Bromwich, M. and Bhimani, A. (1994), Management Accounting, CIMA, London.
- Brown, G., Innes, J. and Tagoe, N. (1999), "Performance Measurement in a Telephone Call Centre", Management Accounting, (January), pp. 41-42.
- Brown, M. G. (1996), Keeping Score: Using the Right Metrics to Drive World-class Performance, Productivity Press, Portland.
- Brownell, P. (1995), Research Methods in Management Accounting, Coopers and Lybrand, Melbourne, Australia.
- Bruns, W. J. Jr. and McKinnon, S. M. (1993), "Information and Managers: A Field Study", Journal of Management Accounting Research, Vol. 5, (Fall), pp. 84-123.
- Burns, W. J. and Kaplan, R. S. (1987), Accounting and Management: Field Study Perspectives, Harvard Business School Press, Boston.
- Burrell, G. and Morgan, G. (1979), Sociological Paradigms and Organizational Analysis, Heinemann Educational Books, London.
- Bushman, R. M., Indjejikian, R. J. and Smith, A. (1996), "CEO Compensation: The Role of Individual Performance Evaluation", Journal of Accounting and Economics, Vol. 21, pp. 161-193.
- Business International Corporation (1990), Winning in the New Global Marketplace: Strategic Redirection for the 1990s, New York.
- Buzzell, R. D. and Gale, B. T. (1987), The PIMS Principles, The Free Press, New York.

- Buzzell, R. D., Gale, B. T. and Sultan, R. G. (1975), "Market Share-Key to Profitability", Harvard Business Review, Vol. 53, (January-February), pp. 97-106.
- Cassell, C. and Symon, C. (1994), "Qualitative Research in Work Contexts", In Cassell and Symon (Eds), Qualitative Methods in Organisational Research: A Practical Guide, pp. 1-13, Sage, London.
- Central Bank of Libya (2001), Economic Bulletin, Vol. 41, First Quarter.
- Central Bank of Libya (2001), the Banking and Monetary Statistics during 1966-2000, Libya.
- Central Bank of Libya (2002), Annual Report No. 45th (2001), Musrath, Al-Ezdihar Printing, Libya.
- Central Bank of Libya (2003), Annual Report No. 46th, (2002), Musrath, Al-Ezdihar Printing, Libya.
- Central Bank of Libya (2004), Annual Report No. 47th (2003), Musrath, Al-Ezdihar Printing, Libya.
- Chandler, A. D. Jr. (1966), Strategy and Structure: Chapters in the History of the American Industrial Enterprise, Garden City, Doubleday.
- Chandler, A. D. Jr. (1977), The Visible Hand: The Managerial Revolution in American Business, Harvard University Press, Boston.
- Chandler, A. D., Jr and Daems, H., (1979), "Administrative Coordination, Allocation and Monitoring: A Comparative Analysis of the Emergence of Accounting and Organisation in the U.S.A. and Europe", Accounting, Organizations and Society, Vol. 4, No. 1/2, pp. 3-20.
- Chenhall, R. and Langfield-Smith, K. (1998), "Factors Influencing the Role of Management Accounting in the Development of Performance Measures within Organizational Change Programs", Management Accounting Research, Vol. 9, pp. 361-386.
- Chenhall, R. H. (1993), "Reliance on Manufacturing Performance Measures, Strategies of Manufacturing Flexibility, advanced Manufacturing Practices and Organisational Performance: an empirical investigation", paper presented at the Strategic Management Accounting Seminar, Macquarie University, Sydney.
- Chenhall, R. H. (1997), "Reliance on Manufacturing Performance Measures, Total Quality Management and Organisational Performance", Management Accounting Research, Vol. 8, pp. 187-206.

- Chenhall, R. H. and Morris, D. (1986), "The Impact of Structure, Environment and Interdependence on the Perceived Usefulness of Management Accounting Systems", Accounting Review, Vol. 61, pp. 16-35.
- Chong, V. K. and Chong, K. M. (1997), "Strategic Choices, Environment Uncertainty and SBU performance: A Note on the Intervening Role of Management Accounting Systems", Accounting and Business Research, Vol. 27, pp. 268-276.
- Chua, W. (1986), "Radical Developments in Accounting Thought", The Accounting Review, Vol. LXI, No. 4, (October), pp.601-632.
- CIMA, (1993), Performance Measurement in the Manufacturing Sector, CIMA, London.
- Clark, K. B., and Fujimoto, T. (1989), Product Development and Competitiveness, OECD International Seminar on Science, Technology and Economic Growth, Paris.
- Coates, J., Davis, T. and Stacey, R. (1995), "Performance Measurement System, Incentive Reward Schemes and Short-Termism in Multinational Companies: a note", Management Accounting Research, Vol. 6, pp. 125-135.
- Cobb, I. (1993), JIT and the Management Accountant: A Study of Current UK Practice, CIMA, London.
- Colville, I. (1981), "Reconstructing Behavioral Accounting", Accounting, Organizations and Society, Vol. 6, No. 2, pp. 119-132.
- Coronada, R. B. and Antony, J. (2002), "Critical Success Factors for the Successful Implementation of Six Sigma Project in Organisations", The TQM Magazine, Vol. 14, No. 2, pp. 92-99.
- Costello, S. J. (1994), Managing Change in the Workplace, Irwin Professional Publishing, Burr Ridge, Illinois, USA.
- Covaleski, M.A. and Dirsmith, M.W. (1990), "Dialectic Tension, Double Reflexivity and the Everyday Accounting Researcher: On Using Qualitative Methods", Accounting, Organizations and Society, Vol. 15, No. 6, pp.543-573.
- Creswell, J. W. (1994), Research Design: Qualitative & Quantitative Approach, Sage, London.
- Crosby, P. B. (1979), Quality is Free, McGraw- Hill, New York.
- Cross, K. F. and Lynch, R. L. (1992), "For good Measure", CMA Magazine, (April), pp. 20-23.

- De Meyer, A., Nakane, J., Miller, J. G. and Ferdows, K. (1989), "Flexibility: the next Competitive Battle", Strategic Management Journal, Vol. 10, pp. 135-144.
- Deming, w. E. (1982), Out of the Crisis, MIT, Cambridge, Mass (USA).
- Devinney, T., Johnson, G., Yip, G., Hensmans, M. Prashantham, S. And Richard, P. (2005), "Successful Strategic Transformers", Paper Presented at the Strategic Management Society, Orlando.
- Dinesh, D. and Palmer, E. (1998), "Management by Objectives and the Balanced Scorecard – Will Rome Fall Again?", Management Decision, Vol. 36, No. 6, pp. 363-369.
- Dixon, J., Nanni, A. and Vollmann, T. (1990), The New Challenge - Measuring Operations for World-class Competition, Dow Jones-Irwin, Homewood, IL.
- Drucker, P. E. (1990), "The Emerging of Manufacturing", Harvard Business Review, (May-June), pp. 94-102.
- Eccles, R. (1991), "The Performance Measurement Manifesto", Harvard Business Review, Vol. 69, pp. 131-137.
- Eccles, R. and Pyburn, P. (1992), "Creating a Comprehensive System to Measure Performance", Management Accounting (USA), (October), Vol. 74, No. 4, pp. 41-44.
- Eisenhardt, K. M. (1989), "Making Fast Strategic Decisions in High-Velocity Environment", Academy of Management Journal, Vol. 32, pp.543-576.
- Eisenhardt, K. M. (1991), "Better Stories and Better Constructs: The Case for Rigor and Comparative Logic", Academy of Management Review, Vol. 16, No. 3, pp.620-627.
- Eisenhardt, K., M. (1989), "Building Theories from Case Study Research", Academy of Management Review, Vol. 14, No. 4, pp. 532-550.
- Elmaihub, S. (1981), The Role of the Public Sector in Development Strategy: The Case of Libya, Paper presented at the Symposium on African Perspective on the New International Economic Order Sponsored by the United Nations University in Co-operation with Addis Ababa University.
- Emmanuel, C., Otley, D. T. and Merchant, K. (1990), Accounting for Management Control, (2nd edition), Chapman & Hall, London.
- Epstein, M. J., Rejc, A. and Slapničar, S. (2004), "The Impact of Performance Measurement on Corporate Performance", Paper from the Fourth International

- Conference on Performance Measurement, (July 28-30), pp. 339-346, Edinburgh, UK.
- Erban, P. (1989), "How they Manage Performance in Windsor", Personal Management, (February), pp. 42-45.
- Eskildsen, J. K., Kristensen, K., Juhl, H. J. and Østergaard, P. (2004), "The Drivers of Customer Satisfaction & Loyalty", Total Quality Management & Business Excellence, Vol. 15, No. 5 and 6, pp. 859-568.
- Euske, R., Lebas, M. and McNair, C. (1993), "Performance management in an International Setting", Management Accounting Research, Vol. 4, pp. 275-299.
- Evans, J. H., Hwang, Y. and Nagarajan, N. J. (1997), "Cost Reduction and Process Reengineering in Hospitals", Journal of Cost Management, (May-June), pp. 20-27.
- Ezzamel, M. (1994), "From Problem Solving to Problematization, Relevance Revisited", Critical Perspectives on Accounting, Vol. 5, pp. 269-280.
- Farley, R. (1971), Planning for Development in Libya, the Exceptional Economy in the Developing World, Praeger Publishers Inc., New York.
- Feigenbaum, A. V. (1991), Total Quality Control, (3rd ed, revised), McGraw- Hill, New York.
- Feltham, G. A. and Xie, J. (1994), "Performance Measure Congruity and Diversity in Multi-task Principal/Agent Relations", The Accounting Review, (July), pp. 429-543.
- Ferreira, A. and Otley, D. (2004), "The Design and Use of Management Control System: an Extended Framework for Analysis", Paper from the Fourth International Conference on Performance Measurement, (July 28-30), pp. 371-378, Edinburgh, UK.
- Ferreira, L.D. and Merchant, K.A. (1992), "Field Research in Management Accounting and Control: A Review and Evaluation", Accounting, Auditing & Accountability Journal, Vol. 5, No. 4, pp. 3-34.
- Fisher, J. (1992) "Use of Non-financial Performance Measures", Journal of Cost Management, Vol. 6, No. 1, (Spring), pp. 31-38.
- Fisher, J. (1995) "Use of Non-financial Performance Measures" In Readings in Management Accounting, edited by S. M. Young, pp. 329-335. Prentice Hall, Englewood Cliffs, New Jersey.

