

Being an Effective Project Manager:
An exploration within project-oriented organisations

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Table of Contents

LIST OF TABLES	10
LIST OF FIGURES	12
ABSTRACT	13
DECLARATION	14
COPYRIGHT STATEMENT	15
ACKNOWLEDGEMENTS	16
CHAPTER 1: INTRODUCTION	17
1.1 RESEARCH BACKGROUND AND MOTIVATION	17
1.2 RESEARCH AIM AND OBJECTIVES	18
1.3 SCOPE OF THE RESEARCH	18
1.4 STRUCTURE OF THE THESIS	19
CHAPTER 2: LITERATURE REVIEW	21
2.1 INTRODUCTION	21
2.2 PROJECT MANAGEMENT	21
2.2.1 Project management and project success	22
2.2.2 Project management practices	23
2.3 PROJECT-ORIENTED ORGANISATIONS	25
2.3.1 Project	27
2.3.2 Project success	28
2.3.2.1 Trust	31
2.3.2.2 Teamwork	31
2.3.2.3 Culture	32
2.4 PROJECT MANAGER	32
2.4.1 Roles and responsibilities of project managers	33
2.4.2 Competencies of project managers	34
2.4.3 Project manager and project success	35
2.4.4 Successful vs. effective project managers	36
2.5 EFFECTIVE PROJECT MANAGERS	37
2.5.1 Requirements for project managers to be effective	38

2.5.2	Selecting effective project managers	40
2.5.3	Essential competencies of effective project managers.....	41
2.5.3.1	Competencies of effective single and multiple project managers.....	44
2.5.3.2	Skills of effective project managers.....	45
2.5.3.3	Characteristics of effective project managers	48
2.6	LEADERSHIP	49
2.6.1	Leadership schools	49
2.6.2	Leadership vs. management.....	52
2.6.3	Leading and managing roles of project managers.....	54
2.6.4	Leadership of project managers and project success	56
2.6.4.1	Leadership styles of project managers and project success	57
2.6.4.2	Leadership competencies of project managers and project success ...	57
2.6.5	Transformational leadership style.....	58
2.6.5.1	Transformational leadership vs. transactional leadership	59
2.6.5.2	Authentic leadership.....	61
2.6.6	Global leadership model	62
2.6.6.1	Global mindset	63
2.7	EMOTIONAL INTELLIGENCE	64
2.7.1	Emotional intelligence models.....	65
2.7.2	Emotional intelligence of project managers.....	66
2.8	KNOWLEDGE GAPS IN PREVIOUS RESEARCH	67
2.9	CONCLUSIONS	68
CHAPTER 3: RESEARCH METHODOLOGY		71
3.1	INTRODUCTION.....	71
3.2	RESEARCH PHILOSOPHY	71
3.2.1	Philosophical assumptions	71
3.2.1.1	Ontology.....	72
3.2.1.2	Epistemology	73
3.2.1.3	Axiology.....	76
3.2.2	Research paradigms	77
3.2.3	Philosophical positions	80
3.2.4	Other philosophical positions.....	83
3.2.4.1	Postpositivism	83

3.2.4.2	Critical realism.....	84
3.2.4.3	Critical theory.....	84
3.2.4.4	Hermeneutics.....	85
3.2.4.5	Postmodernism.....	85
3.2.4.6	Feminism.....	86
3.2.4.7	Structuration theory.....	86
3.2.5	The selected research philosophy.....	87
3.3	RESEARCH APPROACH	87
3.3.1	Deductive approach.....	87
3.3.2	Inductive approach	88
3.3.2.1	Abductive approach	89
3.3.3	The selected research approach.....	90
3.4	RESEARCH DESIGN	90
3.4.1	Quantitative research method.....	91
3.4.2	Qualitative research method.....	92
3.4.2.1	Qualitative versus quantitative research method.....	93
3.4.3	The selected research design.....	94
3.5	RESEARCH STRATEGY.....	95
3.5.1	Grounded theory strategy.....	96
3.5.2	Key features of grounded theory.....	97
3.5.2.1	Theoretical sampling.....	97
3.5.2.2	Constant comparative method.....	98
3.5.2.3	Coding and categorising.....	99
3.5.2.4	Memo writing.....	100
3.5.2.5	Generating theory.....	100
3.5.3	The selected research strategy.....	100
3.6	GROUNDED THEORY'S BACKGROUND AND CHALLENGES.....	101
3.6.1	The origins of grounded theory.....	101
3.6.2	Versions of grounded theory.....	102
3.6.2.1	The objectivist version of grounded theory	102
3.6.2.2	The postpositivist version of grounded theory.....	102
3.6.2.3	The constructivist version of grounded theory	103
3.6.3	The selected version of grounded theory	104

3.7 THEORETICAL PERSPECTIVE	105
3.7.1 Symbolic interactionism.....	106
3.7.2 The selected research perspective	107
3.8 EVALUATION OF QUALITATIVE RESEARCH PROJECT	108
3.8.1 Ensuring rigour in grounded theory research.....	111
3.9 CONCLUSIONS	112
CHAPTER 4: PILOT STUDY AND THE MAIN DATA COLLECTION PROCESS	114
4.1 INTRODUCTION.....	114
4.2 THE PILOT STUDY DATA COLLECTION PROCESS	114
4.3 INITIAL DATA COLLECTED FROM THE PILOT STUDY INFORMANTS	117
4.3.1 Initial analysis of the pilot study data	119
4.4 LIMITATIONS OF THE PILOT STUDY	119
4.5 THE MAIN DATA COLLECTION PROCESS	120
4.5.1 The methods of data collection	120
4.5.2 The procedures of data collection	121
4.6 THE RESEARCH INTERVIEWS.....	123
4.6.1 Face-to-face interviews	123
4.6.2 Skype interviews	123
4.7 THE RESEARCH INFORMANTS' PROFILES	124
4.8 THE RESEARCH DATA	127
4.9 CONCLUSIONS	127
CHAPTER 5: OVERVIEW OF CODING PROCEDURE.....	129
5.1 INTRODUCTION.....	129
5.2 CODING PROCEDURES.....	129
5.3 THE CONCEPTUAL MODEL	132
5.3.1 Leadership.....	135
5.3.1.1 Directing.....	137
5.3.1.2 Inspiring	138
5.3.1.3 Supporting.....	140
5.3.1.4 Building mutual trust	142
5.3.1.5 Analysing context.....	144
5.3.2 Management.....	145
5.3.2.1 Planning	146

5.3.2.2	Organising	147
5.3.2.3	Controlling	148
5.3.2.4	Honing managerial skills.....	149
5.3.3	Emotional intelligence	151
5.3.3.1	Self-awareness.....	152
5.3.3.2	Self-regulation.....	154
5.3.3.3	Social-awareness	155
5.3.3.4	Social-regulation	156
5.4	RELATIONSHIPS BETWEEN THE CONSTRUCTS OF THE CONCEPTUAL MODEL	158
5.4.1	Relationships between the core categories of the conceptual model	158
5.4.2	Relationships between the categories of the conceptual model	160
5.5	THE ROLE OF LEADERSHIP	164
5.6	THE PRACTICAL MODEL	164
5.7	CONCLUSIONS	166
CHAPTER 6: DATA ANALYSIS.....		168
6.1	INTRODUCTION.....	168
6.2	THE LEADERSHIP CORE CATEGORY	168
6.2.1	The directing category.....	168
6.2.1.1	Create a shared project vision	168
6.2.1.2	Define project goals and objectives	169
6.2.1.3	Establish project policies and strategies.....	170
6.2.1.4	Guide project stakeholders.....	171
6.2.2	The inspiring category.....	172
6.2.2.1	Influence and motivate project stakeholders.....	172
6.2.2.2	Elicit the best out of project team members by developing their creativity	172
6.2.2.3	Lead by example	173
6.2.2.4	Exude charisma	174
6.2.3	The supporting category.....	175
6.2.3.1	Build a unified project team.....	175
6.2.3.2	Satisfy project stakeholders by fulfilling their requirements and expectations.....	176
6.2.3.3	Foresee project threats and transform them into opportunities.....	177

6.2.3.4	Demonstrate enthusiasm and attentiveness.....	178
6.2.4	The building mutual trust category	179
6.2.5	The analysing context category.....	179
6.2.5.1	Investigate the context and capacity of the project	179
6.2.5.2	Assess the impact of current social and cultural constraints on the project	180
6.2.5.3	Evaluate the impact of current political and economic conditions on the project.....	181
6.3	THE MANAGEMENT CORE CATEGORY	182
6.3.1	The planning category.....	182
6.3.1.1	Set project plans and schedules.....	182
6.3.1.2	Budget and allocate project resources.....	183
6.3.1.3	Define project tasks and assign them to the right project team members	184
6.3.2	The organising category.....	185
6.3.2.1	Establish appropriate project incentive schemes.....	185
6.3.2.2	Use appropriate project management tools and techniques	186
6.3.2.3	Recruit and train competent individuals	186
6.3.3	The controlling category	187
6.3.3.1	Monitor and troubleshoot project tasks proactively.....	188
6.3.3.2	Develop a self-managed project team	188
6.3.3.3	Meet project performance and purpose.....	190
6.3.4	The honing managerial skills category	191
6.3.4.1	Enhance project knowledge and experience	191
6.3.4.2	Improve interpersonal communication skills.....	192
6.3.4.3	Strengthen decision making abilities	193
6.4	THE EMOTIONAL INTELLIGENCE CORE CATEGORY	194
6.4.1	The self-awareness category	194
6.4.1.1	Perform self-assessment.....	194
6.4.1.2	Build self-confidence	195
6.4.2	The self-regulation category	196
6.4.2.1	Maintain self-control.....	196
6.4.2.2	Evoke conscientiousness.....	197

6.4.2.3	Demonstrate high adaptability	197
6.4.2.4	Exhibit high innovation.....	198
6.4.2.5	Keep self-motivated	199
6.4.2.6	Exude optimism	200
6.4.3	The social-awareness category.....	201
6.4.3.1	Promote intuition and empathy towards project stakeholders	201
6.4.4	The social-regulation category.....	202
6.4.4.1	Build cooperation and teamwork among project team members.....	202
6.4.4.2	Resolve project conflicts and disputes	203
6.5	RELATIONSHIPS BETWEEN THE CONCEPTS OF THE CONCEPTUAL MODEL.....	204
6.6	CONCLUSIONS	205
CHAPTER 7: COMPARATIVE DATA ANALYSIS.....		207
7.1	INTRODUCTION.....	207
7.2	COMPARING THE TYPES OF COMPANY BASED ON THE RESEARCH FINDINGS	207
7.2.1	Comparing the types of company based on the leadership cluster	207
7.2.2	Comparing the types of company based on the management cluster	213
7.2.3	Comparing the types of company based on the emotional intelligence cluster	218
7.3	TWO CASES.....	222
7.3.1	Product-based industry.....	222
7.3.2	Service-based industry	222
7.4	COMPARING THE CASES BASED ON THE RESEARCH FINDINGS	222
7.5	COMPARING THE LEADERSHIP STYLES OF THE COMPANIES	223
7.6	CONCLUSIONS	224
CHAPTER 8: DISCUSSION OF FINDINGS.....		226
8.1	INTRODUCTION.....	226
8.2	THE RESEARCH PROJECT.....	226
8.3	AN EFFECTIVE PROJECT MANAGER	227
8.3.1	Leadership of an effective project manager	227
8.3.1.1	Directing.....	228
8.3.1.2	Inspiring	229
8.3.1.3	Supporting.....	230
8.3.1.4	Building mutual trust	230

8.3.1.5	Analysing context.....	231
8.3.2	Management of an effective project manager.....	231
8.3.2.1	Planning	232
8.3.2.2	Organising	232
8.3.2.3	Controlling	233
8.3.2.4	Honing managerial skills.....	234
8.3.3	Emotional intelligence of an effective project manager	234
8.3.3.1	Self-awareness.....	235
8.3.3.2	Self-regulation.....	236
8.3.3.3	Social-awareness	236
8.3.3.4	Social-regulation	237
8.4	CONCEPTUAL MODEL	237
8.5	PRACTICAL MODEL.....	239
8.6	COMPARATIVE WORKS	239
8.6.1	Comparative works based on the types of company.....	239
8.6.2	Comparative works based on the leadership styles.....	240
8.7	THEORETICAL CONTRIBUTIONS	241
8.8	PRACTICAL CONTRIBUTIONS.....	242
8.9	CONCLUSIONS	243
CHAPTER 9: CONCLUSIONS		246
9.1	INTRODUCTION.....	246
9.2	REVIEW OF THE RESEARCH PROJECT.....	246
9.3	CONCLUSIONS	248
9.4	CONTRIBUTIONS OF THE RESEARCH PROJECT.....	257
9.4.1	Theoretical contributions of the research project.....	257
9.4.2	Practical contributions of the research project.....	260
9.5	LIMITATIONS OF THE RESEARCH PROJECT.....	260
9.6	RECOMMENDATIONS FOR FURTHER RESEARCH.....	262
REFERENCES.....		265
APPENDIX.....		294

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List of Tables

TABLE 2.1: THE SPECIFIC VALUES OF PROJECT-ORIENTED BUSINESS ORGANISATIONS.....	25
TABLE 2.2: NEW PERCEPTION OF A PROJECT AND ITS CONTEXT	27
TABLE 2.3: PROJECT SUCCESS FACTORS	28
TABLE 2.4: PROJECT SUCCESS CRITERIA.....	29
TABLE 2.5: REQUIREMENTS FOR PROJECT MANAGERS TO BE EFFECTIVE	39
TABLE 2.6: KEY COMPETENCIES OF EFFECTIVE PROJECT MANAGERS	42
TABLE 2.7: ESSENTIAL COMPETENCIES OF EFFECTIVE PROJECT MANAGERS	43
TABLE 2.8: COMPETENCIES OF EFFECTIVE SINGLE-PROJECT MANAGERS	44
TABLE 2.9: COMPETENCIES OF EFFECTIVE MULTIPLE-PROJECT MANAGERS.....	45
TABLE 2.10: SIX SPECIFIC SKILLS OF AN EFFECTIVE PROJECT MANAGER	47
TABLE 2.11: CHARACTERISTICS OF PROJECT MANAGERS WHO CAN LEAD	48
TABLE 2.12: SCHOOLS OF LEADERSHIP	50
TABLE 2.13: STUDIES OF LEADERSHIP TRAITS AND CHARACTERISTICS.....	50
TABLE 2.14: LEADERSHIP VS. MANAGEMENT	53
TABLE 2.15: DIFFERENTIATING BETWEEN LEADERSHIP AND MANAGEMENT	53
TABLE 2.16: LEADING AND MANAGING COMPETENCIES FOR LEADING AND MANAGING FUNCTIONS	55
TABLE 2.17: FIFTEEN LEADERSHIP COMPETENCIES OF PROJECT MANAGERS.....	58
TABLE 2.18: UNIVERSAL LEADER’S CHARACTERISTICS.....	63
TABLE 3.1: FOUR DIFFERENT ONTOLOGICAL POSITIONS	72
TABLE 3.2: TWO CONTRASTING EPISTEMOLOGICAL POSITIONS	74
TABLE 3.3: NETWORK OF BASIC ASSUMPTIONS WITHIN SOCIAL SCIENCE.....	75
TABLE 3.4: METHODOLOGICAL IMPLICATIONS OF DIFFERENT EPISTEMOLOGIES	76
TABLE 3.5: DEDUCTION, INDUCTION, AND ABDUCTION: FROM REASON TO RESEARCH	89
TABLE 3.6: CLASSIC APPROACHES FOR JUDGING GROUNDED THEORY RESEARCH	111
TABLE 4.1: THE PILOT STUDY INTERVIEWS	115
TABLE 4.2: THE PROFILES OF THE PILOT STUDY INFORMANTS	116
TABLE 4.3: INITIAL CONCEPTS THAT EMERGED FROM THE PILOT STUDY	118
TABLE 4.4: THE MAIN STUDY INTERVIEWS	125
TABLE 4.5: THE PROFILES OF THE MAIN STUDY INFORMANTS	126
TABLE 5.1: THE CONCEPTUAL MODEL.....	134

TABLE 5.2: THE PRACTICAL MODEL	165
TABLE 7.1: COMPARING THE TYPES OF COMPANY (1-6) BASED ON THE LEADERSHIP CLUSTER.....	209
TABLE 7.2: COMPARING THE TYPES OF COMPANY (7-12) BASED ON THE LEADERSHIP CLUSTER.....	212
TABLE 7.3: COMPARING THE TYPES OF COMPANY (1-6) BASED ON THE MANAGEMENT CLUSTER.....	215
TABLE 7.4: COMPARING THE TYPES OF COMPANY (7-12) BASED ON THE MANAGEMENT CLUSTER.....	217
TABLE 7.5: COMPARING THE TYPES OF COMPANY (1-6) BASED ON THE EMOTIONAL INTELLIGENCE CLUSTER	219
TABLE 7.6: COMPARING THE TYPES OF COMPANY (7-12) BASED ON THE EMOTIONAL INTELLIGENCE CLUSTER	221

List of Figures

FIGURE 2.1: A QUAD CONSTRAINED PROJECT MANAGEMENT MODEL	24
FIGURE 2.2: THE SEVEN FORCES MODEL FOR PROJECT SUCCESS	29
FIGURE 2.3: PROJECT LONG TERM SUCCESS.....	30
FIGURE 2.4: THE LEADER/MANAGER MATRIX.....	54
FIGURE 2.5: TRANSFORMATIONAL-TRANSACTIONAL LEADERSHIP MODEL	60
FIGURE 2.6: AUTHENTIC ACTION WHEEL.....	62
FIGURE 2.7: EFFECTIVE GLOBAL LEADERSHIP	64
FIGURE 3.1: FOUR PARADIGMS FOR THE ANALYSIS OF SOCIAL THEORY.....	77
FIGURE 3.2: CONTRASTING DIMENSIONS FROM THE METATHEORY OF REPRESENTATIONAL PRACTICES.....	79
FIGURE 4.1: THE ORGANISATIONAL LEVEL FRAMEWORK BASED ON THE STRATEGIC VISION	116
FIGURE 5.1: THE PROCESS OF DEVELOPING CORE CATEGORIES	131
FIGURE 5.2: THE CORE CATEGORIES AND CATEGORIES OF THE CONCEPTUAL MODEL	133
FIGURE 5.3: RELATIONSHIPS WITHIN THE CONCEPTUAL MODEL	158
FIGURE 5.4: RELATIONSHIPS BETWEEN THE CORE CATEGORIES	159
FIGURE 5.5: RELATIONSHIPS BETWEEN THE CATEGORIES OF LEADERSHIP AND MANAGEMENT	161
FIGURE 5.6: RELATIONSHIPS BETWEEN THE CATEGORIES OF LEADERSHIP AND EMOTIONAL INTELLIGENCE	161
FIGURE 5.7: RELATIONSHIPS BETWEEN THE CATEGORIES OF EMOTIONAL INTELLIGENCE AND LEADERSHIP	162
FIGURE 5.8: RELATIONSHIPS BETWEEN THE CATEGORIES OF EMOTIONAL INTELLIGENCE AND MANAGEMENT	162

Abstract

As more organisations apply project management to perform projects in order to deliver high quality products and services, the demand for project managers grows, and thus more research is required on the effectiveness of project managers (Crawford, 2005). Hence, this research project aims to provide an in-depth understanding of the effectiveness of project managers within project-oriented organisations.

The purpose of this research project is to fill the research gap by bringing the practical perspective of the effectiveness of project managers, from different informants in various fields, into the theoretical perspective in the form of a conceptual model (i.e. the combination of the constructs: core categories, categories, and concepts) through in-depth interviews and the grounded theory method. This qualitative study attempts to provide a fresh insight into the leading and managing projects, and hence into the effectiveness of project managers in project-oriented organisations.

This research project is one of the very rare studies investigating the matter of an effective project manager, particularly within project-oriented organisations. It is also one of the very few studies investigating the role of leadership in the effectiveness of project managers, particularly within project-oriented organisations. In addition, it is one of the very rare studies providing the conceptual model as the criteria for project managers to become effective within project-oriented organisations. Furthermore, it is one of the very rare studies providing the practical model as the tool to evaluate the effectiveness of project managers within project-oriented organisations.

The research project provides an insightful understanding of the notion of leadership, management, and emotional intelligence, and uncovers their roles in the effectiveness of project managers within project-oriented organisations.

The research project highlights the value of qualitative inquiry for exploring individuals' perceptions and lived experiences, as well as investigating phenomena which have been relatively under-investigated to date. It also highlights the usefulness of grounded theory, which builds concepts grounded in empirical data.

Declaration

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Chapter 1: Introduction

1.1 Research background and motivation

Organisations are increasingly using projects in their daily work in order to cope with high business complexity, to carry out unique and complicated tasks, and to deliver high quality products and services (Gareis, 1991). They become more project-oriented since they need to apply ‘management by projects’ as the central managerial strategy for major parts of their business (Gareis, 1991). This strategy enables them to perform various types of projects so as to handle complex challenges and potentials within their highly dynamic business environments (Gareis, 1991).

However, as more organisations apply this strategy to deliver high quality products and services, the demand for project managers grows (Crawford, 2005). Furthermore, the success of project-oriented organisations depends greatly on the performance of their project managers (Fabi and Pettersen, 1992; Munns and Bjeirmi, 1996; Smith, 1999; Crawford, 2005). Accordingly, these organisations need to develop effective project managers in order to achieve high project performance and thus project success (Huemann, 2010; Papke-Shields et al., 2010).

Hence, more works are required on the effectiveness of project managers since project management standards are inadequate for developing and assessing project managers and more empirical-based research is needed in order to create models of project managers’ effectiveness (Crawford, 2005).

On the other hand, a review of the literature in the field of project management studies has shown that the effectiveness of project managers in project-oriented organisations has been relatively underexplored. Accordingly, this study intends to fill this research gap by bringing the practical perspective of the effectiveness of project managers, from different informants in various fields, into the theoretical perspective in the form of a conceptual model (i.e. the combination of the constructs: core categories, categories, and concepts) through in-depth interviews and the grounded theory method. It attempts to provide a fresh insight into the leading and managing projects, and hence into the effectiveness of project managers in project-oriented organisations.

1.2 Research aim and objectives

The aim of this research project is to provide an in-depth understanding of the effectiveness of project managers within project-oriented organisations. Accordingly, in order to achieve this aim, the following objectives have been established;

- To provide an exhaustive review on the development of leading and managing projects along with the existing theoretical perspective of an effective project manager.
- To investigate the conceptual differences between the notion of leadership and management within project-oriented organisations in the form of a conceptual model.
- To discover the key concepts that contribute to the effectiveness of project managers within project-oriented organisations in the form of a conceptual model.
- To develop the constructs (concepts, categories, and core categories) and generate the relevant comprehensive conceptual and practical models as the criteria for project managers to become effective within project-oriented organisations.
- To explore the roles and interactions of the constructs of the conceptual model.
- To evaluate the significance of each construct of the conceptual model across the different types of project-oriented organisation.
- To propose the direction for future research, and to lay out the conceptual and practical models as the basis for further development of project managers' effectiveness framework.

1.3 Scope of the research

In this research project, the data collection was conducted between June 2010 and July 2011 from different informants in various types of company. It started with an initial pilot study from four informants in four different types of company. Later, after the initial data collection period and after December 2010, fifty-nine interviews were conducted with informants from twelve types of company. Hence, by the end of July 2011, sixty-three interviews had been conducted with informants from sixteen types of company.

1.4 Structure of the thesis

The thesis is structured in nine main chapters; and the flow of chapters is organised based on the research framework.

Chapter 1: Introduction provides an overview of the background and motivation for this research project as well as the research aim and objectives, scope of the research, and structure of the thesis.

Chapter 2: Literature review provides a detailed description and critical overview of the theoretical background of this research project. It discusses the available literature relating to project management studies, particularly the concept of an effective project manager. Gaps in the field of study relating to the scope of this research are also described in this chapter.

Chapter 3: Research methodology discusses and justifies the research philosophy, research approach, research method and design, research strategy, and theoretical perspective chosen for this study. Other important notions in the research methodology such as the evaluation of qualitative study and the challenges of grounded theory are also discussed in this chapter.

Chapter 4: Pilot study and the main data collection process describe the data collection process of the research project. In this chapter, the initial data and the initial findings drawn from the pilot study along with its limitations are explained in detail. The methods and procedures of the main data collection are also described. Moreover, the research interviews, the research informants' profiles, and the research data are demonstrated in this chapter.

Chapter 5: Overview of coding procedure presents an overview of the coding procedure of the data analysis. First, the coding process, the development of the concepts and categories as the constructs, and the formation of the conceptual model are explained. After that, the core categories and categories of the conceptual model along with their relationships are demonstrated before explaining the significance of the role of leadership in the effectiveness of project managers within project-oriented organisations. Then the practical model of this research project is demonstrated.

Chapter 6: Data analysis presents the analysis of the collected data. It explains the concepts of the conceptual model based on the leadership, management, and emotional

intelligence core categories and their categories. The relationships between the concepts are also explained.

Chapter 7: Comparative data analysis presents the comparative works based on the research findings. In this chapter, the twelve types of participating company are compared based on the research findings through three separate clusters (leadership, management, and emotional intelligence). In addition, two cases are created based on the industry of the participating companies (product-based industry and service-based industry) and are compared based on the research findings. Moreover, the leadership styles of the participating companies are compared.

Chapter 8: Discussion of findings demonstrates a discussion about the findings of the research project. In this chapter, the findings are evaluated against the existing literature and explained in terms of their theoretical and practical contributions in order to determine the position of this research project within the literature. Accordingly, the matter of an effective project manager, the conceptual and practical models, and the comparative works are discussed and compared with the extant literature. Moreover, the theoretical and practical contributions of the research project are explained in order to show the value of this study.

Chapter 9: Conclusions provide the review and conclusions of the research project. In this chapter, the theoretical and practical contributions and the limitations of this research project are described before explaining the recommendations for further research.

Chapter 2: Literature review

2.1 Introduction

Today, organisations tend to use project management as the managerial strategy for major parts of their business to perform various types of project so as to handle complex challenges and potentials within their highly dynamic business environments (Gareis, 1991). These organisations as project-oriented organisations use projects in their daily work in order to cope with high business complexity, to carry out unique and complicated tasks, and to deliver high quality products and services (Gareis, 1991).

However, as more organisations apply project management to deliver high quality products and services, the demand for project managers grows, and thus more research is required on the effectiveness of project managers (Crawford, 2005). Indeed, project management standards are inadequate for developing and assessing project managers and more empirical-based research is needed in order to create models of project managers' effectiveness (Crawford, 2005).

This chapter reviews the literature on the study of project management. It demonstrates some of the significant concepts that have been investigated in this domain. The main notions described in this chapter are as follows: project management, project-oriented organisations, project manager, effective project managers, leadership, and emotional intelligence.

2.2 Project management

The concept of project management has evolved since the early 1950s when the US Federal Government carried out several unique and temporary system developments to support and achieve national goals (Bowenkamp and Kleiner, 1987).

Traditional management focuses on continuous operations, a single product life-cycle phase, minimal active coordination of interrelated hierarchical organisations, and repetitive organisational tasks; on the other hand, project management focuses on the on-time development of a new product or service, sequential multiple life-cycle phases, special coordination of interrelated organisations with unfixed relationships, and accomplishment of unique tasks by various organisations (Bowenkamp and Kleiner, 1987). Indeed, project management concepts and techniques have evolved to fill the

gaps between the on-going operations and the temporary nature of projects (Bowenkamp and Kleiner, 1987).

As project management is a complex process aiming for specific outcomes, project management competency is concerned with different knowledge and skill sets that often cross areas of expertise including management, engineering, manufacturing, and information and communication technology (Cleland, 1995, Kerzner, 2009, Greer, 1992, Tinnirello, 2000).

The project management Institute (PMI) (2008, p. 6) defines project management as “the application of knowledge, skills, tools, and technique to project activities to meet project requirements” and characterises “high quality projects as those that deliver the required product, service, or result, within scope, on time, and within budget”. PMI (2008) develops a framework, namely the Project Management Body of Knowledge (PMBOK), that determines the eight core management competencies for project management: scope, time, cost, risk, quality, contract, communication, and human resource.

Tinnirello (2000) describes project management as the knowledge, tools, and techniques which are used to fulfil requirements and expectations, establish measurable scopes, make realistic timetables, and define roles and responsibilities. Similarly, Kerzner (2009) defines project management success as the completion of a project task on-time, on-budget, and with high levels of performance along with the satisfaction of the client. However, Morris (2007) criticises these definitions due to their strong focus on implementing tools and techniques, and emphasises that the definition should be presented based on business context, strategy, and leadership of people.

For any project management approach to be effective, the project must be performed by an effective project manager who demonstrates high quality managerial attributes as well as technical competency and leadership ability (George, 2003; Hyväri, 2006a). However, he or she must apply different attributes at different stages of the project to be effective (Anderson, 1992).

2.2.1 Project management and project success

The effectiveness of project management can be described in terms of different aspects such as: the characteristic of an effective project manager, organisational structure,

technical competency, and leadership ability; however, it mainly refers to the success of projects (George, 2003; Hyväri, 2006a).

Morris (1994) states that 'management by projects' has become an acceptable approach to incorporate organisational tasks and inspire employees to reach higher levels of performance and thus project success. Likewise, Thamhain (2004a) declares that there is a link between project success and the project management approach of project managers. Papke-Shields et al. (2010) also assert that there is a significant relationship between the use of project management and project success since project management practices can improve project performance.

However, Gareis (1991) stresses that to perform different types of projects successfully, different project management approaches must be used by project managers. Shenhar (1998) also emphasises that to achieve project success, project management should be adapted in terms of type of project, managerial styles, attitudes, and practices.

Briefly, project management, as the key strategy of most modern organisations, can greatly affect project performance and thus it plays an important role in project success (Munns and Bjeirmi, 1996; Belout and Gauvreau, 2004; Qureshi et al., 2009). In fact, project management skills can function as predictors of project performance or success (Muzio et al., 2007).

2.2.2 Project management practices

Conflicts are more likely to emerge in certain aspects of project management such as manpower resources (staffing), personality conflicts, administrative procedures, project priorities, technical conflicts, schedules, and cost objectives (Hyväri, 2006a). These conflicts can cause major project management problems such as (1) inadequate resources, (2) meeting unrealistic deadlines, (3) unclear goals, (4) uncommitted team members, (5) insufficient planning, (6) breakdowns in communications, (7) changes in goals and resources, and (8) inconsistency between departments or functions (Posner, 1987; Pinto, 2007).

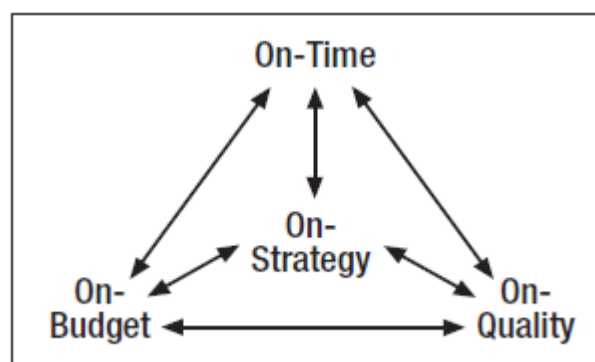
However, there have been some project management practices associated with successfully preventing these conflicts such as: regular feedback from organisational stakeholders, accurate use of network planning techniques, availability of back-up strategies, organisational structure suited to the project team, adequate monitorship for handling changes, project team involvement in project tasks, and project manager's

commitment to preset schedule, budget, and technical performance goals (Bowenkamp and Kleiner, 1987).

Fabi and Pettersen (1992) also identify the major human resource management practices in project management for organisation context. These practices include human resource planning (i.e. anticipating imbalances between availability and organisational needs for personnel), reception (i.e. integrating new employees), selection process (i.e. choosing the best candidates), job analysis (i.e. obtaining information on the specific jobs), remuneration (i.e. paying organisational employees based on the evaluation of their contributions), performance assessment (i.e. judging employees' activity in terms of a certain systematic process), career planning (i.e. fulfilling personal needs and organisational logics), and education and training (i.e. set of planned learning activities through work-groups (Schlick, 1988), simulation (Thornberry, 1987), information sessions (White, 1984), or job rotation (Wakasugi, 1986)).

In this regard, several models have been developed to enhance the project management practices. For instance, Baccarini (1999) proposes a project management model for defining project success and providing a solution to the problem of lacking a clear objective. On the other hand, Norrie and Walker (2004) suggest that this model can be developed if it is used within the strategic measurement. They add a strategy dimension to the traditional triple dimensions and create a quad constrained project management model (Norrie and Walker, 2004). See Figure 2.1.

Figure 2.1: A quad constrained project management model



Source: (Norrie and Walker, 2004)

This model assists project managers in improving their project management implementations and project outcomes. It demonstrates whether or not a project is operating on-strategy (Norrie and Walker, 2004).

2.3 Project-oriented organisations

The study of project-oriented companies commenced in the late 20th century. The International Project Management Association (IPMA) conference held in Vienna in 1990 suggested the subject of “the management based on project”, and subsequently it has become a fresh managerial strategy (Zhao, 2010). Later, Turner (1993) proposed the concepts and models of project-oriented business organisations.

Gareis (1991) defines the new project-oriented business organisation as an organisation that performs small and large projects, internal and external projects, and unique and repetitive projects simultaneously; in order to handle complex challenges and potentials within a dynamic business environment. Likewise, DeFillippi and Arthur (1998) emphasise that in these organisations, project functions as the centre of production management. Lindkvist (2004) also stresses that these organisations use the project model for completion of temporary tasks, designing organisational structure, and production.

Zhao (2010) highlights the advantages of project-oriented business organisations; he discovers that their organisational structure is more flat and flexible, they have higher resource allocation efficiency and stronger management capabilities, and they have a new culture encouraging innovation and teamwork. Gareis (1991) also identifies the specific values of project-oriented business organisations. See Table 2.1.

Table 2.1: The specific values of project-oriented business organisations

No	The specific values of project-oriented business organisations
1	Projects are considered to be strategically significant. They allow business strategies to be implemented and influence them.
2	The autonomy and self organisation of projects is promoted by top management to support the performing projects.
3	Leadership is understood among other issues as the ability to create visions, missions, and strategies, and to communicate them to the projects.
4	Continuous organisational development will ensure the survival of the company in the competitive business world. Projects play important roles in this development, as they provide organisational learning based on fresh experiences obtained from interactions with different environments.
5	Project management is considered as a general management qualification rather than a specialist one.

Source: (Gareis, 1991)

Project-oriented organisations apply ‘management by projects’ as the central managerial strategy for major parts of their business. This strategy is related to the project-oriented structure and culture, project management, and the management of the network of projects (Gareis, 1991). However, these organisations need to use various project management approaches that are appropriate to different situations of their projects (Gareis, 1991).

Project-oriented organisations are still structured in terms of the context of traditional functional organisations, although they adopt and assign temporary tasks to project teams (Huemann et al., 2007). Indeed, in order to cope with high business complexity, they need to employ projects as organisations to carry out unique and complicated tasks and thus deliver products or services (Gareis, 1991). They wish to ensure organisational flexibility and development, concentration on difficulties, decentralisation of managerial responsibility, and goal-oriented, quality, and acceptance of problem solutions (Gareis, 1991).

Within project-oriented organisations, departments carry out projects as the platforms for collaboration, so the roles and responsibilities and the assessment standards should be based on projects goals and objectives (Zhao, 2010). Thus, team building and personnel development are very important in these organisations (Zhao, 2010).

In fact, as the complexity and cost of projects have increased, project-oriented organisations need to promote their project management standards and adopt project managers who seek to improve their own skills and knowledge (Papke-Shields et al., 2010). Huemann (2010) emphasises that an organisation looking to become a project-oriented organisation needs to develop the essential skills and behaviours of its project managers such as leadership, team building, and managing people. Hölzle (2010) also asserts that if organisations cannot provide a suitable and adequate project-based working environment, structures, processes and methods for their project stakeholders, particularly project managers, then they will not be effective.

In project-oriented organisations, project stakeholders, particularly team members, should accomplish project tasks and fulfil project missions, be responsible to project managers, and be constrained and incentivised by project performance (Zhao, 2010). In these organisations, if project team members do not exchange their experience, skills,

and technological expertise, they will be unable to contribute productively to the project (Barki and Hartwich, 2001).

2.3.1 Project

A project can be defined as a temporary endeavour undertaken to create a unique product or service or obtain a desired result (Schwalbe, 2006). It is a temporary organisation with dedicated resources which develops its own patterns of action and communication to function as a means of organisational change, resource and risk management (Turner, 2006; Hölzle, 2010). It functions as the means to deliver new products, services, or innovative outcomes and even change itself in uncertain business environments (Drucker, 1988; DeFillippi and Arthur, 1998; Whitley, 2006; Hodgson et al., 2011). Indeed, it is the lifeline of project-oriented organisations as it becomes the central activity (Humaidi et al., 2010).

Organisations significantly increase their resources in order to invest more in projects such as a new product development, process improvement, or service establishment (Sausser and Eigbe, 2009). However, the relationships between these organisations' projects may be analysed in terms of their objectives, milestone results, or required resources (Gareis, 1991). Accordingly, Gareis (1991) suggests that a project as a subsystem of a company should be differentiated by its own specific values, norms, and rules from other projects or subsystems; he characterises the new perception of a project and its context. See Table 2.2.

Table 2.2: New Perception of a project and its context

No	New Perception of a project and its context
1	A project is not just defined as a unique, complex task, or a specific organisation form, but is perceived as a social system with dynamic boundaries and having the ability to learn and to self-organise.
2	A project as a system can be obviously differentiated from other systems by its specific culture which can be developed via learning and communication. The shared project team set of values, beliefs, and behaviours are considered as an essential project management tool.
3	The mission and strategy of a project are determined by its context. They are defined by the relationships with its environment, the relevant decisions and actions before its commencement, and the relevant consequences after its accomplishment.
4	Within a dynamic project environment, a rationale project understanding and accurate recognition of project circumstances is the key to successfully dealing with changes.
5	Relevant project environments are the supply and demand markets of the project which should be actively managed.

Source: (Gareis, 1991)

2.3.2 Project success

Project success has been defined by different researchers in different ways; however, there have been no project success criteria that can be used in all organisations (Pinto and Slevin, 1988a).

In the 1970s, project success was determined in terms of developing the system, improving implementation, and evaluating time, cost and process (Turner and Müller, 2005). In the 1980s, project success was described in terms of quality of implementation, stakeholders' activities, and organisations' objectives (Turner and Müller, 2005). In this decade, there was an intense focus on the use of accurate tools and techniques; as Pinto and Slevin (1988b) identified the ten most important success factors, albeit, ignoring project managers' competencies (Müller and Turner, 2010). See Table 2.3.

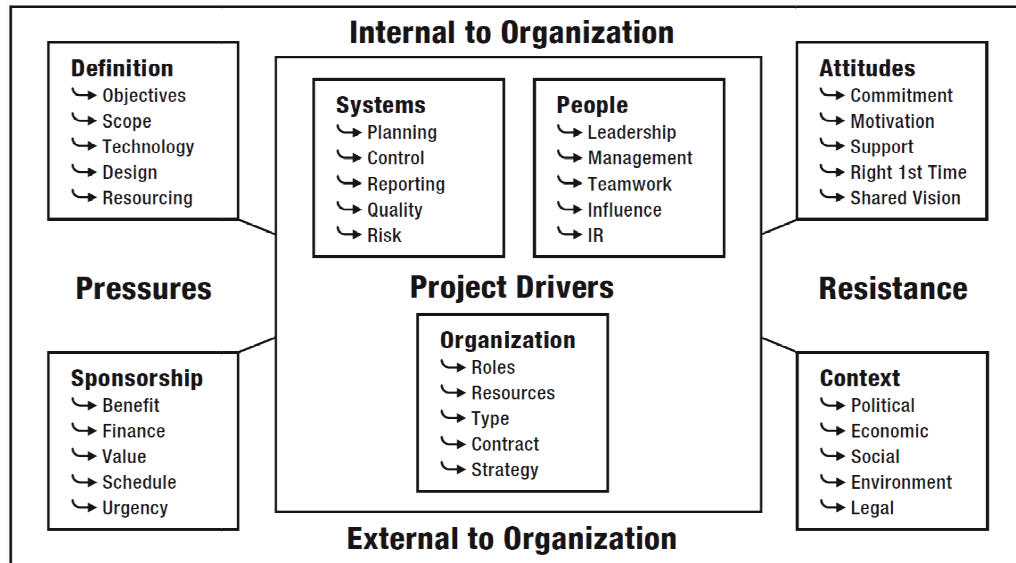
Table 2.3: Project success factors

Success Factors	Description
1. Project Mission	Clearly defined goals and direction
2. Top Management Support	Resources, authority and power for implementation
3. Schedule and Plans	Detailed specification of implementation
4. Client Consultation	Communication with and consultation of all stakeholders
5. Personnel	Recruitment, selection and training of competent personnel
6. Technical Tasks	Ability of the required technology and expertise
7. Client Acceptance	Selling of the final product to the end users
8. Monitoring and Feedback	Timely and comprehensive control
9. Communication	Provision of timely data to key players
10. Troubleshooting	Ability to handle unexpected problems

Source: (Pinto and Slevin, 1988a)

Later, based on the previous efforts, a new model was proposed by Turner (1999). This model includes seven main factors for project success: context, attitudes, sponsorship, definition, people, systems, and organisation. See Figure 2.2.

Figure 2.2: The seven forces model for project success



Source: (Turner, 1999)

Then, Jugdev (2005) suggested the four key factors for assessing project success: (1) a project sponsor should have enough desire to carry out a project, (2) the working relationship between a project sponsor and a project manager should be adjusted accurately, (3) a project manager should tackle complexity and uncertain situations, and (4) stakeholders' idea should be taken into the success criteria. Müller and Turner (2007) also identified ten different project success factors as the criteria. See Table 2.4.

Table 2.4: Project success criteria

Success Criteria
Meeting project's overall performance (functionality, budget, and timing)
End-user satisfaction with the project's product or service
Suppliers' satisfaction
Project team's satisfaction
Meeting user requirements
Meeting the project's purpose
Client satisfaction with the project results
Reoccurring business with the client
Other stakeholders' satisfaction
Meeting the respondent's self-defined success factor

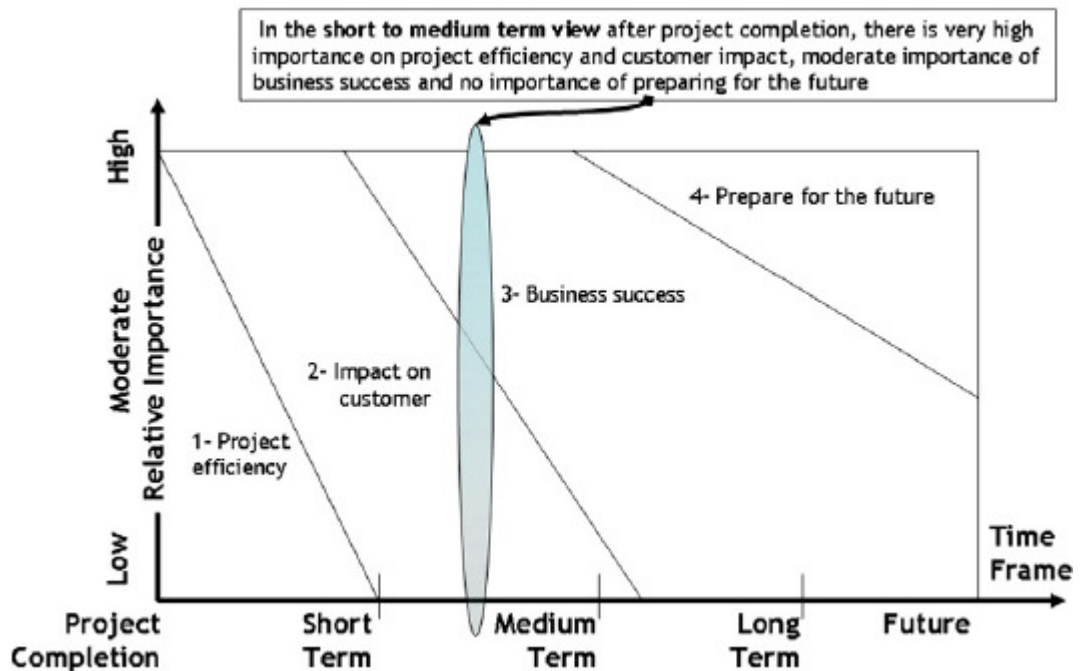
Source: (Müller and Turner, 2007)

In reality, some projects do not meet time, budget, and quality goals, or fail to satisfy project stakeholders and organisations' expectations (Humaidi et al., 2010). The failure of these projects may be caused by different factors such as wrong person for project manager, unsupportive top management, lack of commitment to project, lack of project

knowledge and technical expertise, lack of resources, planning and directing weaknesses, communications breakdown, lack of project management techniques, and political and control issues (Munns and Bjeirmi, 1996; Belout and Gauvreau, 2004; Sauser and Eigbe, 2009). Hence, project success depends on effective multidisciplinary efforts including teamwork and organisations' support (Thamhain, 2004b; Geoghegan and Dulewicz, 2008).

Project success, as Globerson (1983) notes, should be evaluated based on five factors: discipline at work, relevant professional knowledge, human relations, quality of performance, and dedication at work. Its evaluation should reflect organisations' preferences in terms of the degree to which time, cost, and technical specifications are fulfilled (Eilat et al., 2006; Hadad et al., 2012). However, generally, due to the complexity of projects, meticulous evaluation of their success is a difficult task (Ogunlana et al., 2002); as Lloyd-Walker and Walker (2011) emphasise that today, project stakeholders, particularly customers, demand more than the traditional assessment of organisations' project success. They suggest that project success in terms of efficiency is inadequate for long term business sustainability (Lloyd-Walker and Walker, 2011). See Figure 2.3.

Figure 2.3: Project long term success



Source: (Lloyd-Walker and Walker, 2011)

Wateridge (1995) emphasises that project managers need first to understand the importance of project success criteria, then identify those factors that deliver the project success, and finally adopt accurate tools associated with the factors. However, Cooke-Davies (2002) asserts that the project success is associated with the achievement of planned project goals, while the project management success is concerned with the achievement of time, cost, quality, and other objectives for managing projects. Hence, to ensure project success, organisations need to employ effective project managers who can implement project management techniques accurately and achieve high project performance (Munns and Bjeirmi, 1996).

2.3.2.1 Trust

Trust as the key to project success is based on the interpersonal relationships between two or more persons (Burke et al., 2007). It includes three major components: integrity, ability, and benevolence (McGrath and Zell, 2009). Integrity is the set of acceptable principles between the trustor and trustee; ability is the set of skills, competencies, and characteristics that enable a team to impact some specific area; and benevolence is the quality of behaviours used by leaders to care about followers and create reliable concern in relationships (Burke et al., 2007).

If a project manager behaves truthfully and takes his or her responsibility accurately, then project team members in turn will trust him or her and take their responsibilities honestly (Kanter, 2005). Indeed, trust can decrease transaction costs, increase sociability, and enhance cooperation in the organisation context (McGrath and Zell, 2009). Hence it can play a significant role in organisations' project success (McGrath and Zell, 2009).

2.3.2.2 Teamwork

Hyväri (2006a) declares that the project management literature is mostly defined in terms of teamwork literature. Teamwork as the key to project success can be more effective by developing project team members' interactions and cohesiveness (Yang et al., 2011). Accordingly, project success can be expressed in terms of an effective interaction among the team members (Thamhain, 2004b).

In general, five major groups influence performance of teamwork: people, tools and techniques, organisational process, work, and leadership (Thamhain, 2004b). However, each of these groups depends on the project circumstances such as project complexity,

managerial and organisational supports, and social, economic, and business environments (Thamhain, 2004b).

Team communication as the process of disseminating information enables project team members to enhance their teamwork by exchanging their thoughts and opinions in order to achieve project success (Campion et al., 1993; Lussier, 2003). However, the method of communication depends on the number of team members, size and aim of the project, level of authority, location, time, and so on (Smith, 1999).

Hence, teamwork plays an important role in project team performance and thus can significantly affect project performance and the overall project success (Yang et al., 2011).

2.3.2.3 Culture

In general, culture is defined as the shared beliefs, values, and standards of a group of people (Hofstede, 2001; House et al., 2004). However, organisational culture as patterns of shared values and beliefs have evolved over time to create behavioural norms for solving problems (Schein, 1990). Hence, organisational culture can affect organisations' project success (Patanakul and Aronson, 2012).

Within the project-based organisation context, team culture is concerned with the social and cognitive environment, the shared view of reality, and the common attitudes and value systems reflected in project team members' behaviours (Patanakul and Aronson, 2012). Hence, due to the impact of team culture on project success, team culture should be established carefully by project managers to direct their team members towards achieving preset goals successfully (Aronson and Lechler, 2009). Nevertheless, team culture does not contribute to success in the context of management of multiple projects (Patanakul and Aronson, 2012).

2.4 Project manager

PMI (2008) defines the project manager as the person who is responsible for fulfilling the project objectives and goals. The project manager is a businessman, a psychologist, an accountant, and a technician (Barber, 2005). He or she should be a highly effective person and possess knowledge of the technical details of his or her project as well as the ability to obtain goals by leading project team members effectively (Barber, 2005).

Cicmil and Hodgson (2006) point out that project managers seem to engage in acting rather than apply authentic behaviour throughout their projects. Likewise, Whitty and Schulz (2006) state that project managers are like actors within the context of project management and they wear costumes in front of an audience made up of project stakeholders.

As a project is a temporary organisation (Turner, 2006), every time a new project is commenced, its human resource configuration must be changed. Hence, as the project manager is very important to the project, selection of the suitable project manager with the right competencies is critical (Bedingfield and Thal, 2008), and must be seriously considered from an organisation's point of view (Huemann et al., 2007). In this regard, Hölzle (2010) declares that in organisations, small projects are usually managed by project managers; medium-sized projects demand more experienced project managers (i.e. senior project managers); and strategic and large-projects with various resources need the most senior project managers (i.e. project directors).

2.4.1 Roles and responsibilities of project managers

In general, within organisational project environments, considerable efforts have been focused on project performance improvement, however, the role of project managers has been less considered (Sebt et al., 2010).

Wilemon and Cicero (1970) state that project managers' roles are mainly related to organisational constraints, risks, technical and managerial tasks, and interpersonal relations. However, Roberts and Fusfeld (1981) state that the roles of project managers are mainly related to design, problem solving, entrepreneurship, search for information, direction, and sponsors. Likewise, Spitz (1982) states that the roles of project managers are concerned with planning, search for information and communication, identification and acquisition of resources, coordination, control, and catalyst.

Bowenkamp and Kleiner (1987) also suggest a comprehensive list of the responsibilities of project managers as follows: lead the efforts to plan thoroughly all aspects of the project, control the organisational human resources needed by the project, control the basic technical aspect of the project output, lead the people and organisations assigned to the project, monitor performance and efficiency of all phases of the project, and complete the project on schedule and on budget.

The roles of project managers can be defined in terms of accumulative descriptions of tasks, assigned responsibilities for the successful accomplishment of the project, leadership capability for directing project team members, and successful transfer of the project outcomes into organisation (Kloppenborg and Petrick, 1999; Huemann, 2000; Sotiriou and Wittmer, 2001; Parker and Skitmore, 2005). However, the major role is to inspire project team members to obtain project objectives (Fabi and Pettersen, 1992). Indeed, project managers are expected to be leaders, deciders, and coordinators (Fabi and Pettersen, 1992); in order to adjust implementations of different groups to approach goals on-time, on-budget, and on-quality (Crowley, 2006; Hyväri, 2006a).

Hence, due to the significance of roles and responsibilities of project managers, several strategies have been used by organisations to develop their project managers as they might be perceived to lack the requisite managerial skills (Anderson, 1992). Some specific strategies include pre-appointment training, a mentor system, careful selection of potential project managers, early identification of these persons, and developing key managerial skills (Anderson, 1992).

2.4.2 Competencies of project managers

Competency is a term which is widely used by different people but it means different things to them (Sebt et al., 2010). In the project management context, competency is an underlying cluster of related knowledge, abilities or skills, experience, attitudes, and other personal attributes and characteristics that are essential for a project manager to deliver high quality project performance (Boyatzis, 1982; Rowe, 1995; Waller, 1997; Sebt et al., 2010). It can also be measured against well-accepted standards, frameworks, or models, be improved through effective training and developing, and be broken down into dimensions of competence (Sebt et al., 2010).

Crawford (1997) believes that competency can be presented as attribute-based or performance-based, as the project performance is underlined by the required skills and personal attributes (Birkhead et al., 2000). She also suggests that an integrated model in terms of attribute-based competencies (e.g. knowledge, skills, and core personality characteristics) and performance-based competencies can be used to measure against standards or expectations (Crawford, 2005).

Competencies of project managers have been classified into diverse competency frameworks (Thal and Bedingfield, 2010). For instance, Spencer and Spencer (1993)

propose five competency characteristics including knowledge, skill, motives, traits, and self-concept. PMI (2002) also reveals that within the project management context, competency can be described based on three separate dimensions: project management knowledge (i.e. what project managers bring to projects through their knowledge and understanding of project management), project management performance (i.e. what project managers demonstrate through their abilities to successfully accomplish their projects), and personal competencies (i.e. the core personality characteristics underlying project managers' capabilities to carry out projects). Accordingly, project managers will be judged to be competent if they possess the right combination of knowledge, performance, and personal competencies (Sebt et al., 2010).

In fact, project as a distinctive social system transforms the administrative mode of a project manager's position to a managerial one; thus, a project manager needs a comprehensive set of competencies (Huemann et al., 2007; Hölzle, 2010). However, these competencies may vary in their depth and breadth in terms of the type and scope of projects (Hauschildt et al., 2000; Huemann, 2000). For instance, a long-term, long-scale, and strategic project demands a higher standard of competencies compared with a short-term, specialised, and low budget project (Hauschildt et al., 2000; Huemann, 2000). Nonetheless, in any type of these projects, project managers need to exhibit more engagement, commitment, and contribution than other project stakeholders to accomplish their projects successfully (Hölzle, 2010).

2.4.3 Project manager and project success

The literature has shown that the role of project manager is crucial to the project (Yang et al., 2011). However, it has mainly ignored the influence of project managers on project success (Turner and Müller, 2005).

Some researchers have defined the relationship between project manager and project success in terms of people, project strategy, leadership style, teamwork, and industrial relations; however, others have defined it in terms of cost, time and quality of project and ignored the influence of individuals on projects (Turner and Müller, 2005; Geoghegan and Dulewicz, 2008).

Brown and Eisenhardt (1995) find that project managers can significantly affect both process performance and product or service effectiveness. However, Gemünden and Lechler (1997) discover that project managers have a significant indirect influence on

project success and note that project success mainly depends on human factors. In fact, there is a close connection between project managers' perception of project success and their capabilities (Hauschildt et al., 2000; Turner and Müller, 2005).

Undoubtedly, improvement in performance of organisations' projects is tightly bound to improvement in performance of project managers (Sebt et al., 2010). Therefore, as competencies have a direct effect on performance, it is vital for organisations to select their project managers based on competencies which may improve project performance and deliver success (Sebt et al., 2010).

However, Anderson (1992) asserts that the competencies of a project manager do not directly determine whether or not a project is carried out successfully; he emphasises that project performance is affected by the effective application of project management practices adopted by the project manager (i.e. low-level linkage between a project manager's competencies and project performance or success). Likewise, Patanakul and Milosevic (2009) emphasise that project managers need to use multiple project management (MPM) practices to improve their project performance and thus achieve success.

Briefly, project success directly depends on project managers' performance (Smith, 1999), thus project managers considerably affect project success (Fabi and Pettersen, 1992; Crawford, 2005).

2.4.4 Successful vs. effective project managers

Successful project managers are those who are rapidly promoted within an organisational context, while effective project managers are those who have committed, productive, and satisfied team members with high project performance (Luthans, 1988). Successful project managers deal with different types of activities, whereas effective project managers communicate with project stakeholders, manage conflict, and train, develop, and motivate team members (Luthans, 1988).

In fact, successful project managers as astute politicians are not necessarily effective and may not concern their team members and also may not be able to extract the best from them and attain high performance levels (Luthans, 1988).

The definition of effectiveness, as an elusive concern for project managers within project-oriented organisations, can be presented in terms of (1) accomplishing the

project through the high quantity and quality standards of performance, and (2) accomplishing the project through the individuals whose satisfaction and commitment are vital (Luthans, 1988). Hence, as Thamhain and Wilemon (1977) note, leadership, communication, and human resource management can greatly contribute to the effectiveness of project managers (Luthans, 1988).

2.5 Effective project managers

In general, there have been two different perspectives for being an effective project manager (Pinto, 2007). One is concerned with personal characteristics necessary for managing a project and the other one is concerned with critical problems faced by project managers (Pinto, 2007). The latter perspective has been criticised by different researchers including Badaway (1982). He expresses the view that the major problems of project managers are not technical in nature (Pinto, 2007).

Adams et al. (1979) declare that an effective project manager is a communicator, decision maker, integrator, team leader, and responsible for workplace climate. Similarly, Bennis and Nanus (1985) assert that effective project managers are those who manage changes by inspiring innovation in project team members to overcome difficulties. Anderson (1992) also states that those project managers who possess high quality managerial skills and experience are effective and more often associated with better project performance. Moreover, Thamhain (2004a) states that effective project managers are those who inspire and encourage their team members, make them feel proud to be part of project team, set clear project visions, missions, and goals, build a united project team, and show a high level of contributions and recognitions.