- Fitzgerald, L., and Moon, P. (1996), Performance Measurement in Service Industries: Making it Work, CIMA, London.
- Fitzgerald, L., Johnson, R., Birgnall, S., Silvestro, R., and Voss, C. (1991), Performance Measurement in Service Business, CIMA, London.
- Fornell, C. (1992), "A National Customer Satisfaction Barometer: The Swedish Experience", Journal of Marketing, (January), pp. 6-21.
- Fornell, C., Ittner, C., Larcker, D. (1996), The Valuation Consequences of Customer Satisfaction, Unpublished working paper, The Wharton School, University of Pennsylvania, Philadelphia.
- Foster, G. and Gupta, M. (1997), "The Profitability Implications of Customer Satisfaction", Working paper, Stanford University and Washington University.
- Fowler, A. (1990), "Performance Management – the MBO of the 90s", Personal Management, (July), pp. 47-51.
- Franco, M. and Bourne, M. (2003), "Factors that Play a Role in Managing Through Measures", Management Decision, Vol. 41, No. 8, pp. 698-710.
- Franco-Santos, M., Bourne, M. and Huntington, R. (2004), "Executive Pay and Performance Measurement Practices in the UK", Paper from the Fourth International Conference on Performance Measurement, (July 28-30), pp. 387-394, Edinburgh, UK.
- Fry, T. D. and Cox, J. F. (1989), "Manufacturing Performance: Local versus Global Measures", Production and Inventory Management journal, 2nd Quarter, pp. 52-56.
- Gates, S. (1999), Aligning Strategic Performance Measures and Results, The Conference Board, New York.
- Geanuracos, J. and MeikleJohn, I. (1993), Performance Measurement: The New Agenda Using Non-financial Performance Indicators to Improve Profitability, Business Intelligence Ltd, London.
- General Planning Council (2001), The State of Public-Owned Industrial Companies, Tripoli, Libya.
- General Planning Council (2001a), Report of Libyan Economic and Social Indicators 1962-2000, Tripoli, Libya.
- Ghalayini, A. M. and Noble, J. S. (1996), "The Changing Basis of Performance Measurement", International Journal of Operations & Production Management, Vol. 16, No. 8, pp. 63-80.

- Ghalayini, A. M., Noble, J. S., and Crowe, T. J. (1997), "An Integrated Dynamic Performance Measurement System for improving Manufacturing Competitiveness", International Journal of Production Economics, Vol. 48, pp. 207-225.
- Gill, J. and Johnson, P. (1991), Research Methods for Managers, Paul Chapman Publishing Ltd., London.
- Gioia, D. A. and Pitre, E. (1990), "Multiparadigm Perspectives on Theory Building" Academy of Management Review, Vol. 15, No. 4. pp. 584-601.
- Giurnaz, A. (1985), Economic of Oil: A Case of Libya, PhD Thesis, University of Keele, UK.
- Glaser, B. G. (1978), Advances in the Methodology of Grounded Theory: Theoretical Sensitivity, The Sociology Press, Mill Valley, California.
- Glaser, B. G. (1992), Basics of Grounded Theory Analysis, The Sociology Press, Mill Valley, California.
- Glaser, B. G. and Strauss, A. L. (1967), The Discovery of Grounded Theory: Strategies for Qualitative Research, Aldine, New York.
- Goldratt, E. M. and Cox, J. (1986), The Goal: Beating the Competition, Creative Output Books, Hounslow.
- Gooselin, M. (2006), "The Influence of Strategy on the Deployment of Balanced Scorecards", Paper from the Fifth International Conference on Performance Measurement, (July 25-28), pp. 289-295, London, UK.
- Gosse, D. I. (1993), "Cost Accounting's Role in Computer-Integrated Manufacturing: An Empirical Field Study", Journal of Management Accounting Research, Vol. 5, (Fall), pp. 59-69.
- Govindarajan, V. and Shank, J. (1992), "Strategic Cost Management: Tailoring Control to Strategies", Journal of Cost Management, Vol. 6, No. 3, pp.14-25.
- Gregory, M. J. (1993), "Integrated Performance Measurement: A Review of Current Practice and Emerging Trends", International Journal of Production Economics, Vol. 30-31, pp. 281-296.
- Guba, E. G. and Lincoln, Y. S. (1994), Competing Paradigms in Qualitative Research, In Denzin, N. and Lincoln, Y, (eds.), Handbook of Qualitative Research, Chapter 6, pp. 105-117, Sage, Thousand Oaks, California., London
- Guba, E.G. (1990), The Paradigm Dialog, In E. G. Guba (Ed.), The Alternative Paradigm Dialog, Sage, Newbury Park, California., London.

- Gul, F. A. and Chia, Y. M. (1994), "The Effects of Management Accounting Systems, Perceived Environmental Uncertainty, and Decentralisation on Managerial Performance: A Test of Three-Way Interaction", Accounting, Organizations and Society, Vol. 19, No. 4, pp. 413-426.
- Gupta, P. (2005), "Integrated Performance Management", Perspectives on Performance, Vol. 4, Iss. 3, pp. 6-7.
- Guthrie, J. and Ricceri, F. (2002), "Quantify Intellectual Capital: Measuring and Reporting to Demonstrate Value of KM to Stakeholders", Paper Presented at the KM Australia Conference, Building and Improving on Knowledge Management Initiative for Commercial Proficiency, (December 3-4), Sydney.
- Guzzo, R. A., Jette, R. M. (1985), "The Effect of Psychologically Based Intervention programs in Worker Productivity: A Meta Analysis", Personnel Psychology, Vol. 38, pp. 275-291.
- Hall, R. W. (1983), Zero Inventories, Dow Jones-Irwin, Homewood.
- Hall, R. W., Johnson, H. T. and Turney, P. B. B. (1991), Measuring Up – Charting Pathways to Excellence, Irwin, Homewood.
- Hall, W. (1990), World-Class Manufacturing: Performance Measurement in Performance Excellence in Manufacturing and Service Organisation, Edited by P.Turney. Sarasota, FL: AAA.
- Haspeslagh, P. (1982), "Portfolio Planning: Uses and Limits", Harvard Business Review, Vol. 60, pp. 59-75.
- Hauser, J. R., Simester, D. I. and Wernerfelt, B., (1994), "Customer Satisfaction Incentives", Marketing Science, Vol. 13, No. 4, pp. 327-350.
- Hayes, R. H. and Abernathy, W. J., (1980), "Managing our Way to Economic Decline", Harvard Business Review, (July/August), pp. 67-77.
- Hayes, R. H. and Garvin, D. A. (1982), "Managing as if Tomorrow Mattered", Harvard Business Review, (May/June), pp. 70-79.
- Heim, J. A. and Compton, W. D. (1992), Manufacturing Systems: Foundations of World-Class Practice, National Academy of Engineering, Washington, DC.
- Hemmer, T. (1996), "On Design and Choice of Modern Management Accounting Measures", Journal of Management Accounting Research, Vol. 8, pp. 87-116.
- Henderson, B. D. (1979), Henderson on Corporate Strategy, Abt. Books, Cambridge.
- Higgins, B. (1959), Economic Development, W. W. Norton & Co., Inc., New York.

- Higgins, B. (1968), Economic Development: Principles, Problems and Policies, 2nd ed., Constable, London.
- Higgins, B. and Jacques, R. (1967), "Economic Development with Unlimited Supplies of Capital", The Libyan Economic Review, Vol. (III), No. 2, (Autumn), pp. 1-50.
- Hines, R.D. (1989), "The Sociopolitical Paradigm in Financial Accounting Research", Accounting, Auditing and Accountability Journal, Vol. 2, No. 1, pp. 52-76.
- Hinton, M., Francis, G. and Holloway, J. (2000), "Best Practice Benchmarking in the UK", Benchmarking: An International Journal, Vol. 7, No.1, pp. 52-61.
- Hiromoto, T. (1988), "Another Hidden Edge-Japanese Management Accounting", Harvard Business Review, (July-August), pp. 22-26.
- Hopper, T. and Powell, A. (1985), "Making Sense of Research into the Organisational and Social Aspects of Management Accounting: A Review of its Underlying Assumptions", Journal of Management Studies, Vol. 22, No. 5, (September), pp. 429-465.
- Hopwood, A. G. (1984), Accounting and Human Behaviour, Prentice-Hall, Englewood Cliffs, New Jersey.
- Hoque, Z. (2001), Strategic Management Accounting, Concept, Processes, Issues, Chandos Publishing, Oxford.
- Hoque, Z. and Alam, M. (1999), "TQM Adoption, Institutionalism and Changes in Management Accounting Systems: A Case Study", Accounting and Business Research, Vol. 29, No. 3 (Summer), pp. 199-210.
- Hoque, Z. and James, W. (2000), "Linking Balanced Scorecard with Size and Market Factors: Impact on Organisational Performance", Journal of Management Accounting Research, Vol. 12, pp. 1-17.
- <http://www.cbl.gov.ly/en/listview/index.php>
- <http://www.cbl-ly.com/eabout.htm>
- <http://www.gpc.gov.ly/online/detailsnews.php>
- Huselid, M. A. (1995), "The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance", Academy of Management Journal, Vol. 38, No. 3, pp. 635-672.