In this regard, Barber (2005) emphasises that effective project managers are those who trace the progress of their projects, anticipate problems, and proactively solve them. However, Barkley (2006) stresses that effective project managers are those who create an environment of honesty, trust, commitment, pride of workmanship, and open communication in order to motivate their team members to perform work to the best of their efforts. Likewise, Wysocki (2007) notes that effective project managers are those who apply collaborative approaches to resolve project disputes and encourage their team members to contribute more to project works.

Effective project managers exert themselves more when the organisational business is ambiguous, dynamic, and challenging (Norrie and Walker, 2004; George, 2009). They

build mutual trust, pay attention to people's ideas and feelings, and show concern and sympathy towards people (Likert and Hayes, 1957; Blake and Mouton, 1964; McGregor, 1967). They also direct preventive actions and conduct work circumstances towards projects' goals through making an active environment and involving all project stakeholders (Thamhain, 2004b; Burke et al., 2007).

2.5.1 Requirements for project managers to be effective

Gaddis (1959) and Davis (1969) emphasise experience, leadership, planning, and following up tasks as essential requirements enabling project managers to be effective.

In this regard, Posner (1987) points out the key requirements for project managers to be effective: communications (e.g. listening and persuading), goal fixing and analysis (e.g. planning, goal setting, and analysing), team building (e.g. empathy, motivation, and esprit de corps), leadership (e.g. sets an example, energetic, vision or big picture, delegates, and positive), coping skills (e.g. flexibility, creativity, patience, and persistence) and technological skills (e.g. experience and project knowledge).

Pettersen (1991b) also provides a review of what the main authors have stated about what is required for project managers to be effective. He describes these requirements in terms of aptitude, skills, abilities, and different personal characteristics (Pettersen, 1991b). See Table 2.5.

In accordance with this table, Pettersen (1991b) points out that the authors seem to identify the requirements on the basis of their own experience and personal observation. He indicates that all the authors seem to agree on the significance of the wider managerial skills including planning, organising, follow-up, decision making, team supervision, and human aspects (Pettersen, 1991b). He also mentions that many of them emphasise the importance of the project's global vision and multidisciplinary orientation which includes different aspects such as managerial, technical, environmental, political, and legal (Pettersen, 1991b). Furthermore, he notes that a certain number of personal characteristics such as flexibility, creativity, vivacity, analytical ability, adaptability, stability, energeticness, and persistence are more stressed than others (Pettersen, 1991b).

Table 2.5: Requirements for project managers to be effective

Author	Requirements
Martin (1976)	<p>Personal characteristics (leadership, honesty, integrity, understanding the technically aspects of the project, communications, planning, management, follow-up skills, quick thinking, flexibility, listening, information gathering, imaginative versatility, ability to anticipate the future and adapt to it, energeticness and robustness, and decision making)</p> <p>Skills (planning, financial control, drawing up work schedules, management of the integrity, contract management, knowledge of behavioural sciences, supervision, and knowledge of organisational systems and procedures)</p>
Stuckenbruck (1976)	<p>Ten attributes Multidisciplinary-oriented (sufficiently familiar with each discipline to be able to understand the problems and discuss them with the specialists), 'Global problem'-oriented (looking at the project as whole with its multiple interfaces and aspects), Effective problem solver and decision maker (demands common sense, good judgement and intuition, training, and managerial tools), Good manager and administrator (ability to manage daily operation efficiently and know the basic of management of planning, budget, supervision, and follow-up), Good analyst (having strong analytical abilities), Creative (in dealing with information and problems), Effective communicator (Communicate with everyone involved in the project with a good command of spoken and written word), Motivator (motivate project team members to achieve preset goals), Flexible (ability to adapt to changes), non-temperamental (calm, realistic, dedicated, generous, stable, quick-thinking, disciplined, and persistent)</p>
Adams and Barndt (1978)	<p>Abilities (planning, coordinating, budgeting, managing stakeholders, and assessing technical programs and financial reports)</p>
Sharad (1979)	<p>Organisational skills (be a good organiser in terms of fixing priorities and the ability to manage specialists from different fields)</p> <p>Leadership skills (be a good proficient leader to motivate and keep up the project team's morale)</p>
Declerk et al. (1980)	<p>Technical aspect (having theoretical and practical knowledge of project management techniques)</p> <p>Managerial aspect (be a competent organiser, be a dynamic project leader, be a good decision-maker, be able to apply basic knowledge of different subsystems, be able to design, set up and organise these subsystems and discuss about them with specialists)</p> <p>Team-member aspect (be part of the project team, be involved in external and internal networks along with various interpersonal relationships, and having stability, firmness, authority, flexibility, and adaptability)</p>
Stickney and Johnston (1980)	<p>Technical skills (the abilities to apply knowledge in the relevant field)</p> <p>Human-relationships skills (the abilities to communicate efficiently and maintain a harmonious working group, and motivate team members)</p> <p>Conceptual skills (the abilities to perceive the project as a system via keeping a global perspective)</p>
Mikkelsen and Folmann (1983)	<p>Personal characteristics (autonomy and emotional stability, personal contacts, and the ability to operate in an unknown environment)</p>
Stickney and Johnston (1983)	<p>Delegation skills (having proficiency based on delegation and sharing authority)</p> <p>Interpersonal skills (be able to establish and maintain the mutual commitment of the project stakeholders)</p>
Kerzner (1984)	<p>Ten skills (team building, leadership, conflict resolution, technical expertise, planning, organisation, entrepreneurship, administration, management support, and resources allocation)</p>
Einsiedel (1987)	<p>Five characteristics (be taken seriously by organisational stakeholders, be capable and creative in solving problems, be able to tolerate ambiguity, having a flexible management style to handle situational changes, and be an effective communicator)</p>

Source: (Pettersen, 1991b)

Katz and Tushman (1979) declare that due to the existence of project uncertainties and complexities, more communication is needed to reduce them. Indeed, communication and leadership are the most significant requirements in order for project managers to be effective (Frohman, 1976; Roberts and Fushfeld, 1981; Roberts and Fushfeld, 1982; Bedingfield and Thal, 2008).

In this regard, Edmondson et al. (2005) state that to be effective, project managers need to provide an environment in which people can share information, contribute more to projects, and feel that their opinions, values, and decisions are taken into account. Chen and Lee (2007) also assert that leadership, decision-making, giving-seeking information capabilities, and technical and organisational proficiency are the most significant requirements enabling project managers to be effective.

Hence, the basic requirements for project managers to be effective are management abilities (e.g. planning, organisation, supervision, and control), decision-making, communication and human relations abilities, leadership and team management, intellectual capacity, and solid technical expertise in the project domain (Pettersen, 1991a, 1991b; Fabi and Pettersen, 1992).

However, Pettersen (1991b) emphasises that the requirements needed for project managers to be effective may vary according to the nature of the project, and its context, size, and complexity, as well as the stage of its lifecycle. Likewise, Spitz (1982) stresses that each phase of the project demands something different from the project manager, as the diversity of the team and degree of uncertainty may vary from one phase of the project to another.

2.5.2 Selecting effective project managers

As tasks are transferred from the traditional line organisation into the project-based organisation, more effective project managers are demanded from organisations (Turner et al., 2008). However, so far, few models have been created for selecting and assigning effective project managers in project-oriented organisations (Sebt et al., 2010).

In this regard, Crawford (2005) states that as more organisations apply project management to deliver products and services, the demand for project managers grows, and thus more research is required on the effectiveness of project managers. She also finds that project management standards are inadequate for developing and assessing

project managers and more empirical-based research is required in order to create models of project managers' effectiveness (Crawford, 2005).

Zavadskas et al. (2008) also emphasise that for selecting effective project managers, competencies such as personal skills, project management skills, and experience should be taken into consideration by organisations. Likewise, Cheng et al. (2005) stress that when selecting project managers, it is vital for organisations to consider a candidates' past performance as well as his or her suitability for the specific organisation's project. Indeed, as a project's performance can be enhanced by choosing effective project managers, the role of effectiveness of project managers is significant in the success of organisations (Bedingfield and Thal, 2008).

2.5.3 Essential competencies of effective project managers

Archibald (1975) highlights the significance of competencies of effective project managers such as technical knowledge, administrative skill, and leadership ability. Fryer (1979) also discovers five competencies of effective project managers: social skill, decision-making, handling problems, recognising opportunities, and managing change.

In this regard, Bowenkamp and Kleiner (1987) state that it is not difficult to create a list of competencies of effective project managers. They suggest various competencies including plan, monitor, and re-plan the project tasks, act and react inquisitively and accurately, do not manage by exception, insist that the work be done right the first time, involve the manufacturing division early in the project's design phase, timely shoot the systems and build hardware, establish an honest and trustworthy relationship with the customer, and develop communication skills (Bowenkamp and Kleiner, 1987).

Indeed, the key competencies of effective project managers can be conceptualised as human relation skills, leadership skills, technical experience, and administrative experience (Katz, 1974; Anderson and Woodhead, 1981; Anderson and Tucker, 1990; Anderson, 1992; Cleland and King, 1998). See Table 2.6.

Table 2.6: Key competencies of effective project managers

Human relation skills	Leadership skills	Technical experience	Administrative experience
Capability to motivate people (understand elements of human behaviour and their relationship to motivation)	Clear leader and director with authority	Understand technology	Planning
Team building	Capability to plan and elicit commitment	Knowledge of tools and techniques used in the engineering/ construction process	Organisational skills
Integrating team members	Problem identification and solving (director and facilitator)	Applications and methods	Knowledge and understanding of estimating systems, cost control, scheduling control, quality and safety
Communications	Balance technical, economics, and human factors	Technology trends and evolution	Procedure development and implementation
Conflict resolution	Decisive decision making (individual/group)		
	Communications		
	Conflict resolution		

Source: (Anderson, 1992)

Brill et al. (2006) discover which competencies from experienced project managers perspectives are essential for effective project managers. They identify nine major groups of competencies for effective project managers (problem solving expertise, leadership expertise, project administration expertise, communication expertise, people expertise, analytical expertise, tools expertise, personal characteristics, and context knowledge) (Brill et al., 2006). See Table 2.7.

Stevenson and Starkweather (2010) also identify six critical core competencies which can make effective project managers: leadership, ability to communicate at multiple levels, verbal skills, written skills, attitudes, and ability to deal with ambiguity and change.

Hence, almost all of the researchers emphasise the leadership and human skills as the essential competencies of effective project managers (Patanakul and Aronson, 2012).

Table 2.7: Essential competencies of effective project managers

Category	Statement	Category	Statement		
Problem Solving Expertise	<ul style="list-style-type: none"> • Conduct business ethically • Be able to recognise a problem • Manage crises • Manage risk • Be able to frame a problem • Assess risk • Plan contingencies • Know the escalation point • Understand and apply alternate methods 	Personal Characteristics	<ul style="list-style-type: none"> • Have integrity • Be honest • Be good under pressure • Have common sense • Be clear • Be committed • Be focused • Be results driven • Have persistence • Be flexible • Have confidence • Be proactive • Be accessible or visible • Control ones temper • Be fair • Have a positive attitude • Be resilient • Have a strong work ethic • Be disciplined • Be able to learn on the fly • Pay attention to detail • Be a realist • Be open • Deal well with ambiguity • Be logical • Be reasonable • Have a sense of urgency • Have tact • Be creative • Have high energy • Be innovative • Have a sense of humour • Be courageous • Be patient • Be a visionary • Have empathy • Have an outlet to keep work in perspective • Be curious • Be charismatic 		
	Leadership Expertise			<ul style="list-style-type: none"> • Share credit for successes • Make time-sensitive decisions effectively • Delegate and follow-up effectively • Develop and execute a project plan • Take responsibility for failures • Align or focus team members • Know when to take control and when to back off • Motivate team members • Promote teamwork • Lead or facilitate a meeting • Manage group dynamic • Be diplomatic • Negotiate effectively • Be persuasive • Coach, mentor, or teach • Build esteem in others 	
Project Administration Expertise	<ul style="list-style-type: none"> • Create a project plan • Set milestones or deadlines • Manage a budget • Set a schedule • Manage time • Manage quality • Be able to forecast or estimate (time, budget, resources, and the like) • Keep records or document • Set performance metrics • Execute performance metrics • Be able to write proposals • Be able to apply contract law 				
Communication Expertise	<ul style="list-style-type: none"> • Listen effectively • Have strong verbal communication skills • Have strong written communication skills • Deliver good and bad news effectively • Have strong presentation skills • Be able to liaise among stakeholders • Have strong networking skills • Have strong graphical communication skills 			Context Knowledge	<ul style="list-style-type: none"> • Know the goals of the project • Know the scope of the project • Know the mission of the project • Know how project success is measured • Know the available resources (funds, equipment, people, and the like) • Know oneself • Know the team members • Understand the decision-making process within the organisation • Know the client • Know the goals of the organisation • Know the politics or culture within the organisation • Understand the workflow of the organisation • Know the mission of the organisation • Understand the industry in which one works • Know the vendors • Know the politics or culture outside the organisation (clients, vendors, other outside stakeholders) • Understand fields related to the project • Understand the decision-making process outside the organisation (clients, vendors, other outside stakeholders)
People Expertise	<ul style="list-style-type: none"> • Manage expectations • Resolve conflicts • Establish mutual trust • Understand human nature • Understand and overcome resistance to change • Help others achieve their goals • Manage stress in self and others • Build consensus 				
Analytical Expertise	<ul style="list-style-type: none"> • Prioritise • Capture and use knowledge • Be able to research (gather information, ask the right questions, and so on) • Use project management methodologies (process analysis, system design, and so on) 				
Tools Expertise	<ul style="list-style-type: none"> • Have computer skills • Know and use project management tools • Know and use financial management tools 				

Source: (Brill et al., 2006)

2.5.3.1 Competencies of effective single and multiple project managers

In order to be effective in simultaneously managing multiple-project teams, project managers need to have team management competency, since handling multiple projects puts more pressure on project managers (Fricke and Shenhar, 2000; Patanakul and Milosevic, 2005; Patanakul and Milosevic, 2008).

A few competencies have been suggested in order for multiple-project managers to be effective such as innovative thinking styles, multitasking, and conflict management (Payne, 1995; Tullett, 1996; Rubinstein et al., 2001). However, Patanakul and Milosevic (2008) provide a meticulous list of competencies of effective single and multiple project managers. See Tables 2.8 and 2.9.

Table 2.8: Competencies of effective single-project managers

Area	Element	Studies
Technical area	Technical expertise	(Gaddis, 1959; Thamhain, 1983; Goodwin, 1993; Shenhar & Thamhain, 1994; Tullett, 1996)
	Understand technology and trends	(Thamhain, 1991; Shenhar & Thamhain, 1994)
	Problem analysis	(Gaddis, 1959; Archibald, 1975; Pettersen, 1991; Thamhain, 1991; Shenhar & Thamhain, 1994)
Operational area	Planning and scheduling	(Gaddis, 1959; Archibald, 1975; Thamhain, 1983; Posner, 1987; Pettersen, 1991; Shenhar & Thamhain, 1994; Frame, 1999)
	Monitoring and control	(Gaddis, 1959; Archibald, 1975; Thamhain, 1983; Pettersen, 1991; Shenhar & Thamhain, 1994; Dunn, 2001)
	Team structuring	(Posner, 1987; Pettersen, 1991; Shenhar & Thamhain, 1994; Dunn, 2001)
Human area	Leadership	(Gaddis, 1959; Thamhain, 1983; Posner, 1987; Goodwin, 1993; Turner, 1993; Shenhar & Thamhain, 1994; Hauschildt et al., 2000)
	Communication	(Gaddis, 1959; Archibald, 1975; Posner, 1987; Pettersen, 1991; Turner, 1993; Shenhar & Thamhain, 1994; Fricke & Shenhar, 2000)
	Team management/ resolving conflicts	(Pettersen, 1991; Hauschildt et al., 2000; Dunn, 2001)
	Personal qualities of project managers	(Posner, 1987; Pettersen, 1991)
Strategic area	Strategic thinking	(Pettersen, 1991; Shenhar & Thamhain, 1994; Dunn, 2001)
	Business sense	(Gaddis, 1959; McDonough (III) & Kinnunen, 1984; Shenhar & Thamhain, 1994; Frame, 1999)
	Customer coordination	(Frame, 1999; Dunn, 2001)

Source: (Patanakul and Milosevic, 2008)

They stress that in order to be effective, multiple-project managers need to have special competencies for coordinating projects along with competencies for leading individual projects (Patanakul and Milosevic, 2008).

Table 2.9: Competencies of effective multiple-project managers

Competencies for coordinating projects		Competencies for leading individual projects	
Organisational Experiences	Establishing relationship, network, and credibility	Administrative/ process	<ul style="list-style-type: none"> • Planning/scheduling • Monitoring/control • Risk management • Resource management • Company's project management process
Interdependency management	Managing projects' impacts	Interpersonal/ Intrapersonal	<ul style="list-style-type: none"> • Problem solving, • Conflict management • Organised and disciplined • Responsible • Proactive and ambitious • Mature and self-controlled • Flexible
Multitasking	Minimising context switching loss	Business/ Strategic	<ul style="list-style-type: none"> • Business sense • Customer concern • Integrative capability • Strategic thinking, • Profit/cost consciousness
Simultaneous team management	Building and leading project teams	Technical	<ul style="list-style-type: none"> • Knowledge of product applications • Knowledge of technology and trends • Knowledge of project products • Knowledge/skills of technological tools and techniques • Ability to solve technical problems
Management of interproject processes	Managing consolidated activities of different projects		

Source: (Patanakul and Milosevic, 2008)

2.5.3.2 Skills of effective project managers

Spitz (1982) identifies seven key skills that project managers need to be effective; these skills include interpersonal skill (i.e. ability to communicate efficiently), synchronisation skill (i.e. ability to put the different fractions of the project into order), content expertise skill (i.e. technical knowledge related to the product or process of the project), information-processing or communication skill (i.e. obtaining, using, and disseminating information), capacity for handling complexity skill (i.e. assimilating the different team members' ideas and decisions), negotiation skill (i.e. dealing with people and obtaining the requirements to perform project tasks), and boundary-maintenance skill (i.e. capacity to resist unrealistic demands from top management).

In this regard, Peters and Waterman (1982) find that in order to be effective, project managers need to communicate well, lead and influence others, and demonstrate empathy. Likewise, Thornberry and Weintraub (1983) discover major skills that project

managers require to be effective such as oral communication, influencing or leadership, intellectual capabilities, handling stress, and managerial skills (e.g. planning, organisation, follow-up, delegation, and decision-making). Similarly, Honey (1988) emphasises the interpersonal skills such as face to face behaviours which are essential for project managers to be effective.

Kliem and Ludin (1992) also assert that effective project managers use various interpersonal skills such as empathy to see things from the perspective of others and thus better appreciate their concerns. Similarly, Verma (1996) states that as there are various conflicts and disputes within projects, effective project managers use their conflict management skills to adapt their behaviours depending on the type of conflict they deal with. Likewise, Trompenaars and Hampden-Turner (1997) declare that effective project managers understand values, beliefs, and traditions of people from different cultures to manage them effectively at an international level.

Rosenau (1998) also stresses that in order to be effective, project managers need strong leadership, terrific communication abilities, and effective people skills rather than technical skills; he emphasises that effective project managers are people-oriented, flexible, creative, adaptable, and imaginative. Similarly, Jiang et al. (1999) emphasise some people skills that make effective project managers such as: exhibiting empathy, being diplomatic in dealing with people, knowing motivational issues, having effective conflict management and strong body language.

Kets de Vries (2001) also states that behaviour is observable and therefore project managers need to exhibit open and authentic behaviours, if they would like to establish long-lasting relationships with their team members. Likewise, Byrd and Turner (2001) suggest that in order to be effective, project managers need to understand what skills and behaviours are required to deliver high-quality projects. Ei-Sabaa (2001) clusters these skills and behaviours into three major groups: human skills, conceptual and organisational skills, and technical skills.

Kadefors (2004) also expresses that project managers need to build trust and loyalty and show high levels of caring towards their team members in order to be effective. Likewise, Lewis (2003) suggests that in order to be effective, project managers need to know that project team members tend to capture their beliefs by observing their behaviours rather than by listening to their words.

Fisher (2006) also believes that behaviours underpinning the people management skills can differentiate effective project managers from other project managers. He also identifies six specific skills and their relevant behaviours which are needed for a project manager to be effective (Fisher, 2011). See Table 2.10. However, Dainty et al. (2005) assert that developing effectiveness of project managers depends on performance-based skills rather than behavioural attributes that support effective functional performance.

Table 2.10: Six specific skills of an effective project manager

Skill	Behaviours
Understanding behavioural characteristics	Be genuine and open and honest with others. Show openly that you believe in your team members' abilities. Show an open and authentic concern for others that is based on true feelings and not on invented ones. Develop an understanding of the relationship between behaviours and feelings and how you can make this work for you in your teams. Adopt a repertoire of behaviours so you can deal with people in different situations and circumstances.
Leading others	Show a high level of motivation towards innovation to inspire others to become more creative and innovative. Adopt a leadership style that is appropriate to the situation, for example, situational, transitional, visionary or charismatic. Ensure that your team members comply with your wishes. Apply directive, firm or demanding behaviours according to the attitudes and behaviours of your team members.
Influencing others	Convince, influence or impress others in order to support their agenda, or the desire to have a specific impact or effect on others. Influence others by selling them the benefit, for example, why they should change so they can see the benefit and make the appropriate changes to their behaviour or attitude. Share with others what it feels like to work in a highly successful team so they adopt the behaviours that are associated with success. Influence team members to unblock the values and beliefs people have to help them develop better. Share with others what it feels like to work in a highly-valued team.
Authentizotic behaviour	Show open concern for others. Accept people for what they are and do not try to force them to change. Empower people by delegating tasks to them and ask them to take on board more responsibilities. Develop an understanding of what makes the other person tick and what is important to that person. Show genuine concerns and feelings for the needs of others. Make people feel good about work, themselves, others and the project itself.
Conflict management	Establish the root causes of the conflict by talking to others openly and honestly to find out. Concentrate on the work issues and do not get personal. Show loyalty, integrity, trust, help and support when dealing with conflicts. Be tolerant and prepared to compromise. Observe behaviours of team members to sense early when conflicts begin to develop, and then take corrective actions to resolve these.
Cultural awareness	Develop, display and apply an awareness of the cultural differences of team members. Show an understanding and knowledge of the values and beliefs of other cultures. Adapt some of other people's own home country behaviours appropriate to the situation when managing people from diverse cultures. Adopt cultural awareness behaviours to manage people in their projects effectively. Show an open optimism about cultural differences and show views that confirm that you see cultural diversity as an enhancement to your own values and beliefs.

Source: (Fisher, 2011)

Bedingfield and Thal (2008) also discover that the key skills of effective project managers are as follows: leadership skill (e.g. vision, strategy, delegation, empowerment, mobilising, and motivation), communication skill, decision making skill, administrative skill (e.g. organisational, planning, and goal setting skills), coping ability, analytical thinking and problem solving, technical competence, and other skills (e.g. integrity, people skills, team building, political sensitivity, enthusiasm, high self-esteem, and etc.).

In brief, project managers should possess the basic skills such as: credibility, problem solving, tolerance, flexibility, and communication to enhance their performance (Goleman, 1996; Pinto, 1998; Geoghegan and Dulewicz, 2008). However, they must be highly skilled in leadership, administration, organisation, and technical expertise to be effective (Thamhain, 2004b; Kanter, 2005; Crowley, 2006).

2.5.3.3 Characteristics of effective project managers

Project managers are more likely to perform better if their personal characteristics fulfill the requirements of their projects (Mumford et al., 2000). Accordingly, it is essential to profile the personality of effective project managers in order to identify their characteristics (Müller and Turner, 2010). For instance, Pinto (2007) profiles the characteristics of effective project managers and discovers that effective project managers are eager to lead and do things proactively rather than reactively. See Table 2.11.

Table 2.11: Characteristics of project managers who can lead

Rank	Characteristics of an effective project manager
1	Leads by example
2	Visionary
3	Technically competent
4	Decisive
5	A good communicator
6	A good motivator
7	Stands up to top management when necessary
8	Supports team members
9	Encourages new ideas

Source: (Pinto, 2007)

Gray and Larson (2008) also discover that there are some key characteristics for becoming an effective project manager such as: systems thinker, personal integrity, proactive, high emotional intelligence, general business perspective, effective time management, skilful politician, and optimist.

2.6 Leadership

Stogdill (1974) states that there are almost as many diverse definitions of leadership as there are people who want to define it. So, leadership has been defined in terms of different aspects such as group process, power relationship, transformational process, and leaders' skills, personality, and behaviours (Bass, 1990a; Bryman, 1992; Nahavandi, 2009; Northouse, 2010). For instance, Bass (1990a) defines leadership as “an interaction between two or more members of a group that often involves a structuring or restructuring of the situation and the perceptions and expectations of the members”.

In general, leadership can be defined as the ability to fulfill goals through influencing others (Koontz and Weihrich, 1990; DuBrin, 2004). It can also be defined as the process that occurs in a team through persuading and inducing members to obtain goals (Burns, 1978; Jago, 1982; Rost, 1991; Hollander, 1992; Hill, 1999; George, 2006).

Leadership is mainly concerned with the notion of change and the use of influence to modify beliefs, values, behaviours, and motivations and relationships (Bass, 1990a; Kotter, 1990; Parry, 1998). Indeed, it is associated with a social transformational influence process which is exerted by one person over others in order to build the relationships and activities (Rost, 1991; Yukl, 1994; Parry, 1998).

In this regard, Podolny et al. (2004) classify leadership into four groups: transformational, transactional, taken-for-granted, and agentic. However, Bryman et al. (1996) categorise leadership into three main groups and eleven subgroups: (1) traditional leadership (instrumental leadership, contingent reward, management-by-exception), (2) new leadership (charisma, intellectual stimulation, individualised consideration, inspirational leadership, creating trust, empowerment, changing orientation), and (3) nonleadership (*laissez-faire*).

2.6.1 Leadership schools

The development of leadership theories as the stages of schools of leadership have been studied by different authors (Turner and Müller, 2005; Partington, 2007). Herein, the evolution of six famous and modern schools of leadership along with three historical schools is demonstrated (Müller and Turner, 2007). See Table 2.12.

Table 2.12: Schools of leadership

School	Period	Main idea	Example authors
Confucius	500 BC	Relationships (jen), values (xiao), process (li), moderation (zhang rong)	Chen (1990)
Aristotle	300 BC	Relationships (pathos), values (ethos), process (logos)	Covey (1992), Collinson (1998)
Barnard	1938	Relationships versus process	Barnard (1938)
Trait	1930s-1940s	Effective leaders show common traits Leaders born not made	Kirkpatrick and Locke (1991), Turner (1999)
Style or behaviour	1940s-1950s	Effective leaders adopt certain styles or behaviours Leadership skills can be developed	Tannenbaum and Schmidt (1958), Blake and Mouton (1978), Hersey and Blanchard (1988)
Contingency	1960s-1970s	What makes an effective leader depends on the situation	Fiedler (1967), House (1971), Robbins (1997)
Visionary or charismatic	1980s-1990s	Two styles: Transformational: concern for relationships Transactional: concern for process	Bass (1990b)
Emotional intelligence	2000s	Emotional intelligence has a greater impact on performance than intellect	Goleman et al. (2002a)
Competency	2000s	Effective leaders exhibit certain competencies including traits, behaviours and styles Emotions, process, intellect Different profiles of competence better in different situations	Dulewicz and Higgs (2003)

Source: (Müller and Turner, 2007)

The **Trait** school as a leader-centred perspective emphasises the characteristics of great political, social, and military leaders. This theory assumes that certain people were born with the special traits to make them great leaders (Jago, 1982; Bass, 1990a). Several studies have focused on leadership traits; see the significant ones in Table 2.13.

Table 2.13: Studies of leadership traits and characteristics

Stogdill (1948)	Mann (1959)	Stogdill (1974)	Lord et al. (1986)	Kirkpatrick and Locke (1991)	Zaccaro et al. (2004)
Intelligence	Intelligence	Achievement	Intelligence	Drive	Cognitive abilities
Alertness	Masculinity	Persistence	Masculinity	Motivation	Extroversion
Insight	Adjustment	Insight	Dominance	Integrity	Conscientiousness
Responsibility	Dominance	Initiative		Confidence	Emotional stability
Initiative	Extroversion	Self-confidence		Cognitive ability	Openness
Persistence	Conservatism	Responsibility		Task knowledge	Agreeableness
Self-confidence		Cooperativeness			Motivation
Sociability		Tolerance			Social intelligence
		Influence			Self-monitoring
		Sociability			Emotional intelligence
					Problem solving

Source: (Northouse, 2010)

The **Style** school emphasises the behaviour of leaders and focuses on what leaders do and how they act rather than who they are (Northouse, 2010). It assumes that effective leadership can be obtained during life and effective leaders are not born naturally (Northouse, 2010). Most researchers from this theory believe that a different combination of competencies makes different behaviours or styles of leadership which are appropriate in different situations (Turner and Müller, 2005; Müller and Turner, 2007). For instance, Pinto et al. (1998) state that “any project manager’s ability to lead effectively is augmented by his or her understanding of alternative approaches to leadership”.

The **Contingency** school is a leader-match theory which focuses on matching a leader’s style to the appropriate situation (Fiedler, 1964, 1993). It assumes that the effectiveness of a leader depends on how well the style of the leader fits the situation (Fiedler, 1964, 1993). It emphasises that different situations require different kinds of leadership styles (i.e. situational theory) (Blanchard et al., 1993; Hersey and Blanchard, 1993). It also emphasises the relationship between the leader’s style and the characteristics of followers and work (i.e. path-goal theory) (House, 1971; House and Mitchel, 1974; House, 1996).

The **Visionary** school focuses on two types of leadership: transformational which is related to relationships and communication; and transactional which is related to process (Müller and Turner, 2007). In this regard, leader-member exchange (LMX) and psychodynamic theories imply these types of leadership (Müller and Turner, 2007). The LMX theory conceptualises leadership as a process and highlights the interactions between leaders and followers (Dansereau et al., 1975; Graen and Uhl-Bien, 1995). The psychodynamic theory also refers to the relationship between leaders and followers and is used to persuade leaders and followers to become aware of their personality types (Zaleznik, 1977; Maccoby, 1981, 2003).

The **Emotional intelligence** school assumes that most of managers or leaders have a reasonable level of intelligence, however, their emotional response to situations differentiates them from others, not their intelligence (Müller and Turner, 2007).

The **Competency** school encompasses the previous assumptions and assumes that certain competency profiles of effective leaders are appropriate in different situations (Müller and Turner, 2007).

2.6.2 Leadership vs. management

One approach to appreciate something is to recognise how it is different from something else (Kent, 2005). Hence, several authors have attempted to differentiate between leading and managing to comprehend leadership as a distinct concept and a separate function from management (Kent, 2005). For instance, Bennis and Nanus (1985) state that leadership means influencing others and generating changes, whereas management means accomplishing activities and running routines. Rost (1991) expresses that leadership is a multidirectional influence relationship, while management is a unidirectional influence relationship. Kent (2005) also states that leadership as an influence relationship is about making changes and doing the right things, however, management as an authority relationship is about creating stability and doing things right.

Leadership and management are two terms that have been used interchangeably but they express completely different concepts (Hernon, 2009). Leadership is more than an element of the management functions and is concerned with initiating changes, providing direction and motivation, and keeping tasks on track (Hernon, 2009). However, management is the process of coordinating and administrating resources to ensure that an organisation's missions and goals are accomplished on time (Hernon, 2009).

Leadership is related to emotionally changing people's opinions to proactively make real changes, whereas management is related to reactively dealing with people and complexities to solve problems and provide services (Zaleznik, 1977; Bennis and Nanus, 1985; Rost, 1991). Leadership is concerned with conflict management and soft skills, while, management as the art of maximising efficiency is concerned with formulating, monitoring and processing (Wärneryd, 1985; Crowley, 2006; Gray and Larson, 2008). Indeed, leadership is about exploring adaptive and constructive changes but management is about exploring order and stability (Kotter, 1990; Nahavandi, 2009; Northouse, 2010). See Table 2.14.

Table 2.14: Leadership vs. management

Leadership (produces change and movement)	Management (produces orders and consistency)
Establishing Direction <ul style="list-style-type: none"> • Create a vision • Clarify big picture • Set strategies 	Planning and Budgeting <ul style="list-style-type: none"> • Establish agendas • Set timetables • Allocate resources
Aligning People <ul style="list-style-type: none"> • Communicate goals • Seek commitment • Build teams and coalitions 	Organising and Staffing <ul style="list-style-type: none"> • Provide structure • Make job placements • Establish rules and procedures
Motivating and Inspiring <ul style="list-style-type: none"> • Inspire and energize • Empower subordinates • Satisfy unmet needs 	Controlling and Problem Solving <ul style="list-style-type: none"> • Develop incentives • Generate creative solutions • Take corrective action

Source: (Northouse, 2010)

In this regard, Kent et al. (2001) propose a framework in terms of purpose, products, and processes for clarifying differences between leadership and management. See Table 2.15.

Table 2.15: Differentiating between leadership and management

Leadership	Management
Purpose To create direction and the unified will to pursue it through the development of people’s thinking and valuing.	Purpose To determine and compare alternative uses and allocations of resources and to select that alternative which is most energy effective toward accomplishing or producing a product, end or goal.
Products The establishment of thrust toward a purpose or end. The creation of social orderliness to carry out that thrust. Higher states of behaviour and thinking in terms of principles, values, morality, and ethics.	Products Resources, organised effort, and awareness of performance and progress toward goals. The creation of a designed mode of working among people and other resources. The creation of the most energy effective way of dealing with causes of events and situations in accomplishing a purpose tied to a particular situation.
Processes Creating vision, aligning people within a team, meaning their “Self”, recognising and rewarding, communicating meaning and importance of the vision.	Processes Planning, organising, controlling, and coordinating

Source: (Kent, 2005)

However, despite the differences, leadership and management are similar to each other in many ways (Northouse, 2010). Both are concerned with influencing followers, working with people, and achieving common goals (Northouse, 2010). In this regard, Kotter (1990) declares that both leadership and management are essential for an organisation. Hernon (2009) also states that both leadership and management are concerned with recognising people’s feelings and social interactions.

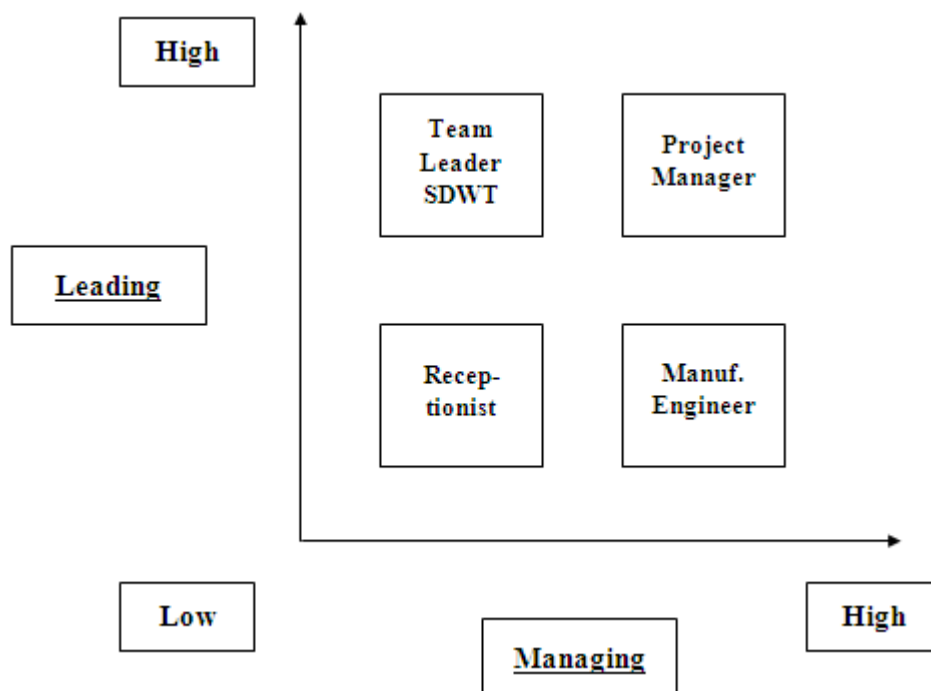
2.6.3 Leading and managing roles of project managers

In the project management context, management is the day-to-day operation of a project plan to achieve goals on-time, on-budget, and on-quality; however, leadership is the higher function that creates a strategic project plan to augment the organisation's business strategy and achieve the outcomes (Norrie and Walker, 2004).

Managers' tasks are related to effectiveness, direction, and stability of projects, while leaders' tasks are related to adaptation, innovation, and flexibility of projects (Yukl and Lepsinger, 2005). Managers are practical, critical, and logical, while leaders are imaginative, inventive, and sensitive (Yukl and Lepsinger, 2005). However, despite these differences, a real project manager should be able to act in both leading and managing roles (Yukl and Lepsinger, 2005).

Within organisations, if a project is more complicated and needs more changes, then a leading role of project managers is more important; and if a project has an active atmosphere and needs more processes and orders, then a managing role of project managers is more significant (Yukl and Lepsinger, 2005). In this regard, Kent (2005) proposes a leader/manager matrix model (Figure 2.4); and emphasises that both leadership and management are important to the success of any organisation and thus it is important to calibrate the leadership and management requirements of any position.

Figure 2.4: The leader/manager matrix



Source: (Kent, 2005)

Kent (2005) believes that a leader/manager needs to be competent in order to employ any of the leading/managing functions timely and situationally. Accordingly, he incorporates Yukl et al.'s (1990) managing functions and Kent et al.'s (2001) leading functions as a competency or job requirement chart (Table 2.16) (Kent, 2005). This chart can determine the level of leading and managing functions required for any job or organisational position such as project manager (Kent, 2005). It also implies that a competent leader/manager is he or she who possesses most or all of the managing competencies and all of the leading competencies (Kent, 2005).

Table 2.16: Leading and managing competencies for leading and managing functions

Leading competencies	Managing competencies
<ul style="list-style-type: none"> • Visualising greatness Thinks strategically. Appropriate risk taking and innovation. Sees, in his/her mind's eye, what could be. Emotion, enthusiasm, and inspiration. • Creating and empowering the "we" Builds teams. Develops others. Appropriately involves others in decision making. Creates ownership/commitment in others. Delegates responsibility. • Communicating for meaning Communications is principle and value based. Communications in facts, values, and symbols. Makes communicating for meaning a priority. Takes required time to explain why something is important. • Managing one's self Maintains an even temperament. Keeps personal energy high. Is self-confident. Maintains focus, persistence, and constancy of purpose. • Care and recognition Publicizes people's effort and successes. Focuses on the positive and recognises positive progress. Cares about others. Recognises and rewards people frequently and appropriately. 	<ul style="list-style-type: none"> • Planning and organising Determining long-term objectives and strategies. Deciding how to use personnel and other resources. • Informing Disseminating information about decisions, plans, etc. Answering requests for information. • Representing Telling others about the organisational unit and its accomplishments. Providing a fair accounting of subordinates ideas and proposals. • Problem solving Identifying and analysing work-related problems to identify causes and solutions. Acting decisively to implement solutions and resolve problems or crises. • Conflict managing Encouraging and facilitating the resolution of conflict. Encouraging cooperation and team work. • Monitoring Gathering information about work activities and progress toward goals. Evaluating the performance of individuals and the work unit. • Consulting and delegating Encouraging suggestions, inviting participation in decision making. Allowing others to have substantial responsibility and discretion in decisions. • Networking Developing contacts with people who are a source of information and support. Maintaining contacts through periodic interaction, visits, calls, etc. • Clarifying Assigning tasks, providing direction, etc. Communicating job responsibilities, task objectives, deadlines, and expectations.

Source: (Kent, 2005)

Briefly, in order to be effective, project managers need to consider the leadership tasks and think beyond the usual managerial tasks since management alone cannot be useful; thus they should attempt to evolve into project leaders (Smith, 1999).

2.6.4 Leadership of project managers and project success

The impact of project managers' leadership on project success has been one of the main concerns for both academic and practical domains (Keller, 1992; Kendra and Taplin, 2004; Turner and Müller, 2005). For instance, the impact of a vision as one of the key components of project managers' leadership on project success is shown by Christenson and Walker (2004); the impact of a supportive environment created by project managers' leadership on project success is highlighted by Thamhain (2004b); and the impact of the transformational leadership style of project managers on project success is shown by Prabhakar (2005).

Aronson et al. (2010) also discover that building activities (vision, values, social rituals, and symbols) of project managers' leadership can significantly affect the spirits of project team members and thus contribute to project success. Similarly, Milosevic and Patanakul (2005) identify standardised project leadership including planning, communication, vision, and interpersonal skills which can strongly contribute to project success. Likewise, Morris (1988) stresses that poor leadership as a failure factor has a negative impact on initiation and planning, execution and controlling, and closing phases of projects.

Yang et al. (2011) also declare that an increase in the level of leadership of project managers can improve the relationships between project team members and therefore increase the likelihood of project success. Similarly, Fortune and White (2006) state that successful project outcomes depend greatly on effective project managers with strong leadership capabilities. Likewise, Hyväri (2006a) suggests that assessing the effectiveness of project managers can be expressed in terms of the consequence of their leadership's approach to achieving success.

However, generally, the project management literature has mainly ignored the contribution of the role of project managers and their leadership to project success (Turner and Müller, 2005; Müller and Turner, 2007).

2.6.4.1 Leadership styles of project managers and project success

The literature implies that there is a strong relationship between project managers' leadership styles and project success (Yang et al., 2011). However, there is not a certain leadership style for achieving project success (Frame, 1987). Indeed, project managers need to adapt their leadership styles to specific situations to achieve project success (Fiedler, 1967, 1974; Hersey and Blanchard, 1988; Gray and Larson, 2008).

In this regard, Müller and Turner (2007) state that different leadership styles are suitable for different types of projects (i.e. different leadership styles are more likely to achieve success in different types of projects). They also assert that different leadership styles are suitable at different stages of a project's life cycle (Turner and Müller, 2005). Similarly, Bass (1990a) declares that certain leaders are more suitable for stable circumstances and others are suited to unstable circumstances. Indeed, the correlation of leadership style and project type, and their influence on project success should be carefully considered by project managers (Müller and Turner, 2007).

Lewis et al. (2002) declare that leadership style can predict project performance or success, since it can enhance project team communication, cooperation, collaboration, and cohesiveness (Podsakoff et al., 1990; Yammarino et al., 1998; Shamir et al., 2000; Dionne et al., 2004; Wang et al., 2005). However, Thamhain (2004a) asserts that there is not a significant relationship between any leadership style and project performance.

2.6.4.2 Leadership competencies of project managers and project success

In general, researchers have not been able to make a concrete link between a project manager's leadership competencies and project success (Goleman, 1996; Pinto, 1998; Geoghegan and Dulewicz, 2008). However, most of them agree that different leadership competencies of project managers influence project success in different situations (Müller and Turner, 2010). For instance, Weinkauff and Högl (2002) state that the appropriateness of a project manager's leadership competencies may vary from one stage of a project to another. Crawford (2005) also states that different leadership competencies of project managers are proper in different types of project. In fact, project managers' leadership competencies should meet the requirements of particular types of project (Müller and Turner, 2010).

In this regard, Geoghegan and Dulewicz (2008) discover that "there is a statistically significant relationship between a project manager's leadership competencies and

project success”. They also identify these competencies and cluster them into three groups: intellectual (IQ), managerial (MQ), and emotional (EQ) (Dulewicz and Higgs, 2003). See Table 2.17.

Table 2.17: Fifteen leadership competencies of project managers

Group	Competency
Intellectual (IQ)	1. Critical analysis and judgement
	2. Vision and imagination
	3. Strategic perspective
Managerial (MQ)	4. Engaging communication
	5. Managing resources
	6. Empowering
	7. Developing
	8. Achieving
Emotional (EQ)	9. Self-awareness
	10. Emotional Resilience
	11. Motivation
	12. Sensitivity
	13. Influence
	14. Intuitiveness
	15. Conscientiousness

Source: (Adapted from (Dulewicz and Higgs, 2003))

However, Turner and Müller (2005) assert that many project managers do not believe that they themselves and their leadership competencies or styles can affect project success.

2.6.5 Transformational leadership style

Burns (1978) proclaims that earlier concepts of leadership are wrong and leadership is more concerned with handling changes, namely transformational leadership. He believes that the transformational leadership style can positively affect both leaders and their followers by changing their morals, ethics, and attitudes (Kent, 2005). In this regard, Podsakoff et al. (1990) cluster this leadership style into six major dimensions: creating visions, developing common goals, high performance expectations, providing suitable approaches, individualised supports, and intellectual stimulations.

Generally, transformational leadership is part of the new paradigm which focuses on charismatic and effective parts of leadership (Bryman, 1992; Barber, 2005; Bass and Riggio, 2006; Northouse, 2010). It refers to inspiring and stimulating followers through dealing with emotions, values, and norms to deliver outstanding results (Bryman, 1992; Barber, 2005; Bass and Riggio, 2006; Northouse, 2010). It emphasises that leaders

should adapt to the needs and motives of followers to motivate them to achieve goals (Bryman, 1992; Barber, 2005; Bass and Riggio, 2006; Northouse, 2010).

In fact, pseudotransformational leadership is personalised leadership which focuses on the leader's interests rather than the follower's interests (Burns, 1978; Bass and Steidlmeier, 1999; Bass and Riggio, 2006). Conversely, transformational leadership is an approach to persuade followers to see beyond self-interest in favour of the common goal by adjusting their morale, thoughts, and principles (Pieterse et al., 2010; Kissi et al., 2012).

The transformational leadership style can affect the project team's effectiveness (Clarke, 2012), stakeholders' satisfaction (Cheung et al., 2001), teamwork (Yang et al., 2011), team cohesion (Wang et al., 2005), commitment and performance (Limsila and Ogunlana, 2008), and knowledge sharing (Carmeli et al., 2011). Indeed, it can positively affect project outcomes (i.e. technically, quality, cost and schedule performance) (Keegan and Den Hartog, 2004; Strang, 2005; Keller, 2006; Grosse, 2007), and project success (Thite, 2000; Prabhakar, 2005).

The transformational leadership style can function as a predictor of project performance (Keller, 1992) since project performance beyond ordinary expectations is delivered by this style (Bass, 1985). Also, the most popular leadership style for running safety and creating a high-performance culture is transformational (Krause, 2007). Hence, a project leader who adopts the transformational leadership style seems more effective from others' viewpoints (Lowe et al., 1996; Fiol et al., 1999).

2.6.5.1 Transformational leadership vs. transactional leadership

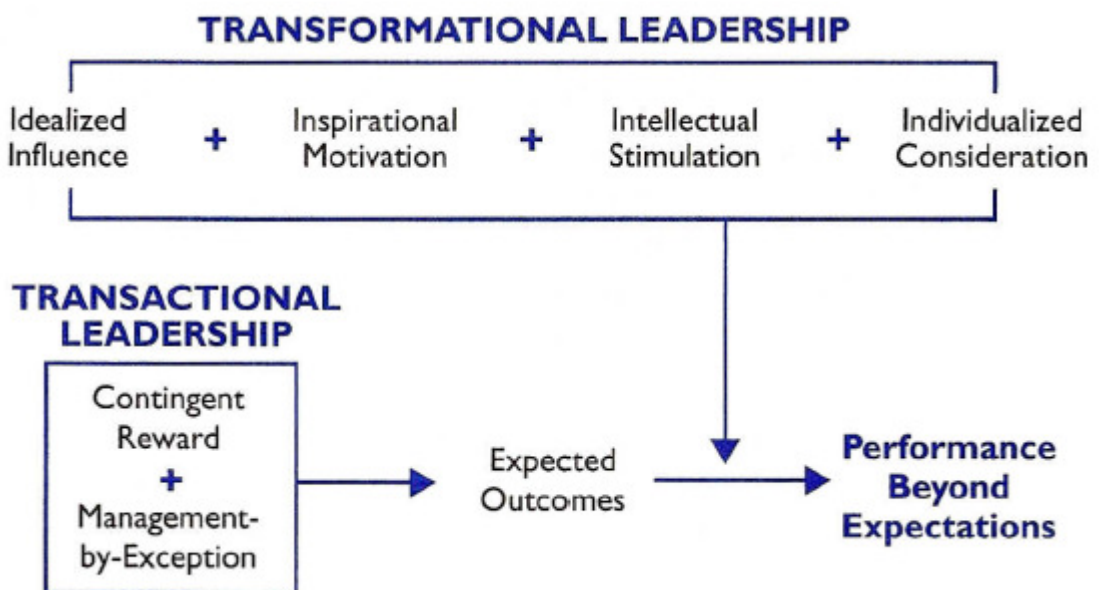
The proactive decision affects the direction of a project and the reactive decision solves the existing problems of a project (Bass and Avolio, 1990; Barber, 2005). These two leadership approaches might be known as transformational leadership style or *firelighter* and transactional leadership style or *fire-fighter* (Bass and Avolio, 1990; Barber, 2005). The transformational leadership style is about lighting the fires of stakeholders' motivation and creativity; however, the transactional leadership style refers to the reactive behaviour of leadership (Bass and Avolio, 1990; Barber, 2005).

Transformational leadership is the process in which a person creates a link that enhances the level of motivation and integrity in both the leader and followers; however, transactional leadership is the contractual agreement between the leader and

the followers on expected performance in exchange for specific rewards (Thite, 2000; Barber, 2005; Bass and Riggio, 2006; Northouse, 2010).

In this regard, Bass (1985) suggests the negative outcome for transformational leadership and creates the leadership continuum which consists of transformational, transactional, and laissez-faire leadership. Bass and Avolio (1990) also develop this model by suggesting seven factors within three groups: (1) transformational factors (idealised influence or charisma, inspirational motivation, intellectual stimulation, and individualised consideration), (2) transactional factors (contingency reward or constructive transactions, and management-by-exception as corrective transactions in forms of active or passive), and (3) nonleadership factor (laissez-faire or non-transactional). See Figure 2.5. These factors also make up the famous leadership instrument: Multifactor Leadership Questionnaire (MLQ) (Bass and Avolio, 1994).

Figure 2.5: Transformational-transactional leadership model



Source: (Northouse, 2010)

Bass and Avolio (1995) also assert that the transformational leadership style is suitable for high difficulty circumstances but the transactional leadership style is suitable for low difficulty circumstances. Similarly, Dulewicz and Higgs (2004) state that the transformational leadership style is suitable for complex change projects but the transactional leadership style is suitable for simple engineering projects. However, the appropriate leadership style is the combination of both transformational and

transactional which can be useful in diverse conditions (Bass and Avolio, 1990; Dulewicz and Higgs, 2003; Turner and Müller, 2005; Yang et al., 2011).

Bass and Avolio (1995) also declare that the transformational leadership style has a greater influence on projects than the transactional leadership style. Likewise, Keegan and Den Hartog (2004) assert that the transformational leadership style is more appropriate for project managers.

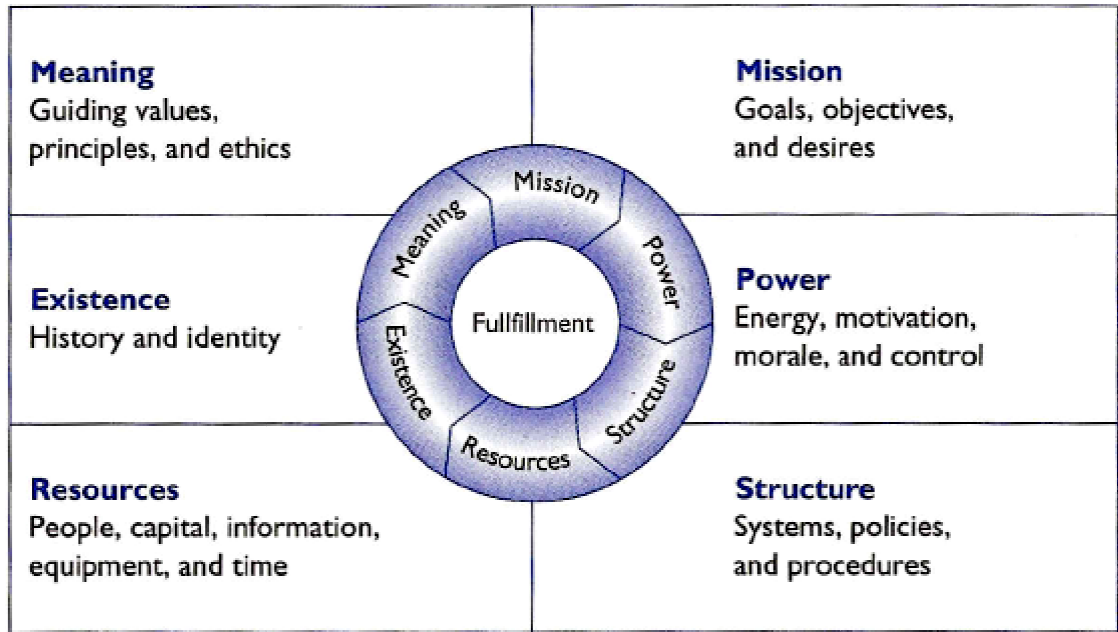
2.6.5.2 Authentic leadership

Authentic, genuine, or real leadership is the integration of transformational and ethical leadership (Avolio et al., 2004). It is about the authenticity of leaders and their leadership and is concerned with transparency, morality, and people's values (Bass, 1990a; Bass and Steidlmeier, 1999). For example, the real power (i.e. not coercive power; capability rather than authority; and part of the influential process of leadership) is derived only by authentic leaders and their followers in order to promote their performance (Burns, 1978; Kanter, 1981; Erchul and Raven, 1997).

However, there is no single definition for authentic leadership; it can be defined intrapersonally, developmentally, and interpersonally (Northouse, 2010). Accordingly, the intrapersonal definition emphasises the leader and the leader's self-knowledge, self-regulation, and self-concept; the developmental definition focuses on the main components of authentic leadership that develop over time such as: self-awareness, internalised moral perspective, balanced processing, and relational transparency; and the interpersonal definition stresses that authentic leadership is the relational process made by leaders and followers (Avolio and Gardner, 2005; Eagly, 2005; Shamir and Eilam, 2005; Avolio, 2009; Northouse, 2010).

In this regard, Terry (1993) explains how leaders can apply authentic leadership. He creates an authentic action wheel to illustrate what is happening in the real situation, and what actions are authentic for leaders and followers within organisations (Northouse, 2010). See Figure 2.6.

Figure 2.6: Authentic action wheel



Source: (Northouse, 2010)

2.6.6 Global leadership model

In the GLOBE (Global Leadership and Organisational Behaviour Effectiveness) research programme (House et al., 2004), leadership is concerned with the societal and organisational norms, beliefs, and values of people. It defines leadership as the ability of a person to motivate others in order to contribute to the effectiveness and success of an organisation (House et al., 2002; Liddle, 2007). In accordance with this definition, GLOBE identifies universal leader's attributes and characteristics (Hofstede, 2001; House et al., 2002; House et al., 2004; Hoppe, 2007). See Table 2.18.

Table 2.18: Universal leader's characteristics

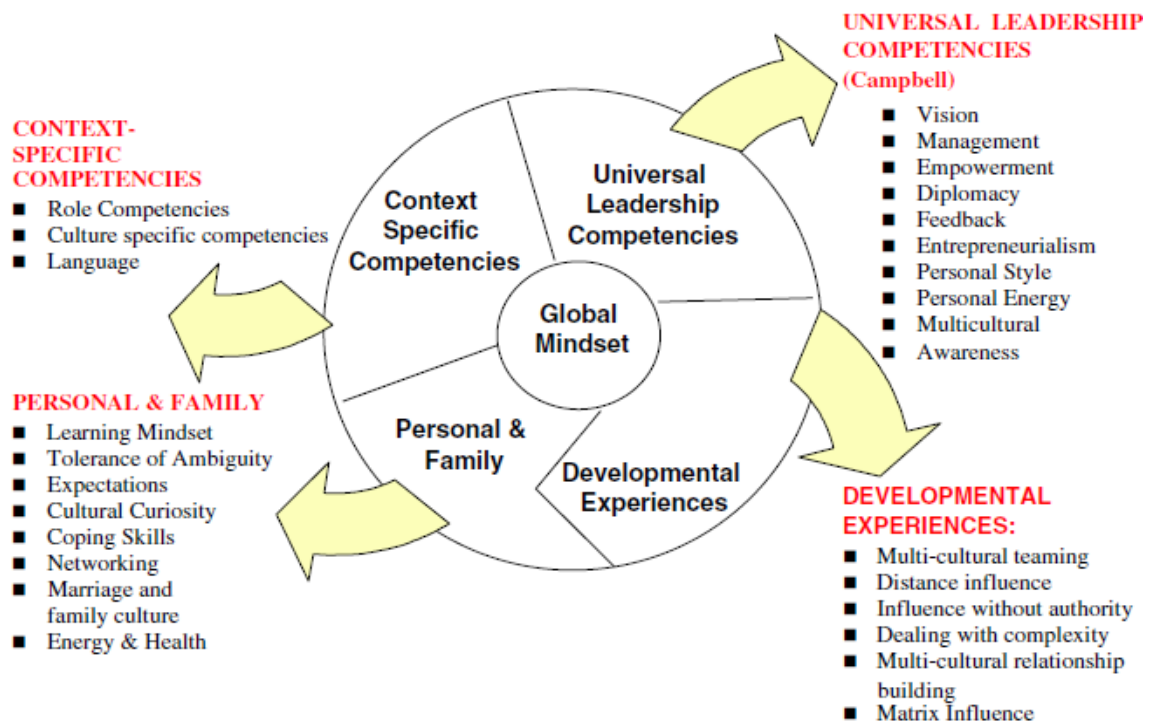
Characteristics	
Contribute to a Person Being Seen as an Outstanding Leader	
Trustworthy	Decisive
Just	Excellence-oriented
Honest	Dependable
Foresight	Intelligent
Plans ahead	Effective Bargainer
Encouraging	Win-win problem solver
Positive	Administratively skilled
Dynamic	Communicative
Motive arouser	Informed
Confidence builder	Coordinator
Motivational	Team builder
Inhibit a Person from Being Seen as an Outstanding Leader	
Loner	Irritable
Asocial	Egocentric
Indirect/Non-explicit	Ruthless
Non-cooperative	Dictatorial
Culturally Contingent Leader Characteristics	
Anticipatory	Intuitive
Ambitious	Logical
Autonomous	Micro-manager
Cautious	Orderly
Class conscious	Procedural
Compassionate	Provocateur
Cunning	Risk taker
Domineering	Ruler
Elitist	Self-effacing
Enthusiastic	Self-sacrificial
Evasive	Sensitive
Formal	Sincere
Habitual	Status-conscious
Independent	Subdued
Indirect	Unique
Individualistic	Wilful
Intra-group competitor	Worldly
Intra-group conflict avoider	

Source: (House et al., 2004)

2.6.6.1 Global mindset

McCall and Hollenbeck (2002) declare that “no one agrees on a global competency set because there is no universal global job”. However, principles are common but are explained variably from culture to culture (Dickson et al., 2001; Mobley and Weldon, 2006). Hence, it is possible to visualise some of the key concepts of effective global leadership (Mobley and Weldon, 2006). See Figure 2.7.