- Hussain, M. and Gunasekaran, A. (2002) "Management Accounting and Performance Measures in Japanese Banks", Managing Service Quality, Vol. 12, No. 4, pp. 232-245.
- Hussain, M. and Hoque, Z. (2002) "Understanding Non-financial Performance Measurement Practices in Japanese Banks: A New Institutional Sociology Perspective", Accounting, Auditing & Accountability Journal, Vol. 15, No. 2, pp. 162-183.
- Hussain, M. M. (2000), Management Accounting Systems in Services: Empirical Evidence with Non-Financial Performance Measurement in Finnish, Swedish and Japanese Banks and other Financial Institutions, ACTA WASAENSIA, No. 78, University of Vaasa, Finland.
- Hussain, M. M. (2003), "The Impact of Economic Condition on Management Accounting Performance Measures: Experience with Banks", Managerial Finance, Vol. 29, No. 2/3, pp. 23-41.
- Innes, J. (1998), Handbook of Management Accounting, CIMA, London.
- International Bank for Reconstruction and Development (1960), The Economic Development of Libya, The Johns Hopkins Press, Baltimore.
- Ittner, C. D. and Larcker, D. F. (1995), "Total Quality Management and the Choice of Information and Reward System", Journal of Accounting Research, Vol. 33, pp. 1-34.
- Ittner, C. D. and Larcker, D. F. (1997), "Quality Strategy, Strategic Control Systems, and Organizational Performance", Accounting, Organizations and Society, Vol. 22, pp. 293-314.
- Ittner, C. D. and Larcker, D. F. (1998a), "Are Nonfinancial Measures Leading Indicators of Financial Performance? An Analysis of Customer Satisfaction", Journal of Accounting Research, Vol. 38, (Supplement), pp. 1-35.
- Ittner, C. D. and Larcker, D. F. (1998b), "Innovations in Performance Measurement: Trends and Research Implications", Journal of Management Accounting Research, Vol. 10, pp. 205-238.
- Ittner, C. D. and Larcker, D. F. (2002), "Determinants of Performance Measure Choices in Worker Incentive Plans", Journal of Labor Economics, Vol. 20, No. 2, pp. 58-90.
- Ittner, C. D. and Larcker, D. F. (2003), "Coming up Short on Nonfinancial Performance Measurement", Harvard Business Review, (November), pp. 88-95

- Ittner, C. D., Larcker, D. F. and Meyer, M. (1997), Performance, Compensation, and the Balanced Scorecard, Working Paper, University of Pennsylvania.
- Ittner, C. D., Larcker, D. F. and Rajan, M. V. (1997), "The Choice of Performance Measures in Annual Bonus Contracts", The Accounting Review, (April), pp. 231-255.
- Jarvis, R., Kitching, J., Curran, J. and Lightfoot, G. (1996), The Financial Management of Small Firms: An Alternative Perspective, Certified Accountants Educational Trust, London.
- Johanson, U. (2005), Balancing Dilemmas of the Balanced Score, EAA Conference Presentation, Gotenberg.
- Johnson, H. T. (1983), "The Search for gain in Markets and Firms: A Review of the Historical Emergence of Management Accounting Systems", Accounting, Organizations and Society, Vol. 2/3, pp. 139-146.
- Johnson, H. T. (1986), A New Approach to Management Accounting History, Free Press, New York.
- Johnson, H. T. (1992), Relevance Regained: from top-down Control to bottom-down Empowerment, Free Press, New York.
- Johnson, H. T. (1994), "Relevance Regained, Total Quality Management and the Role of Management Accounting", Critical Perspectives on Accounting, Vol. 5, pp. 259-267.
- Johnson, H. T. and Kaplan, R. S. (1987), Relevance Lost: The Rise and Fall of Management Accounting, Harvard Business School Press, Boston.
- Johnson, H. T., (1975), "The Role of Accounting History in the Study Modern Business Enterprise", The Accounting Review, Vol. 50, pp. 444-450.
- Johnson, H., T., (1978), "Management Accounting in Early Multidivisional Organisation: General Motors in the 1920s", Business History Review, (Winter), pp. 490-517.
- Johnson, M. D., and Fornell, C. (1991), "A Framework for Comparing Customer Satisfaction across Individual and Product Categories", Journal of Economic Psychology, Vol. 12, No. 2, pp. 267-286.
- Johnson, M. D., Gustafsson, A., Andreassen, T. W., Lervik, L. and Cha, J. (2001), "The Evolution and Future of National Customer Satisfaction Index Models", Journal of Economic Psychology, Vol. 22, pp. 217-245.

- Johnston, R., Brignall, S. and Fitzgerald, L. (2002), "Good Enough Performance Measurement: a Trade-off between Activity and Action", Journal of the Operational Research Society, Vol. 53, No. 3, (March), pp. 256-262.
- Journal of Accountancy, "Incentive Pay Plans Emphasize Nonfinancial Measures", May 1993, pp. 17-18.
- Journal of Applied Corporate Finance (1997), "The Link between Capital Structure and Shareholder Value", Journal of Applied Corporate Finance, Vol. 10, Iss. 2, pp. 40-67.
- Judson, A. S. (1990), Making Strategy Happen, Transforming Plans into Reality, Basil Blackwell, London.
- Juran, J. M. (ed) (1988), Quality Control Handbook, McGraw-Hill, New York.
- Kagioglou, M., Cooper, R. and Aouad, G. (2001), "Performance Management in Construction: A Conceptual Framework", Construction Management and Economics, Vol. 19, pp. 85-95.
- Kald, M. and Nilsson, F. (2000), "Performance Measurement at Nordic Companies", European Management Journal, Vol. 18, No. 1, pp. 113-127.
- Kanji, G. K. (2002), "Performance Measurement System", The Quality Management, Vol. 13, No. 5, pp. 715-728.
- Kaplan, R. and Norton, D. (1992), "The Balanced Scorecard: Measures that Drive Performance", Harvard Business Review, Vol. 70, (January- February), pp. 71-79.
- Kaplan, R. S. (1983), "Measuring Manufacturing Performance: A New Challenge for Managerial Accounting Research", The Accounting Review, Vol. LVIII, No. 4, (October), pp. 686-705.
- Kaplan, R. S. (1984), "The Evaluation of Management Accounting", The Accounting Review, Vol. LIX, No. 3, (July), pp. 390-418.
- Kaplan, R. S. (1986), "The Role for Empirical Research in Management Accounting", Accounting, Organizations and Society, Vol. 11, No. 4, pp. 429-452.
- Kaplan, R. S. (1990), Measures for Manufacturing Excellence, Harvard Business School Press, Boston.
- Kaplan, R. S. and Atkinson, A. A. (1989), Advanced Management Accounting, Prentice Hall, New Jersey.

- Kaplan, R. S. and Norton, D. P. (1996), The Balanced Scorecard – Translating Strategy into Action, Harvard University Press, Boston.
- Kaplan, R. S. and Norton, D. P. (1997), “Why does business need a Balanced Scorecard?”, Journal of Cost Management, (May/June), pp. 5-10.
- Kaplan, R. S. and Norton, D. P. (2004), Strategy Maps: Converting Intangible Assets into Tangible Outcome, Harvard Business School Press, Boston.
- Kaplan, R. S., and Norton, D. P. (1993), “Putting the Balanced Scorecard to work”, Harvard Business Review, (September/ October), pp. 134-147.
- Kaplan, R. S., and Norton, D. P. (1996), “Using the Balanced Scorecard as a Strategic Management System”, Harvard Business Review, (January/February), pp. 75-85.
- Kaplan, R. S., and Norton, D. P. (2000), “Having Trouble with your Strategy? Then Map it”, Harvard Business Review, Vol. 78, Issue 5, (September/October), pp. 75-85.
- Kaplan, R., S. and Norton, D. P., (2001), “The Transforming the Balanced Scorecard from Performance Measurement to Strategic Management: part 1”, Accounting Horizons, Vol. 15, No. 1, pp. 87-104.
- Kaydos, W. (1999), Operational Performance Measurement: Increasing Total Productivity, St. Lucie Press, New York.
- Keegan, D. P., Eiler, R. G. and Jones, C. R. (1989), “Are Your Performance Measures Obsolete?”, Management Accounting, (June), pp. 45-50.
- King, N. (1994), “The Qualitative Research Interview”, In Cassell, C. and Symon, G. (eds), Qualitative Methods In Organisational Research: A Practical Guide, pp. 14-36, Sage, London.
- Kolakowski, L. (1993), An Overall View of Positivism, In Hammersley, M. (ed), Social Research: Philosophy, Politics, and Practice, SAGE, The Open University, London.
- Kuhn, T. S. (1970), The Structure of Scientific Revolutions, University of Chicago Press, Chicago.
- Labas, M. and Euske, K. (2002), “A conceptual and operational delineation of performance” In Neely, A. (editor), Business Performance Measurement: Theory and Practice, University Press, Cambridge.
- Larcker, D. F. (2004), Performance Measures: Insights and Challenges, CIMA, Management Accounting Research Group Conference, (March 25), pp. 1-22.

- Law No. (1) of 1993 of the Banks, Money and Credit.
- Law No. (1) of 2005 of Banks.
- Law No. (4) of 1963 of the Banks, Money and Credit.
- Libby, R. and Luft, J. (1993), "Determinants of Judgement Performance in Accounting Setting: Ability Knowledge, Motivation and Environment", Accounting, Organizations and Society, Vol. 18, No. 5, pp. 425-451.
- Libby, T. and Waterhouse, J. H. (1996), "Predicting Change in Management Accounting Systems", Journal of Management Accounting Research, Vol. 8, pp. 137-150.
- Lincoln, Y. S., and Guba, E. G. (1985), Naturalistic Inquiry. Sage, Newbury Park, California, London.
- Lindberg, J. (1952), A General Economic Appraisal of Libya, United Nations Publication, New York.
- Lipe, M. G. and Salterio, S. E. (2000), "The Balanced Scorecard – Judgemental Effects of Common and Unique Performance Measures", The Accounting Review, Vol. 75, No.3, pp. 283-298.
- Lothian, N. (1987), Measuring Corporate Performance, CIMA Occasional Papers Series, Chartered Institute of Management Accountants, London.
- Luxford, K. (2005), "Libya Beats a Path to Foreign Bankers", Euromoney, (2005), Vol. 36, Issue 437 (from/ <http://Euromoney.com>).
- Lye, J., Perera, H. and Rahman, A. (1997), Grounded Theory: A Theory Discovery Method for Accounting Research, Unpublished Research Paper, Department of Accounting and Finance, The University of Melbourne, New Zealand.
- Lynch, R. L. and Cross, K. F. (1991), Measure Up – The Essential Guide to Measuring Business Performance, Mandarin, London.
- Lynch, R. L. and Cross, K. F. (1991), Measure Up- Yardsticks for Continuous Improvement, Blackwell, Cambridge.
- MacArthur, J. B. (1996), "Performance Measures That Count: Monitoring Variables of Strategic Importance", Journal of Cost Management, Vol. 10, No. 3, (Fall), pp. 39-45.
- Macbeth, D. K., and Neil, G. C. (1991), Customer-Supplier Relationship Performance, Proceedings 2nd International Conference PICS- Belgium
- Malmi, T. (2001), "Balanced Scorecard in Finnish Companies: A Research Note", Management Accounting Research, Vol. 11, pp. 207-220.

- Markovic, N. and Vukovic, M. (2006), "Performance Measurement and IT – Do We need New is Development Paradigm?", Paper from the Fifth International Conference on Performance Measurement, (July 25-28), pp. 457-464, London, UK.
- Marr, B. and Neely, A. (2004), Managing and Measuring for Value: The Case of Call Centre Performance, Cranfield School of Management, Cranfield University, UK.
- Marr, B., Gray, D. and Neely, A. (2003), "What is Driving Companies to Measure their intellectual Capital?", Journal of Intellectual Capital, Vol. 4, No. 4, pp. 441-464.
- Marr, B., Neely, A., Bourne, M., Franco, M., Wilcox, M., Adams, C., Mason, S. and Kennerley, M. (2004), "Business Performance Measurement - What is the State of Use in Large US Firms?", Paper from the Fourth International Conference on Performance Measurement, (July 28-30), pp. 627-634, Edinburgh, UK.
- Martinez, V. (2007), "What is the Value of Using Performance Management System?" Cranfield Management Research Institute (CMRI), Centre for Business Performance, Online Newsletter, from the (http://www.som.cranfield.ac.uk/som/research/centres/cbp/publications/publications_researcharticles.asp/16/02/2007).
- Martins, R. A., Mergulhao, R. C. and Sobreira Leal, J. B. (2006), "The use of Performance Measurement in Six Sigma Projects: A Case Study", Paper from the Fifth International Conference on Performance Measurement, (July 25-28), pp. 489-496, London, UK.
- Maskell, B. (1989a), "Performance Measurement for World Class Manufacturing, Part I", Management Accounting, (May), pp. 32-33.
- Maskell, B. (1989b), "Performance Measurement for World Class Manufacturing, Part II", Management Accounting, (July/ August), pp. 48-50.
- Maskell, B. (1989c), "Performance Measurement for World Class Manufacturing, Part III", Management Accounting, (September), pp. 64-66.
- Maskell, B. H. (1991), Performance Measurement for World Class Manufacturing, Productivity Press, Cambridge.
- Masoud, A. Mustafa (2003), "The Libyan Commercial Banks – the Actuality and Prospect", Journal of Arab Banks Union, No. 277, pp. 29-36.

- Masoud, A. Mustafa and Al-Shrif, B. (2002), "The Libyan Commercial Banks – the Development and Activation", Journal of Arab Banks Union, No. 259, pp. 81-88.
- Mather, H. (1989), Competitive Manufacturing, Prentice Hall Business and Professional Division, Eagle Cliffs, New Jersey.
- May, T. (2001), Social Research: Issues, Methods and Process, 3rd edition, Open University Press, Buckingham, Philadelphia.
- McAdam, R. and Bailie, B. (2002), "Business Performance Measures and Alignment Impact on Strategy: The Role of Business Improvement Models", International Journal of Operations and Production Management, Vol. 22, No. 9, pp. 972-996.
- McCall, G. J. and Simmons, J. L. (1969), Issues in Participant Observation: A Text and Reader, Addison-Wesley Publishing Co, Reading, Mass.
- McDougall, G. H.G. and Levesque, T. (2000), "Customer Satisfaction with Service: Putting Perceived Value into the Equation", Journal of Services Marketing, Vol. 14, No. 5, pp. 392-410.
- McKinnon, J. (1988), "Reliability and Validity in Field Research: Some Strategies and Tactics", Accounting, Auditing and Accountability Journal, Vol. 1, No. 1, pp. 34-54.
- McNair, C. J., Lynch, R. L. and Cross, K. F. (1990), "Do Financial and Non-financial Performance Measures have to Agree?", Management Accounting, (November), pp. 28-36.
- Medori, D. and Steeple, D. (2000), "A framework for Auditing and Enhancing Performance Measurement System", International Journal of Operations and Production Management, Vol. 20, No. 5, pp. 520-533.
- Mendoza, C. and Bescos, P. L. (2001), "An Explanatory Model of Managers' Information Needs: Implication for Management Accounting", The European Accounting Review, Vol. 10, No. 2, pp. 257-289.
- Mephram, M. J. (1988), Accounting in Eighteenth Century Scotland, Garland Publishing, New York.
- Merchant, K. A. (1984), "Influences on Departmental Budgeting: An Empirical Examination of a Contingency Model", Accounting, Organizations and Society, Vol. 9, No. 3/4, pp. 291-307.

- Merchant, K. A. (1985), "Organizational Controls and Discretionary Program Decision Making: A Field Study", Accounting, Organizations and Society, Vol. 10, No. 1, pp. 67-85.
- Merchant, K. A. (1990), "The Effect of Financial Control System on Data Manipulation and Management Myopia", Accounting, Organizations and Society, Vol. 15, No. 4, pp. 297-313.
- Merchant, K. A. and Riccaboni, A. (1990), "Performance-based Management Incentives at the Fiat Group: a field study", Management Accounting Research, Vol. 1, pp. 281-303.
- Miles, M. B. Huberman, A. M. (1994), Qualitative Data Analysis: An Expanded Sourcebook, (2nd Ed), Sage, Thousand Oaks, California.
- Miles, R. E. and Snow, C. C. (1978), Organisational Strategy, Structure and Process, McGraw-Hill, New York.
- Miles, R. E. and Snow, C. C. (1994), Fit, Failure and Hall of Fame, Free Press, New York.
- Miller, D. and Friesen, P. H. (1978), "Archetypes of Strategy Formulations", Management Science, pp. 937-948.
- Miller, J. G. and Vollmann, T. E. (1985), "The Hidden Factory", Harvard Business Review, (September-October), pp. 142-150.
- Ministry of Planning (1973), Three-Year Social and Economic Development Plan: 1973-1975, Libya.
- Ministry of Planning (1976), Social and Economic Transformation Plan: 1976-1980, Libya.
- Ministry of Planning (1976), Summary of the Social and Economic Transformation Plan: 1976-1980, Libya.
- Modell, S. (1995), "A Three-dimensional Approach to Management Control System", Journal of Business and Management, (Spring), pp. 35-73.
- Moullin, M. (2005), "Defining PM - Should the Definition include Stakeholders", Perspectives on Performance, Vol. 4, Iss. 3, p. 17.
- Nahapiet, J. and Ghoshal, S. (1998), "Social Capital, Intellectual Capital, and the Organisational Advantage", Academy of Management Review, Vol. 23, No. 2, pp. 242-266.

- Nanni, A. J., Dixon, J. R. and Vollmann, T. E. (1990), "Strategic Control and Performance Measurement", Journal of Cost Management, (Summer), Vol. 4, No. 2, pp. 33-42.
- Nanni, A. J., Dixon, J. R. and Vollmann, T. E. (1992), "Integrated Performance Measurement: Management Accounting to Support the New Manufacturing Realities", Journal of Management Accounting Research, Vol. 4, (Fall), pp. 1-19.
- Naur, M. (1986), Political Mobilization and Industry in Libya, Akademisk Forlag, Denmark.
- Neely, A., Walters, A. and Austin, R. (2002) Performance Measurement and Management: Research and Action, Boston, USA.
- Neely, A. (1998), Measuring Business Performance, The Economist books, London.
- Neely, A. (1999), "The Performance Measurement Revolution: Why Now and What Next", International Journal of Operations & Production Management, Vol. 19, No. 2, pp. 205-228.
- Neely, A. and Adams, C. (2000), "Perspectives on Performance: The Performance Prism", In Handbook of Performance Measurement, (ed. Bourne, M.), Gee Publishing, London.
- Neely, A. and Adams, C. (2001), "The Performance Prism Perspective", Journal of Cost Management, Vol. 15, No. 1 (January- February), pp. 7-15.
- Neely, A. and Adams, C. and Crowe, P. (2001), "The Performance Prism in Practice", Measuring Business Excellence, Vol. 5, No. 2, pp. 6-14.
- Neely, A. and Bourne, M. (2000), "Why Measurement Initiatives Fail", Measuring Business Excellence, Vol. 4, No. 4, pp. 3-6.
- Neely, A. D., Gregory, M. and Platts, K. (1995), "Performance Measurement system design: a literature review and research agenda", International Journal of Operations & Production Management, Vol. 15, No. 4, pp. 80-116.
- Neely, A., Adams, C. and Kennerley, M. (2002), The Performance Prism: The Scorecard for Measuring and Managing Business Success, Financial Times Prentice Hall, London.
- Neely, A., Mills, J., Platts, K., Gregory, M. and Richards, H., (1994), "Realising Strategy through Measurement", International Journal of Operations & Production Management, Vol. 14, No. 3, pp. 140-152.

- Neely, A., Richards, H. Mills, J., Platts, K. and Bourne, M. (1997), "Designing Performance Measures: A Structured Approach", International Journal of Operations and Production Management, Vol. 17, No. 11, pp. 1131-1152.
- NEVEM (1989), Performance Indicators in Logistics, IFS, UK.
- New York Times (1998), Ford is Changing Bonus Program, March 26: C7 (N).
- Nilsson, F. and Rapp, B. (1999), "Implementing Business Unit Strategies: the role of management control systems", Scandinavian Journal of Management, Vol. 15, pp. 65-88.
- Nørreklit, H. (2000), "The Balance on the Balanced Scorecard a Critical Analysis of Some of its Assumptions", Management Accounting Research, Vol. 11, No. 1, pp. 65-88.
- Nørreklit, H. (2003), "The Balanced Scorecard: What is the Score? A Rhetorical Analysis of the Balanced Scorecard", Accounting, Organizations and Society, Vol. 28, No. 6, pp. 591-619.
- Nudurupati, S. S. (2003), Management and Business Implications of IT- supported performance measurement, PhD. Thesis, University of Strathclyde, UK.
- Oakland, J .S. (1995), Total Quality Management, Butterworth-Heinemann Ltd., Oxford.
- Oliver, R. L. (1977), "Effect of Evaluations and Disconfirmation on Post exposure Product Evaluations", Journal of Applied Psychology, Vol. 62, (April), pp. 246-250.
- Oliver, R. L. (1980), "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions", Journal of Marketing Research, Vol. 17, (November), pp. 460-469.
- Ostinelli, C. and Toscano, G. (1994), Putting Quality to WORK IN Banking through Management Accounting Systems: Three Italian Banks, Alternative Approaches, Paper Prepared for the 17th Annual Congress of European Accounting Association, (April 6-8), Venice, Italy.
- Otley, D, (1987), Accounting Control and Organisational Behaviour, William Heinemann Ltd., London.
- Otley, D. (1994), "Management Control in Contemporary Organisations: Towards a Wider Framework", Management Accounting Research, Vol. 5, pp. 289-299.
- Otley, D. (1997), "Better Performance Management", Management Accounting, p. 44.