Figure 2.7: Effective global leadership



Source: (Mobley and Weldon, 2006)

The global mindset is a deep transformation beyond a change in a skill set (Mobley and Weldon, 2006). It encompasses changing in personal identity and developing new attitudes and skills (Mobley and Weldon, 2006). Thus, the transformation is about competencies of a leader as well as experience and learning (McCall, 1998; Mobley and Weldon, 2006).

This model emphasises that an effective leader in the international context is a person who considers experiences, certain universal leadership competencies, roles, culture specific competencies, a global mindset and learning agility, and personal characteristics (McCall, 2002; Mobley and Weldon, 2006). In this model, the degree of effectiveness is expressed in terms of how well all the interrelated variables fit with the role and context of the leadership, and also how well the leader adheres to learning and adapting to the context (McCall, 2002; Mobley and Weldon, 2006).

2.7 Emotional intelligence

Emotional intelligence is separated from intelligence quotient, due to its wide range of applicability, and developed as a new aspect (Wolff et al., 2002; Antonakis et al., 2009). Intelligence in general is concerned with the ability to learn information and apply it to life's tasks, however, emotional intelligence is concerned with the ability to understand

emotions and apply this understanding to life's tasks (Goleman, 1996; Saucier, 1998; Mayer et al., 2000).

Emotional intelligence, as the ability to process emotional information, refers to the emotional rather than intellectual perspective of a person, and deals with behaviours, social manners, and emotions (Salovey and Mayer, 1990; Mayer and Salovey, 1997; Salovey and Grewal, 2005). Based on emotional intelligence, leadership can be classified into six styles: visionary, coaching, affiliative, democratic, pacesetter, and commanding (Goleman et al., 2002a; Turner and Müller, 2005).

Emotional intelligence emphasises that leaders' emotional intelligence is more effective for projects than the leaders' intellectual ability (Goleman et al., 2002a; Turner and Müller, 2005). In other words, intelligent project managers are differentiated by their emotional responses to different circumstances, not by their intelligence (Goleman et al., 2002a; Turner and Müller, 2005).

2.7.1 Emotional intelligence models

Various emotional intelligence (EI) models have been proposed by different researchers (Conte, 2005; Locke, 2005). The differences between these models are mainly related to perceiving the EI constructs, measuring EI, and determining the relationships between the constructs (Clarke, 2010b). In accordance with these differences, the models can be classified into three major groups (Clarke, 2010b): the ability-based model of EI (Salovey and Mayer, 1990), the competence-based model of EI (Goleman, 1996), and the mixed-model of EI (Bar-On, 1997). However, the ability-based model of EI is widely accepted as it can show scientifically the emotional intelligence through the four abilities which are cognitive in nature: (1) the ability to recognise feelings, (2) the ability to integrate feelings to assist thought, (3) the ability to understand feelings, and (4) the ability to manage feelings (Clarke, 2010b).

In this regard, Goleman (1996) as one of the famous researchers in this area, classifies emotional intelligence into five main domains: self-awareness (i.e. one's understanding of strengths and weaknesses), self-regulation (i.e. ability to maintain oneself under control), social skill (i.e. association with people in a certain direction), motivation (i.e. establishing motivation in self and others), and empathy (i.e. ability to understand others' needs). He also develops his classification and suggests four new domains: self-awareness (emotional self-awareness, accurate self-assessment, and self-confidence),

self-management (self-control, transparency, adaptability, achievement, initiative, and optimism), social-awareness (empathy, organisational awareness, and service), and relationship management (inspiration, influence, developing others, change catalyst, conflict management, and teamwork and collaboration) (Goleman et al., 2002a, 2002b).

Cavallo (2006) also classifies emotional intelligence into four major groups: self-awareness (emotional self-awareness, accurate self-assessment, and self-confidence), self-management (self-control, trustworthiness, conscientiousness, adaptability, achievement orientation, and initiative), social-awareness (empathy and organisational awareness), and social skills (developing others, service orientation, leadership, influence, communication, change catalyst, conflict management, building bonds, and teamwork).

2.7.2 Emotional intelligence of project managers

Despite the importance of emotional intelligence within the project management context (Leban and Zulauf, 2004; Druskat and Druskat, 2006; Müller and Turner, 2007), the emotional intelligence of project managers is a relatively underexplored concept (Clarke, 2010b). Hence, from the project management perspective, there is a need for studies that investigate EI development and discover whether EI can improve attitudes and behaviours necessary for project managers (Clarke, 2010b).

In general, the human aspect of project management has been known as a vital element of the project manager's role associated with project success (Cleland, 1995; EI-Sabaa, 2001; Cooke-Davies, 2002; Cowie, 2003). In this regard, Goleman (1996) asserts that two factors are very important for the success of projects: emotional intelligence (EI) and intellectual aptitude (IQ) of project managers. Emotional intelligence of project managers can positively affect their transformational leadership style (Sunindijo et al., 2007; Clarke, 2010a; Hur et al., 2011). Indeed, the concept of emotional intelligence could distinguish the effectiveness of project managers in performing the human skills (Druskat and Druskat, 2006; Clarke, 2010b).

Salovey and Mayer (1990) also state that empathy as the ability to understand others' emotions is the vital characteristic for emotionally intelligent behaviour of project managers. Similarly, Kellett et al. (2002) state that the leadership of project managers is affected by their mental abilities, emotional abilities, and abilities to execute complicated works. Indeed, the individual differences such as emotional intelligence,

intelligence, openness, conscientiousness, neuroticism, extraversion, and agreeableness can directly affect transformational leadership and can indirectly affect performance of project managers (Cavazotte et al., 2012).

In brief, intellectual competencies (IQ), managerial competencies (MQ), and social and emotional competencies (EI) as the significant constituents of leadership competencies (e.g. emotional, cognitive, behavioural, and motivational) can considerably affect leadership performance of project managers (Dulewicz and Higgs, 2000a, 2000b; Geoghegan and Dulewicz, 2008).

2.8 Knowledge gaps in previous research

The literature has shown that there are some empirical studies that investigate the effectiveness of project managers. However, there is a dearth of project management literature regarding the concept of an effective project manager, particularly within project-oriented organisations. This concept could thus be a timely topic for research.

The review conducted in this chapter has assisted in identifying the gaps in the literature that this research project is aiming to bridge. The gaps can be summarised as follows:

- There is a need for more in-depth empirical research into the perception and appreciation of the effectiveness of project managers in project-oriented organisations.
- There is a severe shortage of studies exploring the role of leadership in the effectiveness of project managers in project-oriented organisations.
- There is a serious need for the creation of a comprehensive model to act as the criteria for project managers to become effective in project-oriented organisations.

Hence, this research aims to provide an in-depth understanding of the effectiveness of project managers within project-oriented organisations, while the outcomes of the literature review have assisted in outlining the key concepts that contribute to the effectiveness of project managers.

2.9 Conclusions

Project management as the set of knowledge, skills, and techniques is used to fulfil requirements and expectations, establish measurable scopes, make realistic timetables, and define roles and responsibilities (Tinnirello, 2000; Schwalbe, 2006). Project-oriented business organisations use it as the central managerial strategy for major parts of their business (Gareis, 1991); since it can greatly affect project performance or success (Munns and Bjeirmi, 1996; Belout and Gauvreau, 2004; Qureshi et al., 2009). However, as more organisations apply project management to deliver products and services, the demand for project managers grows, and thus more research is required on the effectiveness of project managers (Crawford, 2005). Indeed, project management standards are inadequate for developing and assessing project managers and more empirical-based research is needed in order to create models of project managers' effectiveness (Crawford, 2005).

Effective project managers are those who have productive, committed, and satisfied team members with high project performance, those who communicate with project stakeholders, manage conflict, and train, develop, and motivate team members (Luthans, 1988). They can manage changes, possess high quality managerial skills, and inspire their team members to show a high level of contributions and recognitions (Bennis and Nanus, 1985; Anderson, 1992; Thamhain, 2004a). Indeed, they can employ any of the leading and managing functions (Kent, 2005) as well as those related to emotional intelligence (Druskat and Druskat, 2006; Clarke, 2010b) situationally and in a timely manner.

Leadership and management are two terms that have been used interchangeably but they express completely different concepts (Hernon, 2009). Leadership is more than an element of the management functions and is concerned with initiating changes, providing direction and motivation, and keeping tasks on track, however, management is the process of coordinating and administrating resources to ensure that an organisation's missions and goals are accomplished on time (Hernon, 2009). Accordingly, within organisations, if a project is more complicated and needs more changes, then a leading role of project managers is more important; and if a project has an active atmosphere and needs more processes and orders, then a managing role of project managers is more significant (Yukl and Lepsinger, 2005).

Transformational leadership is the process in which a person creates a link that enhances the level of motivation and integrity in both the leader and followers; however, transactional leadership is the contractual agreement between the leader and the followers on expected performance in exchange for specific rewards (Thite, 2000; Barber, 2005; Bass and Riggio, 2006; Northouse, 2010). Accordingly, the transformational leadership style is suitable for complex change projects with high difficulty circumstances and the transactional leadership style is suitable for simple engineering projects with low difficulty circumstances (Bass and Avolio, 1995; Higgs and Dulewicz, 2004). However, different leadership styles and competencies of project managers are suitable for different types of projects at various stages of their life cycle (Frame, 1987; Turner, 1999; Dulewicz and Higgs, 2003; Crawford, 2005; Turner and Müller, 2005; Müller and Turner, 2010).

An increase in the level of leadership of project managers can improve the relationships between project team members and therefore increase the likelihood of project success (Yang et al., 2011). Indeed, assessing the effectiveness of project managers can be expressed in terms of the consequence of their leadership's approach to achieving success (Hyväri, 2006a); since successful project outcomes depend greatly on effective project managers with strong leadership capability (Fortune and White, 2006).

Emotional intelligence emphasises that leaders' emotional intelligence is more effective for projects than the leaders' intellectual ability (Goleman et al., 2002a; Turner and Müller, 2005). In other words, intelligent project managers are differentiated by their emotional responses to different circumstances, not by their intelligence (Goleman et al., 2002a; Turner and Müller, 2005). Indeed, the concept of emotional intelligence could distinguish the effectiveness of project managers in performing the human skills (Druskat and Druskat, 2006; Clarke, 2010b).

The literature has shown that there are some empirical studies that investigate the effectiveness of project managers. However, there is a dearth of project management literature regarding the concept of an effective project manager, particularly within project-oriented organisations. This concept could thus be a timely topic for research.

The review conducted in this chapter has assisted in identifying the gaps in the literature that this research project is aiming to bridge. The gaps can be summarised as follows:

- There is a need for more in-depth empirical research into the perception and appreciation of the effectiveness of project managers in project-oriented organisations.
- There is a severe shortage of studies exploring the role of leadership in the effectiveness of project managers in project-oriented organisations.
- There is a serious need for the creation of a comprehensive model to act as the criteria for project managers to become effective in project-oriented organisations.

Hence, this research aims to provide an in-depth understanding of the effectiveness of project managers within project-oriented organisations, while the outcomes of the literature review have assisted in outlining the key concepts that contribute to the effectiveness of project managers.

This chapter has provided a detailed description and critical overview of the theoretical background of this research project. It has discussed the available literature relating to project management studies, particularly the concept of an effective project manager. It has also determined the knowledge gaps in this research area.

In chapter 3, the research philosophy, approach, method and strategy selected to carry out the study will be explained.

Chapter 3: Research methodology

3.1 Introduction

This chapter discusses the research methodology adopted for the study. It comprises different parts, each focusing on a distinct methodological concern. It explains the research philosophy, approach, design, and strategy used to guide this study. The overall purpose of this chapter is to provide a robust rationale for the selection of the appropriate methodology based on the aim, objectives, and limitations of the study.

To achieve this, the chapter first aims to demonstrate the different philosophical assumptions, paradigms, and positions along with the justifications for the selected research philosophy. Next, the deductive and inductive approaches along with the justifications for the selected research approach are explained. After that, the quantitative and qualitative research methods along with the justifications for the selected research design are explained. Then, the different research strategies, particularly the grounded theory along with its rationale, are explained. The background and challenges of this strategy are also described to select and justify its proper version. Afterwards, the theoretical perspectives, particularly symbolic interactionism along with its rationale, are explained. Subsequently, the evaluation of the qualitative research project is explained. Finally, a brief summary and conclusions of the methodological methods used in this research project are presented.

3.2 Research philosophy

The research philosophy refers to the development of knowledge in terms of its nature in a particular field of study (Johnson and Clark, 2006; Denzin and Lincoln, 2011; Saunders et al., 2012). It explains the knowledge assumptions adopted by a researcher and how his/her specific research approaches, strategies and methods would be used in the study (Johnson and Clark, 2006; Denzin and Lincoln, 2011; Saunders et al., 2012).

Philosophical assumptions, paradigms, and positions along with the justifications for the selected research philosophy are explained in the following subsections.

3.2.1 Philosophical assumptions

Researchers' assumptions about human knowledge and the nature of reality shape how they understand their research subjects, how they adopt their research methods, and how

they interpret their research findings (Crotty, 2003). Their research philosophies, as assumptions about the way of viewing the world, can underpin their research methodology (i.e. a combination of approaches to inquire into a particular area) and research methods (i.e. techniques for data collection and analysis) (Denzin and Lincoln, 2011; Easterby-Smith et al., 2012; Saunders et al., 2012).

In fact, a research philosophy consists of three main assumptions which are known as; *ontology*, *epistemology*, and *axiology* (Denzin and Lincoln, 2011; Lincoln et al., 2011). Explanations of each assumption are presented in the following subsections.

3.2.1.1 Ontology

Ontology is concerned with the researchers' assumptions about how the world functions (Denzin and Lincoln, 2011; Lincoln et al., 2011; Saunders et al., 2012). It highlights the nature of reality and consists of two major aspects, namely objectivism and subjectivism (Creswell, 2007; Denzin and Lincoln, 2011; Lincoln et al., 2011; Saunders et al., 2012). Objectivism indicates that social entities exist in reality independent of social actors in relation to their existence, whereas subjectivism indicates that social phenomena are in fact created by social actors concerned with their existence (Denzin and Lincoln, 2011; Lincoln et al., 2011; Saunders et al., 2012).

Easterby-Smith et al. (2012, p. 18) define ontology as “philosophical assumptions about the nature of reality”. Based on this definition, they classify ontology into four major positions: realism, internal realism, relativism, and nominalism (Easterby-Smith et al., 2012). See Table 3.1.

Table 3.1: Four different ontological positions

Ontology	Realism	Internal Realism	Relativism	Nominalism
Truth	Single truth	Truth exists, but is obscure	There are many 'truths'	There is no truth
Facts	Facts exist and can be revealed	Facts are concrete but cannot be accessed directly	Facts depend on viewpoint of observer	Facts are all human creations

Source: (Easterby-Smith et al., 2012)

Realism emphasises that the world is concrete and external, and phenomena can only be investigated through scientific observations that have a direct association (Easterby-Smith et al., 2012). This extreme position is labelled by Bhaskar (1989) as transcendental realism which assumes that “the ultimate objects of scientific inquiry exist and act quite independently of scientists and their activity” (Bhaskar, 1989, p. 12).

However, internal realism assumes that there is a single inaccessible reality, and it is only possible to collect indirect proof of its fundamental physical processes (Putnam, 1987).

In contrast to these positions, relativism assumes that there is no single reality that can be discovered since issues, particularly those of the social sciences (e.g. behaviour of people), could be defined and experienced differently by different people (Easterby-Smith et al., 2012). This position has been strongly influenced by the works of Latour and Woolgar (1979), who have focused on various debates about how to explain observed patterns and phenomena within research laboratories. It indicates that as people hold different viewpoints, the truth of a specific idea is reached through discussions between the main protagonists (Easterby-Smith et al., 2012). Nevertheless, the closure of these scientific discussions as the acceptance of a particular theory could be greatly affected by political business and financial resources (Knorr-Cetina, 1983). Hence, this position could vary from one contextual place and time to another (Collins, 1983).

On the other hand, nominalism suggests that the names and labels used by people to attach to their experiences are critical (Easterby-Smith et al., 2012). It assumes that there is no truth since different versions of truth may be found by people (Easterby-Smith et al., 2012). It also implies that social life is vague and indeterminate, and thus social reality would be the construction of human beings through language and discourse (Cooper and Burrell, 1988; Cunliffe, 2001).

3.2.1.2 Epistemology

Epistemology is concerned with what constitutes acceptable knowledge and what information a researcher considers to be significant in a field of research (Denzin and Lincoln, 2011; Lincoln et al., 2011; Saunders et al., 2012). It refers to a relationship between the knower and the fact which can be known (Guba and Lincoln, 1994, 2005; Creswell, 2007).

Easterby-Smith et al. (2012, p. 18) define epistemology as “a general set of assumptions about ways of inquiring into the nature of the world”. Based on this definition, they classify epistemology into two contrasting positions: positivism and social constructionism (Easterby-Smith et al., 2012). See Table 3.2.

Table 3.2: Two contrasting epistemological positions

Implication	Positivism	Social constructionism
The observer	must be independent	is part of what is being observed
Human interests	should be irrelevant	are the main drivers of science
Explanations	must demonstrate causality	aim to increase general understanding of the situation
Research progresses through	hypotheses and deductions	gathering rich data from which ideas are induced
Concepts	need to be defined so that they can be measured	should incorporate stakeholder perspectives
Units of analysis	should be reduced to simplest terms	may include the complexity of 'whole' situations
Generalisation through	statistical probability	theoretical abstraction
Sampling requires	large numbers selected randomly	small numbers of cases chosen for specific reasons

Source: (Easterby-Smith et al., 2012)

Positivism is concerned with realism and internal realism ontologies and assumes that “the social world exists externally, and that its properties should be measured through objective methods, rather than being inferred subjectively through sensation, reflection or intuition” (Easterby-Smith et al., 2012, p. 22). However, social constructionism is concerned with relativism and nominalism ontologies and assumes that “reality is not objective and exterior, but is socially constructed and given meaning by people” (Easterby-Smith et al., 2012, p. 23).

Social constructionism developed by several authors such as Berger and Luckman (1966), Watzlawick (1984), and Shotter (1993), refers to the approach that people understand the world through communicating and sharing their experiences with others (Mangan et al., 2004; Lincoln et al., 2011; Easterby-Smith et al., 2012). It indicates that within the social sciences, researchers should not gather facts and examine how the specific patterns occur, although they need to deeply understand the various constructions and meanings that people provide through their experiences (Lincoln et al., 2011; Easterby-Smith et al., 2012). In this regard, Habermas (1970) as one of the

Table 3.4: Methodological implications of different epistemologies

Ontology	Realism	Internal Realism	Relativism	Nominalism
Epistemology	Strong Positivism	Positivism	Constructionism	Strong Constructionism
Methodology				
Aims	Discovery	Exposure	Convergence	Invention
Starting points	Hypotheses	Propositions	Questions	Critique
Designs	Experiment	Large surveys; multi-cases	Case sand surveys	Engagement and reflexivity
Data types	Numbers and facts	Numbers and words	Words and numbers	Discourse and experiences
Analysis/ interpretation	Verification/ falsification	Correlation and regression	Triangulation and comparison	Sense-making; understanding
Outcomes	Confirmation of theories	Theory testing and generation	Theory generation	New insights and actions

Source: (Easterby-Smith et al., 2012)

Strong positivism fits with realism and refers to strong or conclusive verification of a proposition, while normal positivism, or positivism, is concerned with internal realism and refers to weak or probable indirect verification of a proposition (Ayer, 1971). On the other hand, normal constructionism, or constructionism, is concerned with relativism and assumes that knowledge can be constructed along with the extant independent objective knowledge, whereas strong constructionism fits with nominalism and assumes that individual and social knowledge are the same (Ernst, 1996).

3.2.1.3 Axiology

Axiology refers to the branch of philosophy regarding ethics, aesthetics, and religion that plays an important role in forming a part of the fundamental philosophical aspects of paradigms (Lincoln et al., 2011). It indicates that people’s values are the main reasons for encouraging them to participate in a particular action (Heron, 1996). It also highlights the significance of researchers’ judgements about values and principles during the research process (Creswell, 2007). Hence, it implies that values play an important role in the credibility of any research as they are reflected in the choice of philosophical approach (Saunders et al., 2012).

Axiology could assist researchers in viewing the embeddedness of ethics within paradigm and considering the role of spirituality in human inquiry within dialogue (Lincoln et al., 2011). However, it has been ignored within scientific investigations due to its religious considerations (Lincoln et al., 2011). In spite of this, the broad definition

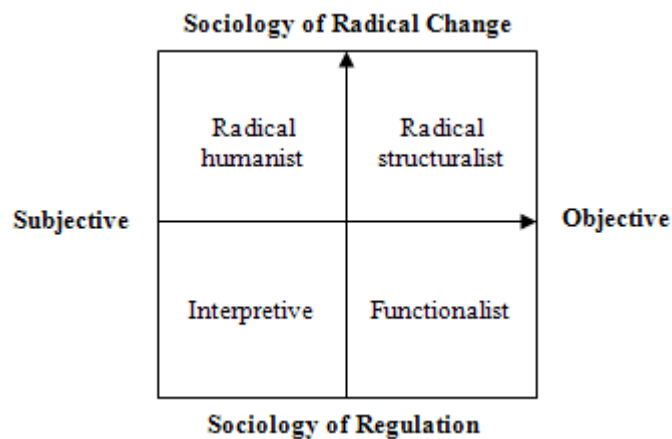
of religion would encompass spirituality as the encouragement for constructivists to be closer to participative inquirers and for critical theorists to be closer to both (Lincoln et al., 2011).

3.2.2 Research paradigms

The concept of paradigm made popular by Kuhn (1962), has been subjected to diverse interpretations (Morgan, 1980; Mangan et al., 2004). However, generally, it can be defined as the sets of philosophical assumptions and beliefs that guide researchers' actions (Denzin and Lincoln, 2011; Lincoln et al., 2011). More specifically, it can be described as a way of exploring social phenomena through particular understandings (Saunders et al., 2012). In other words, paradigm refers to research results as a scientific revolution from independent and creative thinking which can provide new theories, change people's worldviews, and offer valuable questions for scientists (Mangan et al., 2004; Easterby-Smith et al., 2012).

Burrell and Morgan (1979) suggest that all approaches to social sciences are based on interconnected series of assumptions about ontology, human nature, and epistemology (Morgan and Smircich, 1980). They propose a fourfold classification of social science paradigms that represents the main philosophical views of social researchers (Kelemen and Rumens, 2008). They explain that social theory could be effectively investigated based on four broad worldviews reflected in various philosophical assumptions about the nature of science (i.e. the dimension of subjective-objective), and the nature of sociology (i.e. the dimension of regulation-radical change) (Morgan, 1980; Burrell and Morgan, 1982; Morgan, 1984). See Figure 3.1.

Figure 3.1: Four paradigms for the analysis of social theory



Source: (Burrell and Morgan, 1982)

Each of the four paradigms, as a view of social reality, represents a series of related schools of thought shared common ontological assumptions, albeit differentiated in perspectives (Morgan, 1980; Burrell and Morgan, 1982; Morgan, 1984).

The functionalist paradigm is based on the view that society has a concrete, real existence, and organised nature to generate a regulated state of affairs (Morgan, 1980; Burrell and Morgan, 1982; Morgan, 1984). This paradigm encourages approaches to social theory that emphasise appreciating the role of human beings in society such as behaviourism, determinism, abstracted empiricism, social system theory, pluralism, and action frame of reference (Morgan, 1980; Burrell and Morgan, 1982; Morgan, 1984). Therefore, it is concerned with an objective and value-free social science to generate empirical knowledge through rigorous scientific method (Morgan, 1980; Burrell and Morgan, 1982; Morgan, 1984).

On the other hand, the interpretive paradigm is derived from the perspective that the social world has a very unstable ontological status and social reality exists in an unfixed sense as the outcome of the subjective experience of people (Morgan, 1980; Burrell and Morgan, 1982; Morgan, 1984). In this paradigm, multiple realities are shared, science is viewed as a network of language games based on subjective concepts, and scientific knowledge is seen as problematic and common sense knowledge (Morgan, 1980; Burrell and Morgan, 1982; Morgan, 1984). Therefore, the approaches of this paradigm such as hermeneutics, ethnomethodology, and phenomenological symbolic interactionism, criticise the functionalist paradigm for its objective investigation of social science (Morgan, 1980; Burrell and Morgan, 1982; Morgan, 1984).

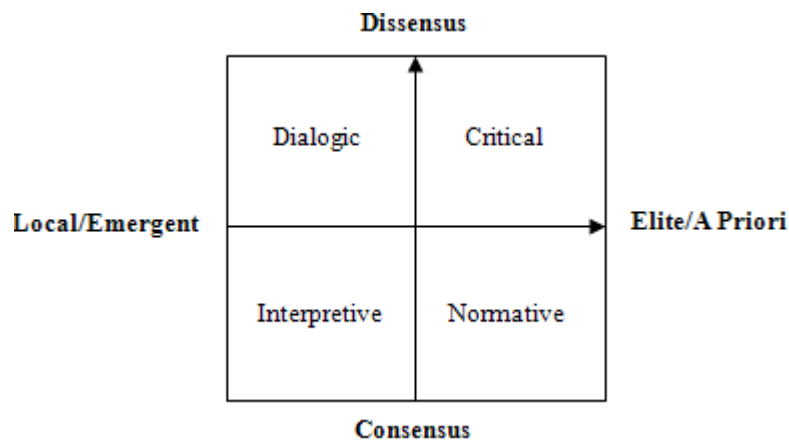
Similar to the interpretive paradigm, the radical humanist paradigm focuses on how reality is socially constructed and sustained through subjective approaches such as anti-organisation theory (Morgan, 1980; Burrell and Morgan, 1982; Morgan, 1984). This paradigm is based on the view that the creation of reality could be affected by human beings, particularly their psyches and social processes (Morgan, 1980; Burrell and Morgan, 1982; Morgan, 1984). Thus, it is concerned with investigating how people link their thoughts and actions (Morgan, 1980; Burrell and Morgan, 1982; Morgan, 1984).

Like the radical humanist, the radical structuralist paradigm emphasises that reality depends on the social view as the dominating force (Morgan, 1980; Burrell and Morgan, 1982; Morgan, 1984). However, this paradigm is tied to concrete ontological status and

the view that reality exists independently of people's perceptions (Morgan, 1980; Burrell and Morgan, 1982; Morgan, 1984). Hence, it is concerned with understanding the inherent contradictions between people that characterise reality and make radical change (Morgan, 1980; Burrell and Morgan, 1982; Morgan, 1984).

On the other hand, Deetz (1996) strongly criticises Burrell and Morgan's (1982) theory and declares that they have reified the research approaches, socially contrived the meaning and conception of issues, and perpetuated the subjective-objective controversy. Accordingly, he proposes a new organisational theory by changing the paradigms to discourses and retaining the orientations (Deetz, 1996). See Figure 3.2.

Figure 3.2: Contrasting dimensions from the metatheory of representational practices



Source: (Adapted from (Deetz, 1996))

The dimension of Local/Emergent-Elite/A Priori demonstrates how and where research concepts could be developed within the two contrasting poles (Deetz, 1995, 1996). However, the dimension of consensus-dissensus refers to the relationship of research to the extant social orders (Deetz, 1995, 1996). In fact, these dimensions provide pluralism and complementarity through better presenting differences that give insights into various discourses in organisation studies (Deetz, 1996).

Normative as modern and progressive discourse is mainly used in applied and North American organisational research (Deetz, 1996). It focuses on law-like relations, objectivity, and operationalisation in order to present codification, orientation, regulation, and normalisation (Deetz, 1973; Hollway, 1984; Deetz, 1996). Hence, similar to the natural sciences, it is associated with statistical reduction, hypothesis, and pattern recognition (Deetz, 1996).