- Otley, D. (1999), "Performance Management: a framework Management Control System Research", Management Accounting Research, Vol. 10, pp. 363-382.
- Otley, D. T. (1980), "The Contingency Theory of Management Accounting: Achievement and Prognosis", Accounting, Organizations and Society, pp. 428-431.
- Pablos, P. O. (2002), "Evidence of Intellectual Capital Measurement from Asia, Europe and the Middle East", Journal of Intellectual Capital, Vol. 3, No. 3, pp. 287-302.
- Pannesi, R. (1989), "Promoting Manufacturing Strategy Implementation through the Right Measures", National Conference Proceedings, American Production & Inventory Control Society (APICS), pp. 263-266, Falls Church VA.
- Parker, L. D. and Roffey, B. H. (1997), "Methodological Themes: Back to the Drawing Board: Revisiting Grounded Theory and the Everyday Accountant's and Manager's Reality", Accounting, Auditing and Accountability Journal, Vol. 10, No. 2, pp. 212-247.
- Pärl, Ü., Haldma, T. and James, S. P. (2006), "Relevance and Value of financial and Non Financial Performance Measures to Managers: an Empirical Investigation" Paper presented at the (BAA) British Accounting Association, (March), pp. 1-12, Dublin.
- Patton, M. Q. (1987), How to Use Qualitative Methods in Evaluation, Sage, London.
- Penrose, E. T., (1959), The Theory of the Growth of the Firm, John Wiley, New York.
- Perera, S., Harrison, G. and Poole, M. (1997), "Customer-Focused Manufacturing Strategy and the Use of Operations-Based Non-financial Performance Measures: A Research Note", Accounting, Organizations and Society, Vol. 22, No. 6, pp. 212-247.
- Peters, T., (1987), "Thriving on Chaos", Alfred A. Knopf, New York.
- Porter, M. E. (1980), Competitive Strategy, The Free Press, New York.
- Pratt, D. (2005), "Are We Getting Close to a Basic Definition?", Perspectives on Performance, Vol. 4, Iss. 3, pp. 18-19.
- Prieto, I. M and Revilla, E. (2004), Learning Capacity and Business Performance Measurement and Research, Paper from the Fourth International Conference on Performance Measurement, (July 28-30), pp. 603-610, Edinburgh, UK.

- Rees, W. and Sutcliffe, C. (1994), "Quantitative Non-financial Information and Income Measures: The Case of Long-term Contracts", Journal of Business Finance and Accounting, (April), pp. 331-347.
- Reichheld, F. and Markey, R. Jr. (1992), *The Loyalty Effect: Essays on the Relationship between Loyalty and Profits*, Bain & Co. p. 1.
- Richardson, P. R. and Gordon, J. R. M. (1980), "Measuring Total Manufacturing Performance", Sloan Management Review, (Winter), pp. 47-58.
- Richman, A., Richman, V. and MacLean, L. (2006), "A New Performance Measure for Commercial Airlines: Daily Hours Ratio", Perspectives on Performance, Vol. 5, Iss.1, (March), pp.13-15.
- Rolstadas, A. (1998), "Enterprise Performance Measurement", International Journal of Operations & Production Management, Vol. 18, No. 9/10, pp. 989-999.
- Rust, R. and Anthony, Z. (1993), "Customer Satisfaction, Customer Retention, and Market Share", Journal of Retailing, Vol. 69, (Summer), pp. 145-156.
- Ryan, B., Scapens, R. W., Theobald, M. (1992), Research Method and Methodology in Finance and Accounting, Academic Press, London.
- Said, A. A., HassabElnaby, H. R. and Wier, B. (2003), "An Empirical Investigation of the Performance Consequences of Non-financial Measures", Journal of Management Accounting Research, Vol. 15, pp. 193-223.
- Salter, M. (1973), "Tailor Incentive Compensation to Strategy", Harvard Business Review, pp. 94-102.
- Sarantakos, S. (1998), Social Research, 2nd Edition, MacMillan Press Ltd., London.
- Scapens, R. (1990), "Researching Management Accounting Practice: The Role of Case Study Methods", British Accounting Review, Vol. 22, (September), pp. 259-281.
- Schmenner, R. W. (1988), "Escaping the Black Holes of Cost Accounting", Business Horizons, (January-February), pp. 66-72.
- Secretariat of Planning, Economic and Trade (1997), The Follow up Report of Implementation of the Three-Year Programme (1994-1996), Libya.
- Secretariat of Planning, Social and Economic Transformation Plan (1981-1985), Libya.
- Secretariat of Planning, Trade and Treasury (1993), Summery of the Three Year Programme: 1994-1996, Libya.

- Sekaran, U. (1992), Research Methods for business: A Skill-building Approach, John Wiley & Sons, USA.
- Senior, B. (1997), Organisational Change, Pitman Publishing, London.
- Siegel, G. and Sorensen, J. E. (1999), Counting More, Counting Less, Transformations in the Management Accounting Profession, Institute of Management Accountants, Montvale, N. J.
- Silverman, D. (1993), Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction, Sage, London.
- Silverman, D. (2001), Interpreting Qualitative Data, Sage, London.
- Silvola, H. (2005), "Management Accounting Practices a Contingency Perspective Based on the Organizational Life Cycle and Venture Capital Investors", Paper Presented at the Annual Congress of European Accounting Association, May, Gothenburg, Sweden.
- Simon, A. and Sohal, A. (1996), "Generative and Case Study Research in Quality Management Part I: Theoretical Considerations", International Journal of Quality and Reliability Management, Vol. 13, No. 1, pp. 32-42.
- Simon, J. L. and Burstein, P. (1985), Basic Research Methods in Social Sciences, (3rd Edition), Pandal House, New York.
- Simons, R. (1987), "Accounting Control Systems and Business Strategy: An Empirical Analysis", Accounting, Organizations and Society, Vol. 12, pp. 357-374.
- Simons, R. (1990), "The Role of Management Control Systems in Creating Competitive Advantage: New Perspective", Accounting, Organisations and Society, Vol. 15, No. 1, pp. 127-143.
- Simons, R. (1995), Levers of Control, Harvard Business School Press, Boston.
- Simons, R. (2000), Performance Measurement & Control System for Implementing Strategy – Text and Cases, Prentice Hall, Englewood Cliffs, New Jersey.
- Singleton-Green (1993), "If It Matters, Measure It", Accountancy, (May), pp. 52-53.
- Skandia (1994), Intellectual Capital Report 1994, Stockholm.
- Skinner, W. (1974), "The Decline, Fall and Renewal of Manufacturing", Industrial Engineering, (October), pp. 32-38.
- Skinner, W., (1971), "The Anachronistic Factory", Harvard Business Review, (January-February), pp. 61-70.
- Smith, A. E. (1990), The Productivity Manual, Gulf Publishing Company, Austen.

- Smith, M., Swaffer, A. and Gurd, B. (1998), The Impact of Organisational Culture on Accounting Lag, Interdisciplinary Perspectives on Accounting Symposium, Osaka, Japan.
- Speckbacher, G., Bischof, J. and Pfeiffer, T. (2003), "Descriptive Analysis on the Implementation of Balanced Scorecard in German-Speaking Countries", Management Accounting Research, Vol. 14, pp. 361-387.
- Spicer, B. H. (1992), "The Resurgence of Cost and Management Accounting: a Review of Some Recent Developments in Practice, Theories and Case Research Methods", Management Accounting Research, Vol. 3, pp.1-37.
- Srinivasan, D. (1997), Relation between Financial and Non-financial Measures of Performance, PhD. Thesis, Graduate School, University of Minnesota, USA.
- Stivers, B. P., Covin, T. J., Hall, N. G. and Smalt, S. W. (1998), "How Non-financial Performance Measures are Used", Management Accounting, Vol. 7, No. 8, pp. 44-49.
- Strauss, A. (1987), Qualitative Analysis for Social Scientists, Cambridge University Press, New York.
- Strauss, A. and Corbin, J. (1990), Basics of Qualitative Research: Grounded Theory Procedures and Techniques, Sage, Newbury Park.
- Strauss, A. and Corbin, J. (1994), "Grounded Theory Methodology: An Overview", in Denzin, N. and Lincoln, Y. (Eds) Handbook of Qualitative Research, Sage, Thousand Oaks, California, London.
- Strauss, A. and Corbin, J. (1998), Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory, Sage, Thousand Oaks, CA., USA.
- Suwignjo, P., Bititci, U. and Carrie, A. (2000) "Quantitative Models for Performance Measurement System", International Journal of Production Economics, Vol. 64, pp. 231-241.
- Sveiby, K. E. (1997), The New Organizational Wealth: Managing and Measuring Intangible Assets, Berrett Koehler, San Francisco.
- Sveiby, K. E. (2001), "A knowledge-based Theory of the Firm to Guide in Strategy Formulation", Journal of Intellectual Capital, Vol. 2, pp. 344-358.
- Tayles, M., Bramley, A., Adshead, N. and Farr, J. (2000), "Dealing with the Management of Intellectual Capital", Accounting, Auditing & Accountability Journal, Vol. 15, No. 2, pp. 251-267.

- Taylor, S. J. and Bogdan, R. (1984), *Introduction to Qualitative Research Methods, The Search for Meaning*, 2nd Edition., John Wiley & Sons, New York.
- Teece, D. J. (2000), Managing Intellectual Capital: Organisational, Strategic, and Policy Dimensions, Oxford University Press, Oxford.
- The Economist Intelligence Unit (1997-1998), Country Profile: Libya, London.
- Thorne, H. (1995), "Performance Measures in Manufacturing: Lessons from the Balanced Scorecard and Dynamic Model", Accounting Forum, Vol. 18, No. 4, pp. 27-44.
- Tomkins, C. and Groves, R. (1983), "The Everyday Accountant and Researching His Reality", Accounting, Organizations and Society, Vol. 8, No. 4, pp. 407-415.
- Turney, P. B. B. and Anderson, B., (1989), "Accounting for Continuous Improvement", Sloan Management Review, Vo. 30, No. 2, (Winter), pp. 37-47.
- Vaivio, J. (1999), "Exploring a 'non-financial' Management Accounting Change", Management Accounting Research, Vol. 10, pp. 409-437.
- Vandewalle, D. (1998), Libya since Independence: Oil and State-Building, Cornell University Press, London.
- Voss, C. A., Blackmon, K., Chase, R., Rose, B. and Roth, A. V. (1997), Achieving World Class Service, an Anglo-American Benchmark Comparison of Service Practice and Performance, Severn Trent plc, Birmingham.
- Wall Street Journal (1994), "Chrysler Aides to Get Bonuses Equal to Salaries", (February 22), 1994, p. A, 4:1
- Williamson, O. E., (1981), "The Modern Corporation: Origins, Evolution, Attributes", Journal of Economic Literature, Vol. XIX, (December), pp. 1537-1568.
- Womack, J. P., Jones, D. T. and Roos, D. (1990), The Machine that Changed the World, Rawson Associates, New York.
- Wright, G. (1998), "Perspective on Performance Measurement Conflicts in Service Business", Journal of General Management, Vol. 23, No. 3, (Summer), pp. 35-50.
- Wright, J. (1981), Libya: A Modern History, Croom Helm, London.
- Yin, R. K. (1993), Applications of Case Study Research, Sage, Newbury Park, California, London.
- Yin, R. K. (1994), Case Study Research Design and Methods, Second Edition, Sage, Thousand Oaks. California, London.

- Yin, R. K. (2003), Case Study Research: Design and Methods, Sage, Thousand Oaks, California, London.
- Young, S. M., Fisher, J. and Lindquist, T. M. (1993), "The Effects of Intergroup Competition and Intergroup Cooperation on Slack and Output in a Manufacturing Setting", The Accounting Review, Vol. 68, No. 3, pp. 466-481.
- Ziethaml, V. A. (1988), "Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis", Journal of Marketing, Vol. 52, pp. 2-22.
- Zuhri, Z. M. (1978), Socio-Economic Transformation and the Problem of Migration in Libya: A Case Study of Benghazi, PhD. Thesis, University of Hull, UK.

APPENDICES

Appendix 3-1: Gross Domestic Product in Libya by Economic Sectors (At Current Factor Income) in the period 1962-2005
(In Libyan Dinars/ Millions) [LD approximately =£1.00000 in 1966 and =£2.3280 in 2005 (see Appendix 3-4)].

Economic Sectors /years	62	63	64	65	66	67	68	69	70	71	72	73	74
Agriculture, Forestry and Fishing	14.9	15.1	16.7	25.2	27.3	30.9	33.4	37.4	33.1	33	43.6	60	64.7
Oil and Natural Gas	38	99.6	195.7	270.1	356.1	402.5	648.6	754.7	812.6	922.7	920.6	1,131.8	2,385.3
Mining and Quarrying	0.6	0.7	0.8	1	1.1	1.3	1.5	1.5	1.7	7.6	9.4	12	15.5
Manufacturing	9	9.9	11.5	12.6	14.4	16.4	20	20.8	22.5	24.5	32	43.8	55
Electricity, Gas and Water	0.9	1.1	1.3	2	2.6	3.2	3.9	5.6	6.2	7.3	9.4	10.8	12.4
Construction	10.3	12.7	21.7	34.9	45.3	66.2	89.2	87.1	87.8	116.8	182.8	261.2	376.6
Trade, Restaurant and Hotels	14.2	16.7	20.2	25.1	33	35.6	45.5	48.5	47	75.6	95.8	124.8	184.2
Transportation, Storage and Communication	8.6	11.3	14.9	18.5	24.8	31.6	39.3	40.8	43.2	87.2	100.5	129.3	155
Banks and Insurance	1.7	2.2	2.6	3.5	4.3	5.6	6.5	7.9	13	29.4	37.2	51.6	72.8
Housing	29.4	30.8	33.4	36.4	43.6	53.6	59.7	70.2	59.6	69	76.1	84.3	111.3
General Services (Includes Education and Health)	22.6	29.1	38.7	54.3	72.5	90.2	113.6	136.7	153.6	204.0	235.4	261.5	343.4
Other Services	5.3	6.1	7.1	8.5	9.9	10.7	11.6	11.8	8	9.4	10.2	11.2	19.5
(GDP) Distributed between:	155.5	235.3	364.6	492.1	634.9	747.8	1,072.6	1,223	1,288.3	1,586.3	1,753	2,182.5	3,795.7
a) Oil and Natural Gas	38	99.6	195.7	270.1	356.1	402.5	648.6	754.7	812.6	922.7	920.6	1,131.8	2,385.3
b) Non Oil Economic Activities	117.5	135.4	168.9	222	278.8	345.3	424	468.3	475.7	663.6	832.4	1,050.7	1,410.4
(GDP) Distributed between: %	100	100	100	100	100	100	100	100	100	100	100	100	100
a) Oil and Natural Gas	24.4	42.3	53.7	54.9	56.1	53.8	60.5	61.7	63.1	58.2	52.5	51.9	62.9
b) Non Oil Economic Activities	75.6	57.7	46.3	45.1	43.9	46.2	39.5	38.3	36.9	41.8	47.5	48.1	37.1

Continue...

... Continue... **Gross Domestic Product in Libya by Economic Sectors (At Current Factor Income) in the period 1962-2005**

Economic Sectors /years	75	76	77	78	79	80	81	82	83	84
Economic Sectors /years	75	76	77	78	79	80	81	82	83	84
Agriculture, Forestry and Fishing	82.9	99.7	90	122.1	140.4	236.4	273.6	285.7	303	323
Oil and Natural Gas	1,961.1	2,750	3,275.9	2,808.7	4,545.3	6,525.7	4,403.3	4,231.7	3,823.6	3,209.8
Mining and Quarrying	20.7	24.2	28.5	33.3	41.5	48.7	50.7	60.9	63.8	53.5
Manufacturing	65.5	90.6	124.7	148.7	185.8	210.4	252.4	265.8	329.1	361.2
Electricity, Gas and Water	17.6	22.4	26.1	31	40	48.7	54.7	68.2	79.8	94.1
Construction	434.7	515.1	602	682.8	726.7	1,102.3	993.6	1,178.2	1,021.5	864.7
Trade, Restaurant and Hotels	224.6	263.1	292	338.9	383.2	516.9	653.6	592.7	487.2	431.4
Transportation, Storage and Communication	175.8	193.3	220.1	250.9	291.2	420.1	494.4	463.1	461.2	459.2
Banks and Insurance	98.8	121.4	144.1	177.5	194.8	246.4	298.2	261.9	315.4	272.1
Housing	131	144.9	157.3	170.7	188.8	210.4	217.6	224.3	238.2	244.1
General Services (Includes Education and Health)	432.2	510.6	614.6	693.8	823.3	940.4	1,052.7	1,234.0	1,318.8	1,411.7
Other Services	29.3	32.8	37.4	37.7	42.2	47.4	54	61.3	70.1	79.9
(GDP) Distributed between:	3,674.3	4,768.1	5,612.7	5,496.1	7,603	10,553.8	8,798.8	8,927.8	8,511.7	7,804.7
a) Oil and Natural Gas	1,961.1	2,750	3,275.9	2,808.7	4,545.3	6,525.7	4,403.3	4,231.7	3,823.6	3,209.8
b) Non Oil Economic Activities	1,713.2	2,018.1	2,336.8	2,687.4	3,057.3	4,028.1	4,395.5	4,696.1	4,688.1	4,594.9
(GDP) Distributed between: %	100	100	100	100	100	100	100	100	100	100
a) Oil and Natural Gas	53.4	57.7	58.4	51.1	59.8	61.8	50	47.4	44.9	41.1
b) Non Oil Economic Activities	46.6	42.3	41.6	48.9	40.2	38.2	50	52.6	55.1	58.9

Continue...

... Continue... **Gross Domestic Product in Libya by Economic Sectors (At Current Factor Income) in the period 1962-2005**

Economic Sectors /years	85	86	87	88	89	90	91	92	93	94	95
Agriculture, Forestry and Fishing	342.2	384.7	411.2	423.3	349.8	482.9	678.2	755.5	851	601.5	947
Oil and Natural Gas	3,500.4	2,595.8	1,875.4	1,570	2,055.5	3,243.8	3,054	2,582	2,385.5	2,559.5	2,468
Mining and Quarrying	49.6	58.1	68.7	84.9	102.3	105.5	72.5	78.5	48.5	169	148.6
Manufacturing	421.7	359.6	334.5	397.2	412.3	457.6	706	795.5	869	865.5	799.7
Electricity, Gas and Water	111.7	116.6	119.1	123.1	173	152.2	177	215	258	191	216.7
Construction	677.4	492.6	411.2	383.8	451.4	457.8	1,319.5	1,425.5	1,534.5	604.5	483.9
Trade, Restaurant and Hotels	572.2	636	660.8	721.1	779.6	789.5	1,041.5	1,182	1,347.5	1,100	1,254
Transportation, Storage and Communication	471.8	484.6	552.3	588.7	596.5	645.8	812	925	1,046	846	892.6
Banks and Insurance	253.7	413.5	325.1	272.3	308.7	285.3	370.5	409.5	452.5	268	286.2
Housing	250.5	252.6	268.1	284.1	298.2	304.6	315.3	333.5	352.5	373.5	391
General Services (Includes Education and Health)	1,109.9	1,063.3	867.7	1,203.7	1,421.3	1,147.7	1,894.0	1,896.5	1,933.0	2,048.5	1,853.3
Other Services	91	103.3	117.5	133.8	152.4	174.2	172	190.5	212	286.5	307.7
(GDP) Distributed between:	7,852.1	6,960.7	6,011.6	6,186	7,191	8,246.9	10,612.5	10,789	11,353.5	9,913.5	10,048.7
a) Oil and Natural Gas	3,500.4	2,595.8	1,875.4	1,570	2,055.5	3,243.8	3,054	2,582	2,385.5	2,559.5	2,468
b) Non Oil Economic Activities	4,351.7	4,364.9	4,136.2	4,616	5,135.5	5,003.1	7,558.5	8,207	8,968	7,354	7,580.7
(GDP) Distributed between: %	100	100	100	100	100	100	100	100	100	100	100
a) Oil and Natural Gas	44.6	37.3	31.2	25	28.6	39.3	35.4	31.7	26.9	29.9	31.7
b) Non Oil Economic Activities	55.4	62.7	68.8	75	71.4	60.7	64.6	68.3	73.1	70.1	68.3

Continue...