Similar to normative, interpretive as premodern and traditional discourse accepts the representational and consensual view of science (Gergen, 1992; Deetz, 1996). It focuses on a social rather than economic aspect of organisation as a social site or a special kind of community that shares significant features with other communities (Gergen, 1992; Deetz, 1996). It sees human beings as active sense makers rather than objective, and emphasises the core conceptions and understandings derived subjectively from the phenomena under investigation (Deetz, 1996). It also deals with social and life functions of individuals beyond the work process in order to show how realities are socially constructed and sustained through norms and rituals within the field of human activity (Deetz, 1996). Hence, it is mainly associated with the use of ethnography, phenomenology or hermeneutics through prolonged observation and in-depth interview in the field (Frost et al., 1985; Deetz, 1996).

However, critical, as late modern and reformist discourse, views organisations as social historical creations accomplished within situation of domination and conflicts (Deetz, 1992, 1995, 1996). It emphasises the critique forms of domination and distorted communication through demonstrating how everyday life realities favour only specific interests (Mumby, 1987; Alvesson and Willmott, 1992; Deetz, 1996). It also explains the social effects of organisation, rationalisation of society, and social domination (Mumby, 1987; Alvesson and Willmott, 1992; Deetz, 1996). Hence, it aims to provide accurate fora for demonstrating dissensus and consensus by considering moral and ethical issues in order to prevent false consciousness, consent, routines, and normalisations (Deetz, 1996).

Similar to critical, dialogic as postmodern and deconstructionist discourse emphasises the asymmetry and domination, although not predefined (Deetz, 1996). It also focuses on the constructed nature of people and reality, language and rhetoric, information and communication technology, theoretical systems, and relationship between power and knowledge (Burrell, 1988; Deetz, 1996). Hence, it mainly intends to highlight the conflicts suppressed within the social constructions of realities, meaning systems, and hidden points of resistance and complexity (Martin, 1990; Deetz, 1996).

3.2.3 Philosophical positions

There are various philosophical positions that can assist a researcher to choose the best approach for his/her research subject (Cooper and Schindler, 2011). However, the basic

assumption is that a researcher needs to adopt certain premises that would explain the research data (Cooper and Schindler, 2011). For instance, in the natural sciences, the approach taken is usually based on positivism, while, in the social sciences, the interpretivism-based enquiry is favoured (Cooper and Schindler, 2011). In this regard, Saunders et al. (2012) suggest four main philosophical positions as a paradigm for management studies: *positivism*, *realism*, *interpretivism*, and *pragmatism*. Explanations of each position are presented in the followings;

Positivism and interpretivism philosophies represent two opposite perspectives about how valid knowledge can be achieved (Denzin and Lincoln, 2011; Lincoln et al., 2011). Positivism suggests that only observable social reality can produce valid knowledge, and the outcome of such research which has adopted a positivism perspective can create law-like generalisations (Gill and Johnson, 2010). This position recognises nature through hard science and realism, and assumes that there is a single identifiable and apprehensible reality (Guba and Lincoln, 2005; Lincoln et al., 2011). It indicates that positivists as objective researchers must not interact with research subjects and should value only scientific rigour without considering its effects on society or subjects (Guba and Lincoln, 2005; Lincoln et al., 2011). Thus, it is mainly associated with quantitative methods, experimental manipulation, and verification of hypotheses (Guba and Lincoln, 2005; Lincoln et al., 2011).

In this philosophical position, the significant point is that the data created have more credibility, as the approach uses existing theory to generate hypotheses, and the resulting collected data can be used for statistical analysis (Cooper and Schindler, 2011). Accordingly, Gill and Johnson (2010) state that positivists are likely to adopt highly structured methodology in order to facilitate replication. Thus, the major advantage of positivism is that the research can be conducted in a value-free way which enables other researchers to use the results in different studies (Saunders et al., 2012).

Conversely, interpretivism suggests that researchers should understand the differences between humans in their roles as social actors (Saunders et al., 2012). In other words, it allows researchers to interpret social roles that conform to the individual's own sets of meaning (Cooper and Schindler, 2011; Saunders et al., 2012). This position is concerned with relativism which assumes that realities exist in terms of multiple mental constructions, social and individual experiments, and local and specific basis (Lincoln and Guba, 1985; Guba, 1990; Guba and Lincoln, 2005). This implies that people

construct their own understanding of reality based on their constructed meaning through dialectical interactions with surroundings (Lincoln and Guba, 1985). Thus, the purpose of interpretivism is to obtain understanding by interpreting subject perceptions (Lincoln et al., 2011). However, this leads to the merging of inquirer and inquired into a single entity, and therefore the research findings as creation or co-creation of transactional interactions would be subjective (Lincoln and Guba, 1985; Guba, 1990; Guba and Lincoln, 2005).

In fact, this philosophical position comes from two traditions: phenomenology and symbolic interactionism (Saunders et al., 2012). Phenomenology is related to the way in which people can understand the world; however, symbolic interactionism refers to the interpretation of the social world with different meanings and actions (Saunders et al., 2012). Both provide in-depth knowledge for researchers, however, they limit generalisation of the research findings due to their subjective approaches (Saunders et al., 2012).

Realism is another philosophical position similar to positivism in that it assumes a scientific approach to the development of knowledge (Saunders et al., 2012). The essence of realism is that what the senses express as reality is the truth (Saunders et al., 2012). In other words, the theory of realism, in opposition to idealism, shows that reality is independent of the mind (Saunders et al., 2012). This philosophical position consists of two types of realism: direct and critical. The direct type indicates that the real world is what people experience through their senses (Saunders et al., 2012). However, the critical type indicates that the experiences of people are the same as their sensation; thus, the real world is the image of things in the world (Saunders et al., 2012).

Finally, pragmatism argues that “knowledge and understanding should be derived from direct experience” (Easterby-Smith et al., 2012, p. 344). This position was founded in the twentieth-century by American philosophers, particularly William James (1907) and John Dewey (1916). The most significant issue for these pragmatists is the practical consequences of the meanings of their ideas or research findings (Saunders et al., 2012). They believe that there are multiple realities and diverse ways of interpreting the world and conducting research since no point of view can convey the entire picture (Kelemen and Rumens, 2008; Saunders et al., 2012). They maintain that individuals always engage in the process of adaptation within the continuously transforming social world

(Jeon, 2004). Thus, the ontological stance of pragmatism is mainly concerned with relativism and slightly related to internal realism (Easterby-Smith et al., 2012).

In fact, this philosophical position establishes a direct link between theory and praxis through a process of continuous reflection of actions in a real context on the research findings (Levin and Greenwood, 2011). This process involves various participants with differing experiences and knowledge of the particular research domain (Levin and Greenwood, 2011). Therefore, pragmatic inquiry can direct both practical and theoretical developments through warranted assertions (Levin and Greenwood, 2011).

Generally, if the research subject does not indicate any specific philosophy, pragmatism would be appropriate as it can work with various philosophical stances (Tashakkori and Teddlie, 1998; Saunders et al., 2009). Thus, pragmatism is more appropriate for those researchers to view the philosophy selected as a continuum rather than opposite positions (Tashakkori and Teddlie, 1998; Saunders et al., 2009).

3.2.4 Other philosophical positions

Over the last few decades, other philosophical positions have been developed as paradigms such as *postpositivism*, *critical realism*, *critical theory*, *hermeneutics*, *postmodernism*, *feminism*, and *structuration theory* (Lincoln et al., 2011). The general overview of these positions is presented in the following subsections.

3.2.4.1 Postpositivism

Postpositivism as a modified form of positivism (Lincoln et al., 2011) was mainly developed by philosophers such as Popper (1963) and Kuhn (1962). It assumes that there is a single reality which cannot completely be discovered due to the hidden variables and a lack of absolutes in nature (i.e. real reality is imperfectly and probabilistically apprehensible) (Guba and Lincoln, 2005; Lincoln et al., 2011). Thus, it implies that nature can never fully be appreciated by researchers (Guba and Lincoln, 2005).

This philosophical position indicates that researchers must attempt to minimise their interactions with their research subjects since validity comes from the research community rather than from the subjects under investigation (Guba and Lincoln, 2005). Nonetheless, in order to obtain a better understanding of reality, they need to use statistics, new approaches (e.g. modified experimental manipulative, critical multiplism,

and falsification of hypotheses) and appropriate explanations and descriptions as qualitative methods (Guba and Lincoln, 2005; Lincoln et al., 2011).

3.2.4.2 Critical realism

Critical realism has been used by different researchers since it suggests a compromise stance between stronger versions of positivism and constructionism (Ackroyd and Fleetwood, 2000; Easterby-Smith et al., 2012). It is concerned with a continuum ontology which starts with a realist stance and ends with a relativist stance (Ackroyd and Fleetwood, 2000). It stems from the idea of 'structured ontology' which differentiates between three positions: empirical or relativism, actual or internal realism, and real or realism (Bhaskar, 1978). This key feature enables researchers to realise and differentiate between dissimilar levels of phenomena in addition to criticising the status quo (Bhaskar, 1978; Easterby-Smith et al., 2012).

This philosophical position implies that causality exists only as potential and fundamental mechanism does not function in the interests of ordinary people (Bhaskar, 1978; Easterby-Smith et al., 2012).

3.2.4.3 Critical theory

Critical theory emerged as an intellectual movement from the Frankfurt School, which criticises the impacts of society and technology on humanity (Alvesson and Deetz, 2000; Easterby-Smith et al., 2012). It emphasises that human nature functions in a power-oriented world that leads to interactions of privilege and domination in terms of specific factors such as race, gender, socioeconomic class, and so on (Lincoln et al., 2011). It also indicates that research should be driven by the study of social affairs in order to change the existing oppressive status (Lincoln et al., 2011). Therefore, it is mainly concerned with internal or historical realism ontology (i.e. virtual reality shaped by social values and crystallised over time), transactional or subjectivist epistemology, and dialogic or dialectical methodology (Lincoln et al., 2011).

One of the most famous theorists from this school is Habermas (1970), who argues that society in general and capitalist society in particular leads to inadequacies and estrangement, although people do not clearly understand this situation and thus unintentionally desire unnecessary consumer products (Alvesson and Deetz, 2000; Easterby-Smith et al., 2012). He states that natural sciences are based on sense experiences through one-way or monologic communication, however, social sciences

are based on communicative experiences through two-way or dialogic communication (Alvesson and Deetz, 2000; Easterby-Smith et al., 2012). He also emphasises that dialogue is the most effective tool for social scientists as knowledge is determined only by interests, and truth can only be reached through debate and rational consensus (Alvesson and Deetz, 2000; Easterby-Smith et al., 2012).

3.2.4.4 Hermeneutics

Hermeneutics was initially proposed by Protestant groups in the seventeenth century in Germany as a means of interpreting the Holy Bible (Easterby-Smith et al., 2012). It suggests a new way of interpreting textual material to comprise both recorded formal written texts and spoken words (McAuley, 1985; Smyth and Morris, 2007; Easterby-Smith et al., 2012). Thus, the ontological stance of this position is mainly concerned with relativism and slightly related to internal realism (McAuley, 1985; Smyth and Morris, 2007; Easterby-Smith et al., 2012).

Gadamer (1989) as one of the best-known proponents of hermeneutics emphasises the context within which texts are written. He notes that contemporary interpretations of earlier texts are influenced by culture; therefore, the interpreter needs to understand the contextual situation of the earlier texts' writers (McAuley, 1985; Easterby-Smith et al., 2012). On the other hand, Ricoeur (1981) as another famous proponent of hermeneutics criticises this idea and notes that there is a gap between the author and the reader due to temporal differences, namely distanciation. He suggests that there needs to be a particular discourse between the author and the reader at the same time, although this approach is not feasible in the case of historical texts (Easterby-Smith et al., 2012). Hence, there may be no single accurate interpretation of a particular text since both writing and reading are context-dependent (Easterby-Smith et al., 2012).

3.2.4.5 Postmodernism

Postmodernism was initially revealed in Jean-François Lyotard's (1984) book, *The Postmodern Condition*, however, the term had been implied in the literature since 1926 (Chia, 2008). Several theorists, particularly French philosophers such as Derrida (1978) and Foucault (1979), have been associated with the development of this philosophy.

Postmodernism with nominalism ontology focuses on the experimental movement in the architecture and the arts, but criticises the scientific development due to its discontinuation and divergence (Hassard, 1993; Easterby-Smith et al., 2012). This

philosophical position also challenges the role of industrial organisation within society, but highlights the role of invisible aspects of organisation as dynamic community (Hassard, 1993; Easterby-Smith et al., 2012).

3.2.4.6 Feminism

Feminism refers to the strong critique of the status of women in society since women's capabilities have been undervalued by society (Alcoff and Potter, 1993; Easterby-Smith et al., 2012). It has nominalist ontology and indicates that women's perspectives have been greatly ignored by scientific enquiry in different aspects (Blaikie, 2007). This ignorance can be seen in the social science as well specifically within the process of structured interviews (Cotterill, 1992).

Within the social sciences, feminism, in terms of epistemology, can be classified into empiricism and standpoint (Alcoff and Potter, 1993; Easterby-Smith et al., 2012). The feminist empiricism assumes that the problem is not with science itself, although the procedures should be rectified (Alcoff and Potter, 1993; Easterby-Smith et al., 2012). On the other hand, the feminist standpoint as a radical view suggests that the social sciences and their methods are basically defective and require to be entirely rethought (Alcoff and Potter, 1993; Easterby-Smith et al., 2012).

3.2.4.7 Structuration theory

Structuration theory as the idea of duality of structure was proposed by Anthony Giddens (1984). He suggests that structure and agency should not be pre-established because each is formed and reformed by the other (i.e. continual interactions between social structure and social action) (Giddens, 1984; Easterby-Smith et al., 2012). He asserts that science has universal laws and fundamentally differs from the social sciences which have contextually dependent laws (Giddens, 1984; Easterby-Smith et al., 2012). He also proclaims that social scientists should attempt to use common sense language, instead of specialist language, in order to effectively provide insights from social science (Giddens, 1984; Easterby-Smith et al., 2012).

This philosophical position is particularly useful in understanding the relationships between different managerial aspects such as organisations and employees or communications and information systems (Easterby-Smith et al., 2012).

3.2.5 The selected research philosophy

In this research project, the choice of research philosophy was determined by the nature of the research subject (Easterby-Smith et al., 2012). Hence, in accordance with the research topic, aim and objectives, and the characteristics of all the philosophies, pragmatism was selected for this research project.

Pragmatism is the best fit for this study since it is associated with the grounded theory strategy and symbolic interactionism perspective of this research (Blumer, 1969; Corbin and Strauss, 2008). This research philosophy would allow me to move back and forth between concrete experience, and abstract conceptualisation and experimentation through meaningful learning and understanding (Kolb, 1984). It would also enable me to synthesise positivism and anti-positivism views through the examination of interaction between individuals within the social world (Strauss, 1987; Hammersley, 1989; Brandi and Elkjær, 2008). In addition, it would assist me to study my own interests and values, choose my desired approaches, and utilise my research findings effectively (Tashakkori and Teddlie, 1998).

3.3 Research approach

In general, there are two major research approaches when undertaking a study: *deductive* and *inductive* (Thomas, 2004; Saunders et al., 2009). These approaches can be used independently or concurrently by a researcher within a study (Thomas, 2004; Saunders et al., 2012). Both approaches along with the justifications for the selected research approach are explained in the following subsections.

3.3.1 Deductive approach

Deductive reasoning indicates that the conclusion drawn logically from a set of premises would be true if all the premises were true (Ketokivi and Mantere, 2010; Saunders et al., 2012). Hence, based on this form of reasoning, the deduction as the approach is built to direct research studies (Saunders et al., 2012).

In the deductive approach, researchers develop hypotheses or propositions related to a theory from the academic literature, and design a research strategy to examine them (Saunders et al., 2012). In this approach as a testing theory, a theory has usually been developed before the collection of data (Eisenhardt and Graebner, 2007; Saunders et al., 2009). This development is achieved by rigorous testing of the research findings which

leads to explanations of causal relationships between different variables relating to a phenomenon (Saunders et al., 2012).

In reality, the basis of the deduction approach is similar to natural science and scientific research and follows the positivism philosophy (Saunders et al., 2012). Thus, a deductive research approach needs to adopt highly structured methodology to provide replication to ensure reliability (Gill and Johnson, 2010; Saunders et al., 2012). It also needs to operationalise concepts to measure facts quantitatively, deal with simple elements to aid better understanding, and select sufficient sample size to generalise findings (Saunders et al., 2012). Hence, the deductive approach is mainly associated with the quantitative research design (Bryman, 2012; Saunders et al., 2012).

3.3.2 Inductive approach

Inductive reasoning indicates that the conclusion can be judged and verified through observations as the supporting evidence since there is a logical gap in the argument between the conclusion and the observed premises (Ketokivi and Mantere, 2010; Saunders et al., 2012). Hence, based on this form of reasoning, the induction as the approach is built to guide research studies (Saunders et al., 2012).

In the inductive approach, researchers collect data and generate theory in the form of a conceptual framework as the outcome of their data analysis (Saunders et al., 2012). In this protracted approach as the building theory, a theory has been developed after the collection of data (Eisenhardt and Graebner, 2007; Saunders et al., 2009). This development is achieved by analysis of the research data which leads to the generation of a new insight into different entities and understanding the nature of the research subject (Bryman, 2012; Saunders et al., 2012).

In contrast to the deduction approach, the basis of the induction approach is similar to social science and follows the anti-positivism philosophy (Saunders et al., 2012). Thus, an inductive research approach needs to use qualitative data and diverse data collection methods in order to explore different views of phenomena (Easterby-Smith et al., 2008; Saunders et al., 2012). It also needs a small sample of research subjects as it deals with contexts and events that have already occurred (Saunders et al., 2012). Hence, the inductive approach is mainly associated with the qualitative research design (Bryman, 2012; Saunders et al., 2012).

3.3.2.1 Abductive approach

Abductive reasoning indicates that a set of possible premises based on a ‘surprising fact’ as the conclusion would be able to sufficiently elucidate this conclusion. So, if this set of premises were true, then the conclusion would be true since it can sufficiently generate this conclusion (Ketokivi and Mantere, 2010; Saunders et al., 2012). Hence, based on this form of weak reasoning, abduction as a branch of the inductive approach is built to conduct research studies (Ketokivi and Mantere, 2010; Saunders et al., 2012).

In the abductive approach, researchers aim to investigate a phenomenon, discover themes, and explain patterns in order to generate or modify a theory through subsequent data collection (Saunders et al., 2012). This approach moves back and forth between deduction as the ‘theory to data’ approach and induction as the ‘data to theory’ approach, in order to integrate them (Suddaby, 2006; Saunders et al., 2012). Thus, it allows researchers to direct their research procedures particularly data collection based on data analysis, to adopt their methodological choices flexibly, and to study unexplored issues (Easterby-Smith et al., 2008; Saunders et al., 2012). Table 3.5 demonstrates the main characteristics of abduction along with other approaches.

Table 3.5: Deduction, induction, and abduction: from reason to research

	Deduction	Induction	Abduction
Logic	In a deductive inferences, when the premises are true, the conclusion must also be true	In an inductive inference, known premises are used to generate untested conclusions	In an abductive inference, known premises are used to generate testable conclusions
Generalisability	Generalising from the general to the specific	Generalising from the specific to the general	Generalising from the interactions between the specific and the general
Use of data	Data collection is used to evaluate propositions or hypotheses related to an existing theory	Data collection is used to explore a phenomenon, identify themes and patterns and create a conceptual framework	Data collection is used to explore a phenomenon, identify themes and patterns, locate these in a conceptual framework and test this through subsequent data collection and so forth
Theory	Theory falsification or verification	Theory generation and building	Theory generation or modification; incorporating existing theory where appropriate, to build new theory or modify existing theory

Source: (Saunders et al., 2012)

3.3.3 The selected research approach

The deductive approach, due to its rigid structure, would not allow me to explore the issues deeply, and this could limit the evaluation of the phenomena under study. In reality, the deductive is not an applicable approach to the subject of this research project. Thus, it was not chosen as the research approach for this study.

Conversely, the inductive is an appropriate approach for this research project since the ultimate aim is to develop a conceptual model based on the research data. It is also particularly appropriate for this study since the purpose is to explore individuals as actors to understand various points of view and establish how they behave in a particular context (Easterby-Smith et al., 2008).

This research approach would enable me to get a feel of the research context, and make better sense of the collected data through analysis so as to develop a theoretical perspective in the form of a conceptual model that is closer to the phenomenon under investigation (Saunders et al., 2012). Additionally, it would allow me to seek existing relationships within the data, realise a newer relationship, and discover fresh issues (Saunders et al., 2009). Furthermore, in accordance with qualitative as the adopted research methodology, which encourages me to explore the phenomena more deeply, the inductive approach seems more suitable for this research project. Thus, the main reason for selecting the inductive approach is that it would assist me to understand the nature of the research subject.

However, despite these reasons, as Saunders et al. (2009) mention, the main drawback of the inductive approach is that there is a risk of failing to collect credible data. Hence, in order to overcome this drawback and avoid discrediting my research findings, the data were collected from a number of different companies to ensure that the data would be credible and representative of the phenomena under study.

3.4 Research design

Research design has been described as the overall research plan of how researchers could collect and analyse data, answer research enquiries, fulfill research aims and objectives, and address research constraints and ethical issues (Cooper and Schindler, 2011; Saunders et al., 2012). It refers to a set of procedures for a study that encompass decisions from the underlying worldviews to the detailed research methods (Creswell, 2009; Birks and Mills, 2011). Hence, the decision of adopting a specific research design

is influenced by the nature of the research subject, philosophical assumptions, interests and experiences of researchers, research strategy, and methods of data collection, analysis, and interpretation (Creswell, 2009).

In the social sciences, two major methods have been used by researchers to design and conduct their research studies: *quantitative* and *qualitative* (Creswell, 2009; Saunders et al., 2009). These methods can be used separately or simultaneously by a researcher within a study (Creswell, 2009; Saunders et al., 2012). Both methods along with the justifications for the selected research design are explained in the following subsections.

3.4.1 Quantitative research method

The quantitative research method was originally developed in the natural sciences to investigate natural phenomena (Saunders et al., 2009). It is more objective in nature and typically supports positivism philosophy (Creswell, 2009; Krathwohl, 2009). It also usually seeks to discover the cause and effect relationships between variables in a phenomenon (Creswell, 2009; Saunders et al., 2009). In addition, it essentially uses a deductive approach by focusing on collecting numerical data, measuring phenomena, and analysing statistics in order to explore the hypothetical model (Creswell, 2009; Saunders et al., 2009).

This type of research method, despite of the difficulty in its initial design, is highly structured, and findings can be easily presented statistically (Yin, 2009). However, during data collection and analysis, this systematic structure would be considered as the most evident drawback of this method; because it can limit the exploration of other areas and prevent researchers from making new findings (Saunders et al., 2009).

In fact, the quantitative research method with its closed questions may limit the breadth of responses due to ignoring some details in the research process (Saunders et al., 2009). For instance, it has a remarkable drawback in transferring information into summary measures and in providing a clear picture of reality (McGuire, 1986; Remenyi et al., 1998; Krathwohl, 2009; Saunders et al., 2009). It also keeps the researchers objectively separated from the subject matter (McGuire, 1986; Remenyi et al., 1998; Krathwohl, 2009; Saunders et al., 2009). Hence, if people who participate in quantitative research could not answer correctly, then the research enquiry would not be responded to by the researcher accurately; because the collected data would be absolute and people could

not provide extra information to enhance the understanding of the researcher (Cooper and Schindler, 2011).

3.4.2 Qualitative research method

The term qualitative is concerned with the qualities of entities, processes, and meanings that are not statistically examined (Denzin and Lincoln, 2011). Therefore, when data analysis is based on interpretations of words rather than numbers, the form of research method for answering research enquiries is termed qualitative (Corbin and Strauss, 2008).

The qualitative research method is “a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem” (Creswell, 2009, p.4). This method, as a field of inquiry, can crosscut diverse disciplines based on complex interrelated sets of concepts (Denzin and Lincoln, 2011). It consists of various interpretations that make the world visible and turn it into sets of representations (e.g. interviews, fieldnotes, photographs, and so on) (Denzin and Lincoln, 2011). These interpretations refer to making sense of phenomena in terms of the meanings people give to them within a particular natural setting (Denzin and Lincoln, 2011). Thus, the qualitative research method focuses on exploring data, uncovering particularities of the phenomena, and describing findings based on the context of the study (Corbin and Strauss, 2008).

In fact, qualitative research is a comparative, descriptive, and explorative research method that can provide a better depiction of reality (Charmaz, 2006). In this method, a variety of techniques have been used to collect and analyse data by researchers who subjectively immersed themselves in their activities to achieve a holistic understanding of the actors involved in the chosen field (Silverman and Marvasti, 2008).

The qualitative research method is more subjective in nature and concerned with the less tangible aspects of a research topic such as beliefs, values, and attitudes (Hussey and Hussey, 1997). Accordingly, it assists researchers to better understand human beings, their worlds, and their social activities and cultural lives (Hussey and Hussey, 1997; Myers, 1997). In this regard, Ghauri and Grønhaug (2005) assert that the qualitative research method is often adopted when it is required to investigate a person’s experience or behaviour, understand a phenomenon about which little is known, and create an in-depth analysis of a particular process.

This type of research method normally uses an inductive approach by gathering qualitative data to derive fresh explanations therefrom (Yin, 2009). It typically supports the interpretivism and pragmatism philosophies since it usually explores patterns of associations between factors, as opposed to abstract interrelations achieved from examination of a large scale survey (Krathwohl, 2009; Saunders et al., 2012). It also provides a rich insight into the research matter but produces contextual rather than generalised findings (McGuire, 1986; Remenyi et al., 1998; Krathwohl, 2009; Saunders et al., 2009).

In this regard, Corbin and Strauss (2008) mention that the qualitative research method allows researchers to get to the inner experiences of the research informants. They believe that this method can provide valuable possibilities and opportunities to learn more about the people within the field of study; since it focuses on dealing with people's feelings and behaviours so as to understand their attitudes in relation to their experiences, values, and social and cultural backgrounds (Corbin and Strauss, 2008).

3.4.2.1 Qualitative versus quantitative research method

Both quantitative and qualitative methods are formed by positivism and postpositivism in the physical and social sciences (Oates, 2006; Denzin and Lincoln, 2011). Positivism indicates that there is a single reality out there to be discovered, whereas postpositivism indicates that reality can never be fully understood (Guba, 1990; Denzin and Lincoln, 2011). In accordance with these, quantitative researchers mainly adopt positivism, while qualitative researchers attempt to use a positivist stance with less rigorous procedures and methods (Creswell, 2009; Denzin and Lincoln, 2011). For instance, Glaser and Strauss (1967), the founders of grounded theory as a qualitative method, attempt to amend the tenets of the positivist position to fit their own postpositivist conception of rigorous investigation (Denzin and Lincoln, 2011). On the other hand, a new generation of qualitative researchers such as poststructuralists and postmodernists argue that the positivist method is a different way of telling a story (Denzin and Lincoln, 2011); whilst others such as proponents of critical theory or constructivism reject the evaluation criteria of the positivist and postpositivist methods (Denzin and Lincoln, 2011).

Both qualitative and quantitative research methods are concerned with the individual's attitudes (Ghauri and Grønhaug, 2005; Denzin and Lincoln, 2011). However, qualitative methods emphasise capturing the subject's perspective by detailed interviewing and

observation (Jick, 1979; Boeije, 2010; Denzin and Lincoln, 2011). Conversely, quantitative methods rely on objective empirical tools and reject impressionistic and interpretive methods (Creswell, 2009; Denzin and Lincoln, 2011).

Qualitative research methods emphasise the meaning of socially constructed experience and the nature of reality, the intimate relationship between the inquirer and the inquired, and the contextual constraints (Remenyi et al., 1998; Hackley, 2003; Marczyk et al., 2005; Denzin and Lincoln, 2011). On the contrary, quantitative methods focus on the examination of causal relationships between variables, not processes (Creswell, 2009; Denzin and Lincoln, 2011).

Qualitative research methods are more likely to confront constraints of the social world, deal with particular cases, and present rich descriptive findings (Charmaz, 2006; Corbin and Strauss, 2008; Denzin and Lincoln, 2011). In contrast, quantitative methods abstract from this world, deal with large numbers of selected cases, and present nondescriptive and generalised findings (Creswell, 2009; Denzin and Lincoln, 2011).

In fact, qualitative and quantitative researchers tackle the same set of issues differently (Becker, 1986; Denzin and Lincoln, 2011). Each group of researchers deals with specific genres and has its own style of representation, interpretations, and evaluation criteria (Becker, 1986). For instance, qualitative researchers use ethnographic and biological materials, photographs and historical documents, and first-person prose (Creswell, 2009; Denzin and Lincoln, 2011). Conversely, quantitative researchers use mathematical models, statistical presentation, and an impersonal writing style or third-person prose (Creswell, 2009; Denzin and Lincoln, 2011).