... Continue... **Gross Domestic Product in Libya by Economic Sectors (At Current Factor Income) in the period 1962-2005**

Economic Sectors /years	96	97	98	99	00	01	02	03	04*	2005*
Agriculture, Forestry and Fishing	1,095.3	1,250.4	1443.9	1,546.5	1,439.7	1,392.0	1,348.8	1,375.8	1,439.3	1,554.6
Oil and Natural Gas	3,063	3,204.5	2,000.7	3,254.1	6,661	6,345.8	13,164.2	15,782.6	27,227.9	38,153.0
Mining and Quarrying	185	183.9	156.9	215.4	313.5	306.7	364.0	382.6	431.2	520.0
Manufacturing	746.8	848.8	872.8	944	972.9	877.8	813.5	764.7	761.1	799.0
Electricity, Gas and Water	232.3	244.1	254.5	269.3	291.8	284.6	293.7	303.2	334.4	379.0
Construction	679	661.6	537.5	737.7	1,087.1	1,063.4	1,262.1	1,326.7	1,495.3	1,803.0
Trade, Restaurant and Hotels	1,418	1,604.7	1,670.3	1,965.9	1,700.3	1,882.4	2,089.5	2,204.9	2,392.6	2,892.0
Transportation, Storage and Communication	948.1	1,104.4	1,174.1	1,275.8	1,252	1,299.3	1,429.2	1,530.1	1,663.6	2,013.0
Banks and Insurance	307.1	366.8	445	476	350.3	377.2	414.2	439.9	478.9	579.0
Housing	410.1	442.2	469	507.2	481.3	499.0	515.0	534.1	591.6	614.0
General Services (Includes Education and Health)	2,174.6	2,741.9	2,580.0	2,654.0	2,665.8	2,901.4	2859.5	2,910.8	4,286.0	4,682.0
Other Services	354	331.6	380.9	493.9	404.5	411.1	427.5	451.2	475.5	549.0
(GDP) Distributed between:	11,631.3	12,887.9	11,985.9	14,285.8	17,620.2	17,640.7	24,981.2	28,006.6	41,576.8	54,537.6
a) Oil and Natural Gas	3,063	3,204.5	2,000.7	3,254.1	6,661	6,345.8	13,164.2	15,782.6	27,227.9	38,153.0
b) Non Oil Economic Activities	8,568.3	9,638.4	9,985.2	11,031.7	10,959.2	11,294.9	11,817.0	12,224.0	14,348.9	16,384.6
(GDP) Distributed between: %	100	100	100	100	100	100	100	100	100	100
a) Oil and Natural Gas	32.1	32.6	22.1	28.4	37.8	36	52.7	56.4	65.5	70
b) Non Oil Economic Activities	67.9	67.4	77.9	71.6	62.2	64	47.3	43.6	34.5	30

Source: General Planning Council, 2001a.

Central Bank of Libya, Annual Reports (2001, 2002 and 2003).

* <http://www.cbl.gov.ly/en/listview/index.php>

**Appendix 3-2: Per Capita Income in Libya in the Period 1962-2005
(In Libyan Dinars)**

Year	Amount	Year	Amount	Year	Amount
1962	107	1977	1910	1992	1865
1963	156	1978	1823	1993	1812
1964	234	1979	2431	1994	1984
1965	304	1980	3251	1995	2224
1966	379	1981	2517	1996	2456
1967	430	1982	2396	1997	2581
1968	595	1983	2177	1998	2437
1969	654	1984	2143	1999	2655
1970	656	1985	2169	2000	3247
1971	776	1986	1900	2001	3346
1972	823	1987	1526	2002	4390
1973	970	1988	1527	2003	4807
1974	1763	1989	1666	2004*	6756
1975	1369	1990	1822	2005*	8927
1976	1679	1991	1853		

Source: General Planning Council, 2001a.

Central Bank of Libya, Annual Report (47), 2003.

*<http://www.cbl.gov.ly/en/listview/index.php>

Appendix 3-3: Five-year Plan 1963-1968 and Additional Year 1969 (In Libyan Dinars/ Millions)

Economic Sector	Original Allocation	%	Final Version	%	Actual Expenditure	%
Agriculture and Forestry	29.3	17.3	63.0	10.1	65.4	11.9
Industry	6.9	4.1	32.6	5.2	28.5	5.2
National Economy	2.9	1.1	5.5	0.9	4.3	0.8
Communications	27.5	16.2	118.6	19.0	91.6	16.6
Public Works	38.7	26.6	82.2	13.1	-	-
Education	22.4	13.1	59.9	9.6	47.6	8.6
Health	12.5	7.4	24.3	3.9	16.5	3.0
Labour and Social Affairs	8.7	5.1	29.7	3.0	20.2	3.7
News and Guidance	2.6	1.5	10.4	1.7	6.6	1.2
Public Administration	6.4	3.8	0.8	0.1	46.3	8.4
Planning and Development	11.4	6.7	9.7	1.5	5.0	0.9
Housing	-	-	109.3	17.5	192.2	29.4
Interior	-	-	52.3	8.4	-	-
Electricity	-	-	25.3	5.0	56.8	10.3
Other	-	-	1.7	0.3	10.3	-
Total	169.1	100	625.3	100	551.0	100

Source: Giurnaz, (1985, 197A)

Appendix 3-4: The Average Exchange Rates between the Libya Dinar (LD) and the UK Pound (£) during the Period 1962-2005

Year	Average Rate UK £	Year	Average Rate UK £	Year	Average Rate UK £
1962	N.A.	1977	0.54775	1992	0.46182
1963	N.A.	1978	0.58672	1993	0.48069
1964	N.A.	1979	0.65139	1994	0.56378
1965	N.A.	1980	0.69031	1995	0.54396
1966	1.00000	1981	0.55622	1996	0.60712
1967	0.85971	1982	0.48056	1997	0.64412
1968	0.85207	1983	0.42579	1998	0.75587
1969	0.85662	1984	0.35156	1999	0.74457
1970	0.85382	1985	0.42885	2000	0.79405
1971	0.84900	1986	0.46221	2001*	0.9276
1972	0.77346	1987	0.48634	2002*	1.9455
1973	0.68639	1988	0.50851	2003*	2.3202
1974	0.65958	1989	0.47101	2004**	2.3980
1975	0.59855	1990	0.50436	2005**	2.3280
1976	0.49605	1991	0.49594		

Note: N.A. = Not Available

Source: Central Bank of Libya, the Banking and Monetary Statistics during 1966-2000

* Central Bank of Libya, Annual Report (47), 2003.

**<http://www.cbl.gov.ly/en/listview/index.php>

Appendix 3-5: Socio-Economic Development Plan 1973-1975 (In Libyan Dinars/ Millions)

Economic Sector	Amount	%
Agriculture, Forestry and Fishing	327.8	16.6
Oil and Natural Gas	48.9	2.5
Mining and Quarrying	2.9	0.2
Manufacturing	231.6	11.8
Electricity and Water	257.4	13.1
Construction	6.2	0.3
Wholesale and Retail Trade	1.0	0.1
Transport and Communication	253.8	12.9
Banks and Insurance	0.4	0.0
Housing	361.3	18.4
Public Services (Except Education & Health)	186.7	9.5
Education Services	192.1	9.8
Health Services	71.0	3.6
Other Services	0.0	0.0
Reserve	23.9	1.2
Total	1965.0	100

Source: Ministry of Planning, Three-Year Socio-Economic Development Plan (1973-1975), p. 90.

Appendix 3-6: Socio-Economic Development Plan 1976-1980 (In Libyan Dinars/ Millions)

Economic Sector	Amount	%
Agriculture and agrarian reform	445.3	6.2
Integrated agricultural developments	781.3	10.9
Industry and mineral resources	1089.7	15.2
Oil and Gas	648.2	9.0
Electricity	543.6	7.6
Transport and Communication	632.1	8.8
Education	470.4	6.6
Health	171.4	2.4
Manpower	41.8	0.6
Social Security	43.2	0.6
Housing	794.2	11.1
Economy	32.7	0.5
Sport, Information and Culture	91.3	1.3
Municipalities	552.7	7.7
Planning	56.7	0.8
Reserve	325.3	4.5
Nutrition and Sea Wealth	41.4	0.6
Marine Transport	373.5	5.2
Security Services	35.0	0.5
Total	7170.0	100

Source: Bearman (1986, p. 193).

**Appendix 3-7: Revised Socio-Economic Development Plan 1976-1980
(In Libyan Dinars/ Millions)**

Economic Sector	Amount	%
Agriculture, Forestry and Fishing	1030.1	14.4
Oil and Natural Gas	41.0	0.6
Mining and Quarrying	9.0	0.1
Manufacturing Industry	1515.4	21.1
Electricity and Water	706.7	9.9
Construction	7.0	0.1
Wholesale and Retail Trade	32.9	0.4
Transport and Communication	1197.8	16.7
Housing	887.5	12.4
Public Services (Except Education & Health)	760.1	10.6
Education Services	513.0	7.2
Health Services	145.2	2.0
Reserve	325.3	4.5
Total	7171.0	100

Source: Ministry of Planning, Socio-Economic Transformation Plan (1976-1980), p. 58.

**Appendix 3-8: Socio-Economic Development Plan 1981-1985
(In Libyan Dinars/ Millions)**

Economic Sector	Amount	%
Agriculture and Land Reclamation	3100	18.2
Light Industry	1200	7.0
Heavy Industry	2730	16.1
Oil and Gas	200	1.2
Electricity	2000	11.8
Education	1000	5.9
Information and Culture	150	0.9
Labour Force	150	0.9
Health	560	3.3
Social Security	130	0.8
Sport	100	0.6
Housing	1700	10.0
Public Utilities	1300	7.6
Transport and Communication	2100	12.3
Economy	500	2.9
Planning	80	0.5
Sub-total	17000	100.0
Projects Reserves	1500	
Total	18500	

Source: Secretariat of Planning, Socio-Economic Transformation Plan (1981-1985), p. 97.

Appendix 3-9: Three-year Programme 1994-1996 (In Libyan Dinars/ Millions)

Economic Sector	Allocations	Actual investment	Percentage of actual expenditure of each sector to total (%)	Percentage of actual investment to allocation (%)
Agriculture	158	49.130	3.4	31
Industry	94.700	132.8	9.1	140
Energy	332	371.5	25.6	111
Education	289	127.900	8.8	44
Media & Culture	12	5	0.3	41.6
Health & Social Security	205	87.9	6.1	42.8
Transport	194.700	66.050	4.6	34
Planning	17.900	10.800	0.7	60
Economic	6	1.975	0.1	33
Sea Resources	25.600	15.850	1.1	62
Justice & General Security	12.300	6.200	0.4	50.4
Administration Centres	240	271.911	18.7	113
Human Resource	32	32.000	2.2	100
Housing & Public Utilities	297.450	140.400	9.7	47
Tourist	3	2.400	0.2	80
Animal Resources	11	8.250	0.6	75
Man-Mad River	100	20	1.4	20
Finance	5	0	0.0	00
Previous Commitments	100	33	2.3	33
Reserve & Maintenance	264.350	67.500	4.7	25
Total	2400	1450.566	100	60.44

Source: Secretariat of Planning, Economic and Trade, (1997): The Follow up Report of Implementation of the Three-Year Programme (1994-1996).

Appendix 4-1: Letter of Introduction/ University of Dundee



Dr Reza Kouhy, Senior Lecturer
+44 (0)1382 344981
r.kouhy@dundee.ac.uk

08 November 2004

To Whom It May Concern

Re: Miss Aisha Salem El-Shukri

Miss Al-Shukri has been registered as a full time postgraduate student in the Department of Accountancy and Business Finance, University of Dundee since August 2003. She is studying under my supervision, jointly with Professor John Innes, for her research project entitled "Non-Financial Performance Measurement - The case of Libyan Banks". She is a very hard working student and we expect that she will finish her PhD thesis by December 2006.

This PhD research project has a very applied orientation that should appeal to managers of the Libyan Banking sector (Private and Public banks) since it is intended primarily to investigate and develop a Non-Financial Performance Measurement framework that will support performance management in the Libyan banking sector.

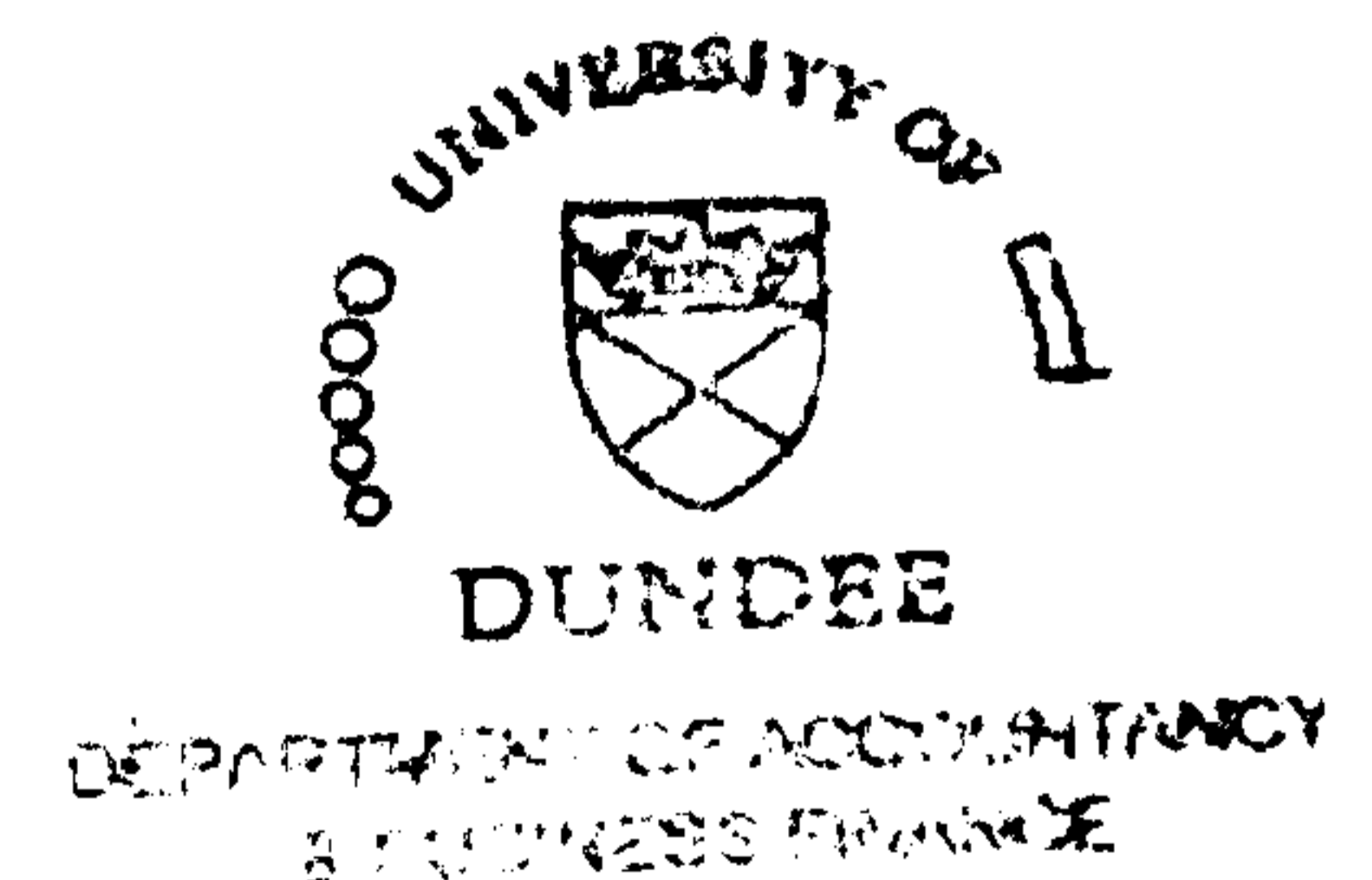
We would appreciate it if you provide Miss El-Shukri with any necessary help and assistance in order to complete this empirical work.

Many thanks in advance.

Yours faithfully

Dr Reza Kouhy
Supervisor

Professor John Innes
Supervisor



Reza Kouhy, BSc, IIAA, PhD, Lecturer Telephone (01382) 344981. e-mail r.kouhy@dundee.ac.uk

University of Dundee, Dundee, DDI 4HN Telephone (01382) 344193 Fax (01382) 224419

**Appendix 4-2a: Translated Version of Letter of Introduction/ University of
Garyounis**

To Whom It May Concern

The Faculty of Economics of the University of Garyounis – Benghazi certifies that Aisha Salem El-Shukri is a lecturer in the Department of Accounting. Currently, she is a PhD. Student at the University of Dundee, UK, in the Department of Accounting & Business Finance.

The University will be very grateful to you, if you could give her permission to interview some of your bank's staff and to access any authorised documents relevant to her research.

Thank you for your kind cooperation

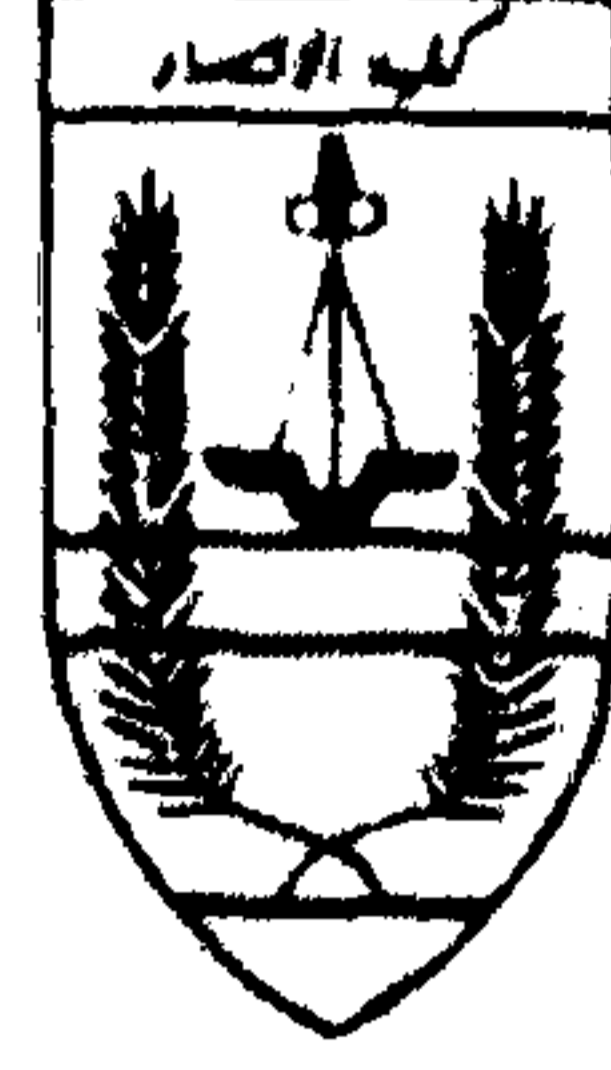
Yours faithfully

Dean of the Economics Faculty

Idris Eshtiwy.

Appendix 4-2b: Letter of Introduction/ University of Garyounis

UNIVERSITY OF GARYOUNIS
FACULTY OF ECONOMICS
BENGAZI - LIBYA
TEL: 2228825



الجمهورية العربية الليبية الشعبية الاشتراكية العظمى
جامعة قاريونس
كلية الاقتصاد
بنغازي - ليبيا
هاتف: 2228825

الرقم:
التاريخ: 2005/08/03 ف.....

إلى من يهمه الأمر

بعد التحية ،،،

تفيد كلية الاقتصاد بجامعة قاريونس بأن الأخت / ا. عائشة سالم جمعة الشكري
عضو هيئة التدريس بقسم المحاسبة والمؤفدة إلى بريطانيا لدراسة شهادة الدكتوراة ، تقوم
بالإعداد لأطروحتها وتحتاج إلى بعض البيانات والمعلومات المتعلقة بدراستها من مصرفكم .

نشكركم على حسن تعاونكم الدائم

والسلام عليكم ورحمة الله وبركاته

د. إدريس عبد السلام اشتيوي
أمين اللجنة الشعبية لكلية الاقتصاد
جامعة قاريونس

صورة للحفظ