Thus, the differences between qualitative and quantitative research design are related to their basic philosophical assumptions, type of strategy, and methods of data collection and data analysis (Creswell, 2009).

3.4.3 The selected research design

The drawbacks of the quantitative method can negatively affect the aim and objectives of this research project. Additionally, I felt that this study would only be possible through direct conversations with the informants. Hence, I was not convinced that the quantitative research design and method could fit this explorative and interpretative study to the data.

The main justification for discarding the quantitative design is that it lacks the effective investigative and descriptive tools for studying human behaviours and actions. I felt that a suitable method would need to shed light on which features are essential for individuals, and this would have to be done by investigating individuals' experiences and thoughts. Thus, I made sure that the quantitative research design and method would not be able to provide proper data for this study.

The aim of this study could be fulfilled through only the qualitative research design and method, because the nature of human emotions, feelings and behaviours can only be evaluated effectively through this kind of design and method. Accordingly, the pragmatist research philosophy, the inductive research approach, the qualitative research method, and the grounded theory research strategy would constitute the qualitative research design of this study.

The main reason for this selection is that the qualitative research design would assist me in explaining the informants' behaviours more explicitly based on the statements of their experiences and thoughts. It would allow me to immerse myself within the environment under study to analyse the informants' interactive actions. It would also provide me with a more holistic view of the reality contained in the informants' actions. Furthermore, it would enable me to present a descriptive picture of informants' participative activities and attain clear details of their intentions, feelings, and desires.

In fact, the qualitative research design produces more valid and reliable data for generating a theory based on the true accounts and informants. However, as Glaser and Strauss (1967) emphasise, in order to propose a theory, the researcher has to check and recheck the collected data constantly, which is a fundamental basis for the grounded theory strategy. Hence, herein, in order to collect data that were as close as possible to the participants' lived experiences, any judgement about the subject under investigation would be suspended, and constant engagement with the participants would be undertaken.

3.5 Research strategy

Researchers need to link their philosophy, approach, and methods with actual practice to fulfil the research aim and objectives (Bryman and Bell, 2007). This can be done by choosing the proper research strategy and data collection and data analysis procedures (Bryman and Bell, 2007). Hence, the decision to adopt a particular research strategy is

mainly influenced by the research subject, aim and objectives, existing knowledge, research philosophy, recourses, and time frame (Thomas, 2004; Bryman and Bell, 2007; Easterby-Smith et al., 2008; Saunders et al., 2009). This implies that the applicability and suitability of a strategy are more important than its labelling (Thomas, 2004; Bryman and Bell, 2007; Easterby-Smith et al., 2008; Saunders et al., 2009).

Herein, the main types of research strategies that have been employed in various forms of studies such as exploratory, descriptive, and explanatory are listed below (Hussey and Hussey, 1997; Ghauri and Grønhaug, 2005; Saunders et al., 2012);

- **Experiment** - (more common to natural sciences; also in social sciences particularly psychology)
- **Survey** - (associated with deductive approach; e.g. structured observation, structured interviews, and questionnaires)
- **Case study** - (investigation of a particular contemporary phenomenon within its real life context)
- **Action research** - (research conducted by the problem-solver team in a flexible and iterative way in order to enhance the performance)
- **Grounded theory** - (inductive approach; theory developed from data generated by a series of in-depth interviews)
- **Ethnography** - (inductive approach; an in-depth, descriptive study of a culture; part of the socio-cultural anthropology)
- **Archival research** - (concerned with current and past documents and administrative records as the original data)
- **Narrative inquiry** - (story, nature of a qualitative interview, a personal account of an experience)

3.5.1 Grounded theory strategy

Grounded theory is a qualitative research strategy that “uses a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon” (Strauss and Corbin, 1990, p. 24). It is an interactive and comparative method of social scientific theory construction that contains flexible analytical guidelines (Glaser and Strauss, 1967; Charmaz, 2011). These guidelines enable researchers to build a well grounded theory to explain, interpret, and predict social phenomena within the context of study (Charmaz, 1983; Dey, 1999).

In this strategy, researchers need to be involved continuously throughout the simultaneous data collection and analysis process (Glaser and Strauss, 1967; Strauss and Corbin, 1990). They should construct analytical codes from the data, employ the comparative method as a means of evaluating the similarities and differences within the data, and use memo writing to record the relationships and gaps among the coded categories (Glaser and Strauss, 1967).

In fact, grounded theory has obtained popularity in different fields through building the theory from practice rather than attempting to fit practice within the theoretical boundaries (Goulding, 2002; Babchuk, 2009). In other words, it is mainly used to generate theories, concepts, or hypotheses from data, rather than from previous assumptions, studies, or theoretical frameworks (Eisenhardt and Graebner, 2007; Hernon, 2009).

The key actions that distinguish grounded theory from other strategies are as follows (Bryant and Charmaz, 2007; Babchuk, 2008; Charmaz, 2010, 2011):

- Conduct data collection and analysis simultaneously in an iterative process
- Use constant comparative method throughout the study
- Engage in theoretical sampling
- Reach theoretical saturation (an end point in the data collection process)
- Develop inductive concepts and categories through systematic data analysis
- Use of memo to direct the elaboration of categories and their relationships
- Identify core categories based on similar properties and dimensions
- Build a well grounded theory

3.5.2 Key features of grounded theory

Grounded theory has some major features which are common to all grounded theory research studies such as theoretical sampling, constant comparative method, coding and categorising, memo writing, and generating theory (Birks and Mills, 2011). Each is explained in the following subsections.

3.5.2.1 Theoretical sampling

Sampling greatly affects the rigour of any research project concerned with validity and reliability (Morse, 1991). However, generally, the matter of sampling in a qualitative

inquiry such as grounded theory has been paid less attention than in quantitative research (Jeon, 2004).

Theoretical sampling is the process of data collection based on the development of the concepts and categories through data analysis in order to generate theory (Glaser and Strauss, 1967). Hence, it plays a very important role in grounded theory by directing the process of data collection, determining the adequacy of the selected sample, and deciding the quality of the generated theory (Jeon, 2004).

Bryman (2012) states that theoretical sampling is one of the forms of purposive sampling. However, in reality, theoretical sampling differs from others nonprobability sampling such as purposive or selective sampling (Morse, 1991; Jeon, 2004). These samplings usually select participants (i.e. knowledgeable and experienced people in the research domain) at the beginning of the qualitative research, and may continue beyond this initial selection (Morse, 1991; Jeon, 2004). However, theoretical sampling functions beyond the actions of these samplings (Jeon, 2004). It is guided by emerging concepts and categories, the need for theoretical elaboration, and the need for development of grounding theory in the empirical data (Jeon, 2004). Therefore, it can be called the integration of constant comparison and concurrent data collection and analysis (Jeon, 2004).

In theoretical sampling, all decisions are made in terms of queries, follow-up interviews, and consultations with experts in the research domain (Jeon, 2004). Nonetheless, in general, the adequacy of a generated theory is mostly determined by the quality of the data and its analysis, rather than the amount of data (Jeon, 2004).

Theoretical sampling continues until the *theoretical saturation* is reached (Bryman, 2012). Theoretical saturation means the point at which all categories are well developed and further data collection and analysis add no new conceptualisation (Corbin and Strauss, 2008). Thus, theoretical saturation and theoretical sampling along with constant comparison as the ‘troublesome trinity’ must not be ignored by grounded theory researchers (Hood, 2007; Babchuk, 2009).

3.5.2.2 Constant comparative method

The constant comparative method is essential in the stimulation of thinking about concepts and categories to enhance theoretical sensitivity (i.e. the ability to understand data and give meaning to them) and directs theoretical sampling during data collection

and analysis (Glaser, 1978; Corbin and Strauss, 1990). It is mainly used to assist conceptualisation and categorisation to ensure that a theory is well grounded in the data (Jeon, 2004).

This method enables researchers to maintain theoretical sensitivity throughout their research and generate substantive theory as a process with explanatory power derived from the collected data, not from their preconceived notions (Glaser and Strauss, 1967; Glaser, 1978; Strauss and Corbin, 1998). This gives a theory its trustworthiness which can be apprehensible within its particular context (Jeon, 2004).

In other strategies, data collection and analysis are carried out in stages and data collection is influenced by preset research questions (Jeon, 2004). Conversely, in accordance with the constant comparative method, in grounded theory as an open strategy, research enquiries emerge during the simultaneous data collection and analysis process (Jeon, 2004).

3.5.2.3 Coding and categorising

Coding and categorising as analysis aspects of the grounded theory method can determine the quality of emerging theory (Strauss, 1987). Coding is the process of arranging, sorting, and connecting sets of data (Glaser and Strauss, 1967); while categorising is the process of conceptualising data in the form of concepts, codes, and categories with particular properties (i.e. general or specific characteristics or attributes of a category which allow a category to be defined and given meaning) and dimensions (i.e. range along which properties of a category vary; used to provide parameters for the purpose of comparison between categories) (Glaser, 1978; Mello and Flint, 2009).

In general, the coding process consists of substantive coding including open or initial coding and axial coding, and theoretical or selective or focused coding (Glaser, 1978; Strauss and Corbin, 1998; Charmaz, 2000). Substantive coding is the process of conceptualising the empirical substance of the research domain, while theoretical coding is the process of conceptualising the substantive codes and integrating them into a theory (Glaser, 1978).

In this regard, open coding refers to breaking apart, conceptualising, and categorising data in terms of their properties and dimensions (Strauss and Corbin, 1990). Axial coding refers to linking concepts to each other and making connections between categories (Strauss and Corbin, 1990). Selective coding refers to selecting core

categories and relating other categories to them (Strauss and Corbin, 1990). However, focused coding means reanalysing data and developing initial codes to construct a theory (Charmaz, 2006).

3.5.2.4 Memo writing

Memos refer to various forms of written records used during data analysis (Strauss and Corbin, 1998). They record analytical ideas about concepts, codes, categories, and their relationships (Glaser, 1978). This implies that ‘memo writing’ clusters pieces of data together as a general concept, but it does not report any data (Miles and Huberman, 1984).

In fact, continuous writing of theoretical memos assists researchers in being more analytical and reflective in retaining and elaborating ideas, developing theoretical codes, and generating theory (Jeon, 2004). However, this on-going process is inseparable from theoretical sampling, the constant comparative method, coding and categorising, and generating theory (Jeon, 2004). Hence, strong theory can be generated through only continuous writing of memos (Glaser, 1978).

3.5.2.5 Generating theory

Generating either substantive or formal theory is the conclusive stage of the grounded theory procedure (Glaser and Strauss, 1967; Mansourian, 2006). Substantive theory is developed from conceptual categories for a particular area of inquiry that leads to generation of formal theory, whereas formal theory is developed directly from data through the substantive theory (Glaser and Strauss, 1967).

In this stage, researchers need to summarise and organise the findings into a coherent body which would be easily apprehensible and instructive for readers (Mansourian, 2006). They need to meticulously share their knowledge by transferring the clear picture of the phenomena as the result of a long term interaction with the research context (Mansourian, 2006). However, this transference as a contribution to knowledge is a challenging and delicate task for researchers (Mansourian, 2006).

3.5.3 The selected research strategy

Grounded theory was chosen as the strategy for this research project. The primary reason is that grounded theory would assist me to study individuals and focus more on their experiences, behaviours, and social interactions (Parry, 1998; Charmaz, 2006). It

would also allow me to study my own interests, follow my own philosophical view and theoretical perspective, and focus on theory generation, rather than extending or verifying existing theories. Additionally, it would assist me in moving back and forth between data analysis and data collection in order to explore the new areas of the study and gain a fresh perspective on them (Stern, 1994; Charmaz, 2011).

This strategy would enable me to comprehend the informants' social world and life through an understanding of their direct interactions (Mills et al., 2007). Accordingly, it would aid me in achieving realistic results, close to the nature of the subject under investigation. Hence, grounded theory would be the most suitable strategy among all strategies to fulfill the aim and objectives of this research project.

3.6 Grounded theory's background and challenges

There have been many discussions about grounded theory as one of the most significant strategies within the qualitative research domain. Thus, herein, the background and most of the challenges in relation to this strategy are demonstrated in the following subsections.

3.6.1 The origins of grounded theory

Grounded theory is strongly underpinned by the symbolic interactionism perspective and the pragmatism philosophy (Charmaz, 2006; Corbin and Strauss, 2008). The symbolic interactionism perspective was developed by Herbert Blumer (1969), who was strongly influenced by George Herbert Mead (1863-1931), a professor of philosophy at the University of Chicago and one of the key founders of pragmatism. Later, grounded theory was discovered by Strauss (1967), as one of the co-founders, who was heavily influenced by Blumer (Baszanger, 1998).

The origins of grounded theory lie in sociology, particularly the sociology of health and illness (Glaser and Strauss, 1967). When Glaser and Strauss as sociologists started to conduct collaborative research on dying hospital patients, the need to formulate an explicit methodological system for coding their data was identified (Glaser and Strauss, 1967; Strauss and Corbin, 1990; Glaser, 1992). Hence, they published their research in a book entitled '*The Discovery of Grounded Theory*' (1967) which laid the foundation of grounded theory (Glaser and Strauss, 1967).

3.6.2 Versions of grounded theory

There have been several modifications to grounded theory over time and the matter of the real grounded theory is still being discussed by authors (Charmaz, 2000). Accordingly, different classifications have been made by authors for versions of grounded theory (Charmaz, 2000). One of the famous classifications was suggested by Creswell (2005) and labelled as emergent (Glaser), systematic (Strauss & Corbin), and constructivist (Charmaz). These versions have been formed over time since its inception in (1967). In this regard, herein, three distinct versions of grounded theory (Charmaz, 2011): Glaser (1978) or objectivist, Strauss (1990) or postpositivist, and Charmaz (2000) or constructivist, are explained in the following subsections.

3.6.2.1 The objectivist version of grounded theory

The objectivist version of grounded theory was founded by Barney Glaser (1978). He published his research in a book entitled '*Theoretical sensitivity: Advances in the Methodology of Grounded Theory*' (1978). Later, he published another book entitled '*Emergence vs. Forcing: Basics of Grounded Theory Analysis*' (1992) to criticise his former colleague, Strauss (1990), and the postpositivist version of grounded theory. He also published a paper entitled '*Constructivist Grounded Theory?*' (2002) to criticise Charmaz (2000) and the constructivist version of grounded theory.

This version starts with open coding the data and identifying categories until theoretical saturation occurs (Glaser, 1978). This process as substantive coding can also guide the theoretical sampling of the research (Glaser, 1978). Then, theoretical coding is used to find the core variables through linking substantive codes and examining their relationships (Glaser, 1978). This process includes coding the data, identifying the key variables, and emerging the theory (Glaser, 1978). Finally, based on positivism, the emerging theory represents the relevant research area (Glaser, 1978).

3.6.2.2 The postpositivist version of grounded theory

The postpositivist version of grounded theory was established by Anselm Strauss and Juliet Corbin, an American nurse and colleague of Strauss (1990). They published their works in a book entitled '*Basic of Qualitative Research: Grounded Theory Procedures and Techniques*' (1990). After publishing this book, Anselm Strauss died in 1996, however, the second (1998) and third edition (2008) of this book were published by his colleague, Juliet Corbin.

This version emphasises ‘constant comparison’, allows a review of the literature, and facilitates a series of additional procedural steps and techniques so as to enhance the ‘theoretical sensitivity’ and quality of grounded theory (Strauss, 1987; Corbin and Strauss, 2008). These procedures consist of three levels of coding, namely *open*, *axial*, and *selective* (Strauss and Corbin, 1990). Accordingly, within the process of open coding, the collected data are broken into separate lines in order to explore all aspects of the research subject and create the codes as labels for the meaning of issues (Glaser and Strauss, 1967; Strauss and Corbin, 1998). The initial codes are then developed, conceptualised, and grouped into categories (Strauss and Corbin, 1998). After that, within the process of axial coding, the categories with similar dimensions and properties are clustered together and their relationships are recognised (Strauss and Corbin, 1998). Finally, within the process of selective coding, the core categories with similar dimensions and properties are identified, in order to relate other categories to them and generate an explanatory theory (Strauss and Corbin, 1998).

In fact, the postpositivist version focuses on eliciting the meanings of the phenomena through social processes and social interactions (Corbin and Strauss, 2008). It incorporates the subjective and objective approaches to the data and takes middle ground between objectivist and constructivist versions (Strauss and Corbin, 1998). It also has less emphasis on emergence than other versions since it facilitates perceived coding and an analytical framework for data analysis (Charmaz, 2011).

3.6.2.3 The constructivist version of grounded theory

The constructivist version of grounded theory was formed by Kathy Charmaz, an American sociologist (2000). She published her research findings in a paper entitled ‘*Grounded theory: Objectivist and Constructivist Methods*’ (2000). Later, she published a book entitled ‘*Constructing grounded theory: A practical guide through qualitative analysis*’ (2006).

This version suggests an emergent method which would allow further exploration through adopting a flexible series of principles (Charmaz, 2006). In this version, within the process of initial coding, the concepts are emerged, highlighted, and coded from data (Charmaz, 2006). After that, within the process of focused coding, the final theory, as the integrative views of the participants and the researcher, emerges from data

(Charmaz, 2006). This implies that the theory is constructed through the involvements of the researchers with people, perspectives, and practices (Charmaz, 2006).

In fact, the constructivist version adopts objective methodological approaches developed by Barney Glaser with positivist assumptions along with social constructionism inherent in Anselm Strauss's symbolic interactionism perspective (Charmaz, 2011).

3.6.3 The selected version of grounded theory

I decided not to select the objectivist version of grounded theory, since this version, in contrast to the current study, is concerned with the positivism philosophy. This may stem from Glaser's (1978) quantitative backgrounds, as he studied at Columbia University, and was influenced by the work of Paul Lazarsfeld who was renowned for developing the quantitative survey method (Strauss and Corbin, 1990; Annells, 1996; Charmaz, 2006). In addition, this version has complex procedures and techniques and is inflexible for implementation by researchers (Charmaz, 2000). Furthermore, the inclusion of the researchers' experiences, as the prior views of the data, and the use of literature should be delayed until the theory has been developed (Strauss and Corbin, 1990; Glaser, 1992).

I also decided not to select the constructivist version of grounded theory, since this version emphasises heavily the constructionism perspective as legitimate forcing (Glaser, 2002). In addition, in this version, the emergent theory is strongly dependent on the researchers' stance (Glaser, 2002).

Hence, the postpositivist version of grounded theory was adopted for this study, since the philosophical assumptions of this version are very close to the current research project. This may stem from Strauss's (1990) qualitative background such as relativism, pragmatism, and symbolic interactionism, as he trained in the Department of Sociology at the University of Chicago which is well known in the qualitative research domain (Mills et al., 2007). In addition, Denzin (1988), as one of the famous qualitative authors, supports the postpositivist version since it allows researchers to interact with the data within the coding paradigm. He asserts that the step by step approach of this version offers an accurate sequence of the research procedures (Denzin, 1988; Charmaz, 1990).

On the other hand, this version as well as the two other versions has been criticised by different authors (Charmaz, 2011). For instance, Charmaz (2000) criticises its postpositivist philosophical stance and labels it as a method of application rather than innovation. Glaser (1992) also challenges its additional procedural techniques and its very subjective interpretations, and declares that it differs from original grounded theory since it prevents researchers creatively discovering theory. However, despite these objections, it would be the most suitable version of grounded theory for this study.

3.7 Theoretical perspective

Perspective as a point of view, an eyeglass, or a sensitizer can guide people's perceptions of reality (Charon, 2010). It functions as the theoretical framework which encompasses a set of assumptions, values, and beliefs in order to organise and control people's perceptions and behaviours (Charon, 2010). For instance, symbolic interactionism and social constructionism as theoretical perspectives have been used in the social sciences, to explore people's thoughts, feelings, and actions in order to understand social concerns (Mead, 1934; Blumer, 1986; Charon, 2010).

In fact, perspective (a set of symbols), language (a special type of symbol), and symbol (a special type of social object), as central elements of human life, are shaped through interaction (Charon, 2010). Within the social context, this interaction is influenced by symbolic communication and interpretation of one another's acts; and also transformed into social interaction (Charon, 2010). Accordingly, social interaction can shape human beings (social symbolic actors), social objects (objects in certain situations), symbols, self, mind (ongoing symbolic action toward the self), social intelligence (understanding the perspectives of others as we act), identity, and society (Charon, 2010).

Most researchers agree with this point that society is central to shaping what the human being is (Goffman, 1974). Society, as the cooperative problem solving context, is characterised by social symbolic interactions (i.e. taking one another into account), cooperation (i.e. a certain type of interaction), and culture (i.e. a shared perspective and generalised other) (Charon, 2010). In the society, our action in a situation depends on our interpretation of others' actions and vice versa (Charon, 2010). Accordingly, the significant point is how people define the social world they live in and how that definition influences their actions (Charon, 2010).

3.7.1 Symbolic interactionism

Symbolic interactionism was originally founded by two American sociologists, Charles Horton Cooley (1864-1929), and George Herbert Mead (1863–1931) who was strongly influenced by pragmatism, the work of Charles Darwin (1809 – 1882), and the views of John Dewey (1859–1952) (Morris, 1977; Strauss, 1993). Later, this theoretical perspective was established based on Herbert Blumer's (1969) idea of 'root images' (i.e. concepts such as social interaction, actor, object, and so on) which was derived from Mead's (1934) principles of 'I', 'me', 'self', and their internal communications within the context of social interaction (Jeon, 2004).

Blumer (1969) used Mead's social interaction terms: 'the conversation of gestures' and 'the use of significant symbols' in his book *Symbolic Interactionism: Perspective and Method* (1969). However, he renamed them as 'non-symbolic interaction' and 'symbolic interaction' (Blumer, 1969). Hence, Mead's (1934) contribution was mainly philosophical, but Blumer's (1969) contribution was primarily sociological and could more effectively develop symbolic interactionism (Porter, 1998; Jeon, 2004).

Mead (1934) asserts that 'self' needs to be understood through interaction with the social world since the person does not live in isolation and needs to communicate with others within society. He maintains that 'self' consists of 'I' as a subjective and active element and 'me' as an objective and passive element, which interact with each other to shape behaviour (Mead, 1934; Jeon, 2004). He declares that 'self' as potential enables human beings to interpret others' symbols through the process of 'taking the role of the other' and enhancing the sense of 'social self' (Mead, 1934; Morris, 1977; Jeon, 2004).

Mead (1934) states that human behaviours are influenced by environments as well as previous experiences since an individual as 'self' is powered by the meaning making of surroundings. He emphasises the self-interpretation process which enables an individual to understand the values and norms of a new social context and form behavioural conformity (Mead, 1934; Blumer, 1998). He indicates that the new 'self' can adapt the behaviour, as proper to the new environments, and incorporate it into its portrayal of self-compatibility (Blumer, 1998). In contrast to this view, Goffman (1959) emphasises behaviouristic interactions that are similar to symbolic interactionism. He believes that the self is something without any power and displays a person that has no self-judgment or ability to reflect on new situations (Goffman, 1959). Hence, his perspective, due to disregarding the human ability to react to interactive situations, would be unable to

explain the dynamic of individuals' interactional processes within a particular context (Goffman, 1959).

In fact, individuals do not coexist with their social setting, rather, they are part of it (Berger, 1963). Thus, their behaviours are shaped through inner experiences and an understanding of the social world's symbols (Mead, 1934). Their ability to interpret and reflect on the social environment also determines how they make choices (Charon, 2010). Hence, as long as individuals as 'selves' play this role in the social setting, they have to adapt themselves to their surroundings and shape their behaviours to be successful (Mead, 1934).

In short, symbolic interactionism has been used in exploring "the complex world of lived experience from the point of view of those who live it" (Schwandt, 1994, p. 118). It focuses on fully understanding human behaviours, and psychological and social interactions through capturing the meanings that are experienced by individuals within a particular context (Morris, 1977; Chenitz and Swanson, 1986; Jeon, 2004). Thus, similar to phenomenology, this perspective emphasises the notion of meaning, the lived experience, and the worldview and behaviour (Baker et al., 1992; Osborne, 1994; Jeon, 2004).

3.7.2 The selected research perspective

Social constructionism was not chosen for this study since it usually seeks to explore the social world by identifying how the existing pattern of social behaviour can be explained differently (Mead, 1934; Blumer, 1986; Charon, 2010). This research perspective is unsuitable for this study as it implies that the reality that people observe, in contrast to the law of nature, is the outcome of other people's socially constructed actions (Mead, 1934; Blumer, 1986; Charon, 2010).

On the other hand, in order to make the necessary connection between the emergent findings and understanding the research data, and particularly to assist the research process, symbolic interactionism was selected for this study (Mead, 1934; Blumer, 1969).

This research perspective is appropriate for this study as it indicates that human behaviour is not objective and fixed, but an evolving phenomenon shaped through a person's interpretative ability to respond to his/her surroundings (Mead, 1934; Blumer, 1969). In addition, similarly to the current study, its basis lies in pragmatism (i.e. the

nature of knowing and acting are linked as people act on the basis of their experiences and ideas about the world around them) (Mead, 1934; Blumer, 1986; Charon, 2010). Moreover, it would enable me to be engaged in the world of study through actively interacting with the research informants in order to deeply explore issues from their points of view and fully understand their roles and characteristics based on their interpretations (Blumer, 1969; Chenitz and Swanson, 1986; Jeon, 2004).

3.8 Evaluation of qualitative research project

Quality is “elusive, hard to specify, but we often feel we know it when we see it. In this respect research is like art rather than science” (Seale, 2002, p. 102). So, generally, it is difficult for researchers to present how they have met certain evaluation criteria as quality justification in conducting their research studies, particularly with qualitative research (Lincoln and Guba, 1985; Corbin and Strauss, 2008). However, Lincoln and Guba (1985) propose a criteria for researchers, namely *trustworthiness*, in order to evaluate the worth of their qualitative studies. They emphasise that this trustworthiness can be achieved through the establishment of four constructs: *credibility* (i.e. internal validity; truth value), *transferability* (i.e. external validity; applicability), *dependability* (i.e. reliability; consistency), and *confirmability* (i.e. objectivity; neutrality) (Lincoln and Guba, 1985).

Credibility as the most crucial construct of trustworthiness is concerned with truthfulness, authenticity, and genuineness of the research findings (Lincoln and Guba, 1985). It refers to the amount of collected data that accurately reflects the multiple realities of the phenomenon under investigation (Lincoln and Guba, 1985). In other words, it indicates that research findings need to make sense in order to be credible and authentic to readers (Miles and Huberman, 1994). This construct can be achieved through seven techniques: prolonged engagement (i.e. stay in the field until reaching theoretical saturation point), persistent observation (i.e. consistently and meticulously pursue and analyse contextual factors), triangulation (i.e. adopt ranges of methods to collect multiple sources of data), peer debriefing (i.e. clarifying missed aspects of research), negative case analysis (i.e. highlighting exceptional cases), and referential adequacy (i.e. storing a selection of raw data to retrieve later to check the validity of initial findings), and member-checking (Denzin, 1978; Lincoln and Guba, 1985).

Transferability refers to the applicability of research findings in other contexts (Lincoln and Guba, 1985). It indicates that research findings need to be generalised and transferable to other contexts (Miles and Huberman, 1994). This construct can be obtained by the technique of ‘thick description’ (Ryle, 1949; Geertz, 1973) which refers to a way of achieving a variety of informants’ diverse views and experiences in order to discover the results that can be transferable to other contexts with different times, locations, circumstances, and people (Lincoln and Guba, 1985; Holloway, 1997).

Dependability is concerned with consistency and repeatability of research findings (Lincoln and Guba, 1985). It indicates that the process of research needs to be consistent and stable over time across various inquirers and techniques (Miles and Huberman, 1994). This construct can be attained by the technique of ‘inquiry audit’ which refers to evaluating the accuracy of the research process, interpretations, and findings by an external researcher as an auditor to ensure that they are supported by the research data (Lincoln and Guba, 1985).

Confirmability refers to evaluating the objectivity through examination of the same data (i.e. replicability) by another researcher (Lincoln and Guba, 1985; Miles and Huberman, 1994). It indicates that research findings should reflect the conditions of the inquired rather than the inquirer (Guba and Lincoln, 1981). In other words, it implies that research findings need to be derived from the research informants’ statements, not the bias or interests of the researcher (Lincoln and Guba, 1985). This construct can be gained through different techniques such as confirmability audit (i.e. inquiry audit to verify the research findings), audit trail (i.e. descriptive records of the steps taken throughout the research process), triangulation (i.e. use different data collection methods, various sources of data, multiple analysts, and diverse theoretical perspectives), and reflexivity (i.e. be aware of the effects of the role of the researcher on the procedures and outcomes throughout the research process) (Denzin, 1978; Lincoln and Guba, 1985).

In accordance with the trustworthiness, in this study, in order to establish credibility of the research findings, I presented data that would be true and based on the research participants’ statements. For instance, numerous excerpts from the various interview transcripts will be demonstrated in the following chapters in order to show that the research findings of this study would be drawn from the research informants. I also carried out a pilot study to confirm that the process of the research project made sense

and that the credibility was acceptable. In addition, I used a verification process to further ensure the credibility of the collected data. For instance, at the end of each interview, I tried to summarise the issues that would be discussed for the participants to make sure that no relevant matter would be omitted. Immediately after each interview, I made notes and highlighted the significant themes. After conducting the interviews at each site, I arranged a meeting with the person who had provided access (the gatekeeper) so as to do the last interview in that site. This would enable me to express my appreciation to him or her and the organisation for allowing me to gather data at that site, and also to explain my initial understanding from the collected data. Furthermore, I attempted to use all the specified techniques to further enhance the credibility of my research findings.

In this study, the conceptuality of the generated theory could provide the transferability and generality of the research findings beyond the local context (Strauss and Corbin, 1990). Indeed, qualitative research studies are usually concerned with interpretive and naturalistic approaches to the world (Denzin and Lincoln, 2011). Thus, I believe that the data collected from diverse sources in various field sites provides a good representation of the world and lived experiences of the research informants.

In this study, the dependability and confirmability of the research findings can be established by the study since it generates and confirms its findings by itself due to its use of the grounded theory strategy as the iterative data collection and analysis method. Moreover, I attempted to use all the specified techniques to further enhance the dependability and confirmability of my research findings. For instance, I used triangulation to provide comprehensive understanding through convergence among multiple sources of information that would be used during the data collection process. For example, in some of the organisations, in addition to numbers of interviews, I tried to obtain permission to utilise certain organisational documents and observational data, use some formal and informal organisational materials, and access organisational intranet. These materials and documents would enable me to provide collaborative evidence to support the information obtained through the in-depth interviews with the informants.

3.8.1 Ensuring rigour in grounded theory research

Making judgements about the quality of qualitative research, particularly grounded theory is so difficult because it depends on multiple elements such as researcher expertise, purpose of research, methodological congruence, procedural precision, and methods of research (Corbin and Strauss, 2008; Birks and Mills, 2011). However, the major grounded theorists provide different criteria for evaluating the quality of grounded theory research studies (Birks and Mills, 2011). For instance, Glaser and Strauss (1967) suggest that grounded theory should demonstrate *fit* with the research field, be *understandable* by people in the field, be sufficiently *general* for other applications, and be employed in such a way that the user has *control* over its use. See Table 3.6.

Table 3.6: Classic approaches for judging grounded theory research

Glaser and Strauss (1967): Fit Understandable General Control	Glaser (1978): Fit Work Relevant Modifiable	Strauss and Corbin (1990): Data quality Research process Empirical grounding	Charmaz (2006): Credibility Originality Resonance Usefulness
	Glaser (1992): Fit Work Relevant Modifiable Parsimony Scope	Strauss and Corbin (1998): Data quality Theory quality Research process Empirical grounding	
		Corbin and Strauss (2008): Fit Applicability Concepts Contextualisation of concepts Logic Depth Variation Creativity Sensitivity Evidence of memos	

Source: (Adapted from (Birks and Mills, 2011))

On the other hand, Birks and Mills (2011) argue that these criteria as classic approaches for judging the quality of grounded theory research are not comprehensive. They declare that a comprehensive evaluation should not be confined to the traditional criteria, and needs to be constantly developed (Birks and Mills, 2011). Notwithstanding, almost all the extant criteria imply that the assurance of rigour in grounded theory depends mainly on the level of trustworthiness which is based on the quality of the research process (e.g. theoretical sampling, constant comparison, coding, and memoing), and the quality of the generated theory (Glaser and Strauss, 1967; Glaser, 1978; Strauss and Corbin, 1998).

Accordingly, in this study, I attempted to consider all the specified criteria, particularly those of Strauss, throughout my research in order to establish trustworthiness through an accurate research process and the empirical grounding of the research findings, particularly the theory in the collected data (Strauss and Corbin, 1990).

3.9 Conclusions

In this chapter, the philosophical assumptions, paradigms, and positions have been evaluated to understand the underlying knowledge required in choosing the approach, method, and strategy to facilitate the research process. Accordingly, pragmatism was selected as the research philosophy of this study since it provides a better fit.

Deductive and inductive as the major research approaches have also been examined in order to determine their suitability for this study. Accordingly, the inductive approach was selected for this study since it is more flexible, highly associated with qualitative research design, and more useful in providing a feel of the research context and informants.

In addition, quantitative and qualitative as the main research methods have been evaluated in order to determine their appropriateness for this study. Accordingly, the qualitative method was selected for this study since it enables deeper exploration of phenomena, allows more flexible data analysis, and generates insightful findings more comprehensively.

Furthermore, grounded theory among all the research strategies was selected as the method of enquiry, data collection, and data analysis of this study. This strategy has a high potential for conducting qualitative research, and insists upon an engagement with the participants as actors and their environments. This assists researchers in getting a

feel for the actors involved and thus attaining a more intelligent understanding of the research context. Among the different versions of this strategy, the postpositivist was chosen for this study since it is highly associated with pragmatism, symbolic interactionism, and the nature and context of this research.

Moreover, symbolic interactionism, as a widely accepted theoretical perspective to explain the formation of human behaviour through interactive activities, was selected for this research project. This research perspective is particularly useful when a researcher would like to understand a person's experience in a specific social setting such as the workplace.

Finally, the evaluation of the qualitative research project was meticulously explained in order to prove that the findings of this qualitative research project are trustworthy. Following this, the criteria of grounded theory research were explained in order to show an assurance of rigour in this grounded theory research project.

Overall, this chapter has outlined the justifications for the chosen research methodology and provided explanations for the methods which will be used to analyse the data in the following chapters.

In chapter 4, the process and context of data collection, and the selected data collection methods and procedures along with their rationales will be described.

Chapter 4: Pilot study and the main data collection process

4.1 Introduction

This chapter presents the process of pilot study and the main data collection of this research project. It includes descriptions of the research informants' profiles, how the interviews were conducted, coding process, and an illustration of the initial findings of the pilot study. The overall purpose of this chapter is to provide an outline of the methods and procedures used to collect data from the research informants.

In order to provide a clear presentation of these activities, the chapter first aims to demonstrate the pilot study of the research project. Next, the initial data and the initial findings drawn from the pilot study along with its limitations are explained in detail. Then, the main data collection process is meticulously described. After that, the research interviews, the research informants' profiles, and the research data are demonstrated. Finally, a brief summary and conclusions of the chapter are presented.

4.2 The pilot study data collection process

In general, the pilot study, by producing additional data, provides valuable insights, mitigates uncertainty about research outcomes, and increases the chances of success in research (Baker, 1994; Turner, 1999; van Teulingen and Hundley, 2001; Turner and Müller, 2003; Turner, 2005). It can identify potential practical problems and provide advance warning of any mistake or shortcoming in the research (De Vaus, 1993; van Teulingen and Hundley, 2001). Hence, in reality, a pilot study is time-consuming; however, it is worthwhile to do it before investing a great amount of time and effort in the main work of the research project (van Teulingen and Hundley, 2001).

In this study, the pilot study was carried out to check the applicability of the selected research design to the research aim and objectives. It enabled me to confirm that the approach of this study would be accurate and on the right track. It also gave me an initial understanding of the subject under study and informed the conduct of interviews during the main data collection process.

Four interviews were conducted in June 2010. See Table 4.1. These four face-to-face interviews were carried out in the Persian language, with the four informants in the different fields in Tehran.

The first interview was carried out with the director of a prominent tunnelling company in Asia. The second one was conducted with the director of a globally prominent copper mining company. The third one was done with the director of a prominent chemical company in West Asia. The fourth one was conducted with the director of a prominent pharmaceutical company in Asia.

Table 4.1: The pilot study interviews

Number of interviews at each organisational level				
Type of Company	Strategic Management	Tactical Management	Operational Management	Total Interviews
1. Tunnelling	1	-	-	1
2. Copper mining	1	-	-	1
3. Chemical	1	-	-	1
4. Pharmaceutical	1	-	-	1
TOTAL	4	-	-	4

Source: Field work

The interviews were unstructured and the length of each was approximately two hours. After each of these interviews, I immediately transcribed it fully first in Persian and then to English. The transcripts were checked twice in order to minimise any mistake during the analysis and interpretation of the data. This stage of analysis enabled me to identify many issues that would help improve the research findings.

During the interviews, I encouraged the participants to freely express their points of view, first in relation to leading and managing projects, and second about their ideas on the effectiveness of project managers. The interviews covered topics such as the lived experiences of the participants, and the differences between leading and managing projects. They also covered different themes such as leadership, trust and emotional intelligence.

During the pilot study, my informants were from the same organisational level (Figure 4.1). They spoke at length, mentioned many issues, and suggested new themes. However, I did not approach them for the main data collection of this research project due to the limitations of the pilot study (see section 4.4).

Figure 4.1: The organisational level framework based on the strategic vision



Source: (Adapted from (O'Brien and Marakas, 2006))

The transformational, transactional, and laissez-faire leadership styles which were designed to predict the effectiveness of project leaders within the organisation context were used for this research project (Eagly and Johannesen-Schmidt, 2001). In accordance with this approach, the leadership styles of the informants were determined. The leadership styles along with the characteristics of companies as the profiles of the pilot study informants are shown in Table 4.2.

Table 4.2: The profiles of the pilot study informants

No	Type of company	Sector (Private/Public)	Organisational level	Leadership style (Transformational, Transactional, Laissez-faire)	Location of company	Project-oriented (Yes/No)
1	Tunnelling	Private	Strategic Management	Transactional	Tehran	Yes
2	Copper mining	Public	Strategic Management	Transformational	Tehran	Yes
3	Chemical	Private	Strategic Management	Transactional	Tehran	Yes
4	Pharmaceutical	Private	Strategic Management	Transformational	Tehran	Yes

Source: Field work

4.3 Initial data collected from the pilot study informants

The initial analysis of the data collected from the four participants was carried out by using the grounded theory method. This method includes breaking down the data to learn its essence and construct a new abstract meaning, so that the underlying concepts can emerge from the initial understanding (Corbin and Strauss, 2008). This process enabled me to derive a variety of meanings from the true experiences described in the interviewees' statements. It starts with open coding and continues until a state of saturation is reached in the data through constant comparison. In this certain situation, by including new data, no new insights or useful information that could add value to the research are obtained (Corbin and Strauss, 2008).

The initial coding of the data which represent the most important concepts raised by the four pilot study informants is shown in Table 4.3. The emerging codes are presented in the first column, while concise summaries of the concepts, based on the informants' statements, are presented in the second column.

The numbers after each concept refer to the pilot study informants from the different companies: (1) tunnelling, (2) copper mining, (3) chemical, and (4) pharmaceutical. Table 4.3 demonstrates the differences between these companies through emerging concepts. For instance, the informant from the tunnelling company states that leadership refers to the highest organisational level and includes tactical, financial, and support units; the informant from the copper mining company states that leadership is about providing the appropriate environment for the whole system; the informant from the chemical company states that leadership means anticipating future events and expecting all occurrences; and the informant from the pharmaceutical company states that leadership is concerned with the training of managers and creating a plan based on the leader's strategy.

Table 4.3: Initial concepts that emerged from the pilot study

Codes	Concepts
Leadership	<ul style="list-style-type: none"> • Highest organisational level and includes tactical, financial, and support units (1) • Providing the appropriate environment for the whole system (2) • Adapting the state of the system to changes and critical situations (2) • Anticipating future events and expecting all occurrences (3) • Training managers and creating a plan based on the leader's strategy (4)
Management	<ul style="list-style-type: none"> • Keeping the current situation and controlling and executing the plan (2) • Executing the assigned missions based on the vision of projects (3)
Leader	<ul style="list-style-type: none"> • An instructor of swimmer (manager) outside the river (1) • Creates the vision and mission for each unit of the project (3) • Trouble-shooter, proactive, and creator (3) • Leaders are strict in their principles but are flexible in their techniques (2, 3) • Understands political situation in the project area and in the world (3) • Grasps the strategy and conveys it to the managers (4) • Knows the cultures of all countries in the world (4) • Leaders should not exclude themselves from their followers (4)
Project	<ul style="list-style-type: none"> • Leaders and managers are interdependent in the organisational projects (3) • A project needs both leader and manager to be successful (4) • A project is defined from the starting point until the end of the productivity point (1)
Universal leadership	<ul style="list-style-type: none"> • There is no one for different cultures, economical conditions, and political situations (1) • It is the basic criteria: plan, financial resources, and human resources (1) • Defined in terms of geographic condition, climate, political situation, and resources (2) • It refers to financial affairs, project control, expectation, and resources (3) • Common in analysing the market and making the business plan (4)
Culture	<ul style="list-style-type: none"> • It has a strong influence on the project (1) • It is defined in terms of political, religious, and behavioural issues (2) • It is significant to modify the culture of a place to progress the project (2) • It is concerned with the general (national) culture and the specific (local) one (3) • It affects projects tremendously (4)
Ethic	<ul style="list-style-type: none"> • Technical ethic is not dependent on the conditions of projects and is permanent (1) • Humanistic ethic is changed by changing the conditions of projects (1) • Its nature is the same and universal, but its structure might be changed (2, 3) • Ethic as a set of rules affects progress of each project (4) • Ethical leaders are more successful than non-ethical ones (4)
Charisma	<ul style="list-style-type: none"> • Strong influence and authority over people and followers in the system (1) • Charismatic leaders due to their emotional intelligence are more effective (2,3) • It has a scientific (learnable) side and an artistic (inherent) side (2, 3) • Depends on the circumstance and potential of a leader (4)
Trust	<ul style="list-style-type: none"> • Projects cannot be developed without trust between the leaders and followers (1) • Choosing the employees should be done carefully to establish strong trust (1) • Trust as the universal issue is the first stipulation for initiating a project (2) • Lack of trust in projects leads to a decrease in the integrity of projects (2,3) • Trust should be settled with especial supervision in projects (3) • Leaders cannot give adequate freedom of action to their managers without trust (4) • Leaders must always trust their followers until they misuse the trust (4) • Creating trust in a system should always be accompanied by accurate supervision (4)
Emotional intelligence	<ul style="list-style-type: none"> • Emotional intelligence can affect the quality of a project's outcomes (1) • It plays a significant role in the leadership approach of a project (1) • It is one of the significant differences between leaders and managers within projects (2) • Emotional intelligence of leaders can improve the projects (3) • Emotional intelligence is one of the remarkable aspects in project management (4) • It is psychologically important and assists project managers to communicate better (4)
Project stakeholders	<ul style="list-style-type: none"> • All people involved in the project can be known as the stakeholders (1) • Each person in his or her position is known as an essential element for a project (1) • Culture of the project area forms the relationship with the stakeholders (2) • Successful organisations consider the stakeholders' opinions (3) • Their ideas can be collected through their feedback (4) • Drugstores, pharmacies, doctors, distributors, customers and patients (4)
Motivation	<ul style="list-style-type: none"> • Motivational factors: financial issues, future works, and the reputability of the company (1) • A leader should be involved in the project works to enhance integrity (2) • Established by presenting a different bonus for all levels of employees (3) • Offering a bonus for different targets, giving loans, and enhancing positions (4)

Source: Field work

4.3.1 Initial analysis of the pilot study data

Through the initial coding (Table 4.3), I identified a number of themes. For instance, I identified three initial themes for effectively managing an organisational project: trust, emotional intelligence, and relationship with stakeholders. This implies that project managers could not accomplish their projects successfully without establishing trust, emotional intelligence, and an appropriate relationship with stakeholders throughout their projects.

I also discovered other issues which were considered carefully by project managers such as leadership, vision, management, mission, culture, and charisma. For instance, I found that leadership was concerned with the vision of a project; however, management referred to the mission of a project. Hence, project managers should assign the missions based on the vision of their projects. I also found that in order to be effective within project-oriented organisations, project managers needed to develop their leadership by fully understanding the culture of their organisational projects, avoiding excluding themselves from members of organisational projects, and constantly attempting to be charismatic in their management style.

The initial analysis of the pilot study data implied that it was worthwhile to continue this research project since it had the potential to contribute to the project management domain. It also persuaded me to investigate more about the influence of leadership and emotional intelligence on the effectiveness of project managers. Hence, the main advantage of this pilot study is that it encouraged me to carry out this research more decisively than ever.

4.4 Limitations of the pilot study

Generally, pilot studies like many other functions have some limitations (Turner, 2005). These limitations may refer to different problems such as the possibility of making inaccurate predictions on the basis of outcomes of the pilot study (Turner, 2005). However, some problems might not be known until the main research project has been conducted (Turner, 2005).

Most of the problems are formed in two ways: (1) where data from the pilot study are included in the major results of the research project, and (2) where pilot participants are included in the major study (i.e. new data are collected from pilot study informants) (van Teulingen and Hundley, 2001).

Nonetheless, generally, the limitations of qualitative research are less than those of quantitative research (Holloway, 1997; van Teulingen and Hundley, 2001). The reason is that qualitative data collection is often progressive, especially in subsequent interviews, as the interviewer can obtain valuable insights from the previous interviews to improve the following interview (Holloway, 1997; van Teulingen and Hundley, 2001).

Despite these limitations, I tried to conceptually capture the outcomes of pilot interviews rather than use their initial findings directly. I also attempted to learn how to accurately conduct the main interviews and thus enhance the quality of the research project.

4.5 The main data collection process

Data collection is one of the most significant stages in conducting a research project (Saunders et al., 2009). In this stage, planning, effort and patience are needed to collect data accurately (Saunders et al., 2009). Herein, the main data collection process refers to the methods and the procedures used to collect the research data. These methods and procedures are both described in the following subsections.

4.5.1 The methods of data collection

In order to collect data accurately, diverse data collection methods have been suggested for research studies such as interview, questionnaire, observation, focus group, diary, critical incident technique, protocol analysis, and postcard (Hussey and Hussey, 1997; Easterby-Smith et al., 2012; Saunders et al., 2012). However, the data collection method of a study should be chosen based on its research philosophy, approach, design, strategy and limitations (Hussey and Hussey, 1997; Easterby-Smith et al., 2012; Saunders et al., 2012).

Generally, an interview, as a purposeful conversation between two or more people, is a method of collecting valid and reliable data in relation to research questions and objectives (Saunders et al., 2009). It can be classified into two major forms: structured and semi-structured or unstructured (Saunders et al., 2009). Structured interviews are concerned with quantitative research design (Saunders et al., 2009). They are normally used in descriptive studies and cover specific sets of questions (Easterby-Smith et al., 2002; Robson, 2002; Saunders et al., 2007). Conversely, semi-structured and unstructured interviews are concerned with qualitative research design (Saunders et al.,

2009). They are usually used in exploratory studies and cover lists of themes and questions (Easterby-Smith et al., 2002; Robson, 2002; Saunders et al., 2007).

In fact, unstructured interview as the in-depth interview is the most effective method when a researcher asks informants to explain their experience, by reflecting on relevant incidents (Johnson and Harris, 2003). This can help the researcher obtain a picture of the actions and interactions involved in those incidents (Johnson and Harris, 2003). Through this form of qualitative interview, the informants may give relevant examples that can assist the researcher in capturing a clearer understanding of their thoughts, desires and experiences (Berg, 2009). Indeed, this method enables researchers to provide new insights that can lead to a better understanding of the subject area in many different ways (Easterby-Smith et al., 2008).

In accordance with the chosen research methodology, the unstructured form of interview was selected as the main data collection method of this study in order to gather in-depth data to understand the research subject and fulfil the research aim and objectives (Strauss and Corbin, 1997; Corbin and Strauss, 2008).

The main reason for this selection was that the list of themes was varied in terms of the flow of conversation and the area of interest under investigation, as the informants would be given the opportunity to speak freely about their thoughts in relation to the topic. In this respect, the unstructured interviews allowed me to explore the research issues and make newer insights into the research subject. They helped me develop an understanding of the informants' ideas. They also gave me a higher degree of confidence in the research as a clear understanding of the meaning and motives was obtained.

4.5.2 The procedures of data collection

In order to follow the confidentiality code of conduct rigorously, before the start of each interview, I reassured each informant that the contents of the interview and the findings derived therefrom would only be presented in general terms. I also presented a copy of a letter (in person or by email) to each informant to explain my intentions in collecting the data and how it would be used. The letter showed that each interview and its outcomes would be treated as strictly confidential and personal details (i.e. any individual participant or company name) would not be presented in the research project.

Moreover, I attempted to carefully consider the matter of impartiality during collection and analysis of the data.

During the interviews, I presented myself as someone who was eager to learn from the informants' experiences and opinions. I tried to obtain realistic and true accounts of their experiences. I also asked the informants to share their knowledge and thoughts regarding the research subject.

I started my interviews by using a predefined set of questions as an icebreaker to aid the flow of the conversation. These questions focused particularly on a number of key areas that I wished to understand;

- What is the informant's understanding of the leading and managing projects?
- What is the informant's idea about an effective project manager?
- What issues can affect the effectiveness of project managers?

This approach enhances the accuracy of the resulting data set and validity of the data, since they were gained through replicated responses from different informants. It allowed me to achieve an accurate overall account of the organisation context and working environment in each company. It also saved time and assisted me in avoiding mistakes later when analysing the data. However, following this initial process, the interviews were mostly unstructured.

Hence, the initial part of the interviews dealt with general organisational issues to encourage the flow of the conversation, while later, the issues based on the informants' experiences would be explored. In this way, I was able to obtain an understanding of their lived experiences and how they interacted with others to carry out their projects (Corbin and Strauss, 2008).

In this study, all of the interviews were voice recorded, with the permission of the informants, and I transcribed each of them fully afterwards. Nonetheless, I summarised my discussions with the informants, particularly noting those issues that seemed most important. This approach proved to be useful in verifying and validating the outcomes of the interviews. In addition, in order to get an overall feeling of the interviews, I used my notes to guide my observations. I frequently analysed my notes to compare the new data with the old so as to generate additional questions for subsequent interviews. Furthermore, in most of the interviews, in order to collect a more valid data set

regarding the organisational project tasks, I used the process of rapport-building by means of staying in the companies for a short period.

4.6 The research interviews

In this study, the main data were collected between December 2010 and July 2011, from the different informants in the different organisations. They were gathered through two different methods of in-depth interview: Face-to-face and Skype. The process of both methods is described in the following subsections.

4.6.1 Face-to-face interviews

I carried out 39 face-to-face interviews in the companies' private meeting rooms with an informal atmosphere in Tehran and London. I generally began by providing an introduction to the research aim and the reason for conducting the interview.

First, I conducted 21 interviews in Persian in Tehran with the different informants from the various fields. Overall, each of these interviews lasted between 60 and 90 minutes. I immediately transcribed each of them fully first in Persian and then to English. The transcripts were checked twice in order to minimise any mistake during the analysis and interpretation of the data.

Later, I conducted 18 interviews in English in London with the different informants from the different fields. Overall, each of these interviews lasted between 25 and 45 minutes. I immediately transcribed each of them fully afterwards to aid accurate analysis.

4.6.2 Skype interviews

After conducting the face-to-face interviews, I thought it was worthwhile having data from different places around the world. Accordingly, I decided to select informants from diverse companies in different countries and continents. Hence, I conducted 20 interviews in English over the internet via Skype software in order to gather rich data and generalise the research findings. Overall, each of these interviews lasted between 20 and 30 minutes. I transcribed each of them fully afterwards in order to analyse them accurately and extract more valuable findings.

It is obvious that these interviews cannot function as real face-to-face interviews but the Skype application provided me with this opportunity (i.e. to see and talk to people live

from anywhere around the world) to collect more data from the various informants without any serious difficulties.

At this stage of data collection, the situation of all the interviews was approximately the same; which means that one informant from his/her office, over the internet, talked to me freely about the research subject. However, in general, the opportunity to conduct interviews over Skype provided me with a good experience.

4.7 The research informants' profiles

In this research project, in order to prevent any preconceptions and ensure representativeness, the participants were selected based on the snowballing process. Thus, during the initial prearranged interviews, I asked each participant to introduce me to any colleague or friend who he/she felt was a good knowledge contributor to the notion of my research.

In this study, I wanted to collect data from various informants with dissimilar organisational levels within different types of company in order to gather sufficiently comprehensive data and thus generate realistic findings in the form of the conceptual model. Hence, I conducted 59 interviews with the various informants from twelve different types of company (forty-five companies in total). See Table 4.4.

Table 4.4: The main study interviews

Number of interviews at each organisational level				
Type of Company	Strategic Management	Tactical Management	Operational Management	Total Interviews
1. Printing technologies	1	1	-	2
2. Paper manufacturing	1	3	-	4
3. Automotive	2	1	-	3
4. Computer (software & hardware)	3	1	-	4
5. Green energy technologies	2	-	-	2
6. Construction	4	1	1	6
7. Telecommunications	4	2	1	7
8. Trading	2	1	1	4
9. Advertising & Marketing	2	4	-	6
10. Business & Enterprise	4	2	-	6
11. Management consulting	3	5	1	9
12. Banking & Insurance	3	3	-	6
TOTAL	31	24	4	59

Source: Field work

Overall, the informants of the main study are drawn from dissimilar organisational levels (strategic, tactical, and operational management), diverse business units, and various different organisations. See Table 4.5.

Table 4.5: The profiles of the main study informants

No	Type of interview	Type of company	Sector (Private/Public)	Organisational level	Leadership style (Transformational, Transactional, Laissez-faire)	Location of company	Project-oriented (Yes/No)
1	Face-to-face	Printing Technologies	Public	Strategic	Transformational	Tehran	Yes
2	Face-to-face	Printing Technologies	Private	Tactical	Transformational	Tehran	Yes
3	Face-to-face	Paper manufacturing	Private	Strategic	Transactional	Tehran	Yes
4	Face-to-face	Paper manufacturing	Private	Tactical 1	Transactional	Tehran	Yes
5	Face-to-face	Paper manufacturing	Private	Tactical 2	Laissez-faire	Tehran	Yes
6	Face-to-face	Paper manufacturing	Public	Tactical 3	Transformational	Tehran	Yes
7	Face-to-face	Automotive	Private	Strategic 1	Transformational	Tehran	Yes
8	Face-to-face	Automotive	Private	Strategic 2	Transformational	Tehran	Yes
9	Face-to-face	Automotive	Private	Tactical	Transformational	Tehran	Yes
10	Face-to-face	Computer	Private	Strategic 1	Transformational	Tehran	Yes
11	Skype	Computer	Private	Strategic 2	Transformational	Cairo	Yes
12	Skype	Computer	Private	Strategic 3	Transformational	Reading	Yes
13	Skype	Computer	Private	Tactical	Transactional	Kitchener	Yes
14	Face-to-face	Green Energy Tech.	Private	Strategic 1	Transformational	Tehran	Yes
15	Skype	Green Energy Tech.	Private	Strategic 2	Transactional	Cambridge	Yes
16	Face-to-face	Construction	Private	Strategic 1	Transactional	Tehran	Yes
17	Face-to-face	Construction	Private	Strategic 2	Transactional	Tehran	Yes
18	Face-to-face	Construction	Private	Strategic 3	Transactional	Tehran	Yes
19	Face-to-face	Construction	Private	Strategic 4	Transformational	Tehran	Yes
20	Skype	Construction	Private	Tactical	Transactional	Geneva	Yes
21	Skype	Construction	Private	Operational	Transactional	Geneva	Yes
22	Face-to-face	Telecommunications	Private	Strategic 1	Transformational	London	Yes
23	Face-to-face	Telecommunications	Private	Strategic 2	Transformational	London	Yes
24	Face-to-face	Telecommunications	Private	Strategic 3	Transformational	London	Yes
25	Face-to-face	Telecommunications	Private	Strategic 4	Transformational	London	Yes
26	Face-to-face	Telecommunications	Private	Tactical 1	Transformational	London	Yes
27	Face-to-face	Telecommunications	Private	Tactical 2	Transformational	London	Yes
28	Face-to-face	Telecommunications	Private	Operational	Transformational	London	Yes
29	Face-to-face	Trading	Private	Strategic 1	Transactional	Tehran	Yes
30	Face-to-face	Trading	Private	Strategic 2	Transformational	Tehran	Yes
31	Face-to-face	Trading	Private	Tactical	Transactional	Tehran	Yes
32	Skype	Trading	Private	Operational	Transformational	Paris	Yes
33	Skype	Advertising- Marketing	Private	Strategic 1	Transactional	Kuala Lumpur	Yes
34	Face-to-face	Advertising- Marketing	Private	Strategic 2	Transformational	London	Yes
35	Skype	Advertising- Marketing	Private	Tactical 1	Transactional	Melbourne	Yes
36	Skype	Advertising- Marketing	Private	Tactical 2	Transformational	Muscat	Yes
37	Skype	Advertising- Marketing	Private	Tactical 3	Transformational	São Paulo	Yes
38	Face-to-face	Advertising- Marketing	Private	Tactical 4	Transformational	London	Yes
39	Face-to-face	Business- Enterprise	Private	Strategic 1	Transformational	Tehran	Yes
40	Face-to-face	Business- Enterprise	Private	Strategic 2	Transformational	London	Yes
41	Skype	Business- Enterprise	Private	Strategic 3	Transformational	Hong Kong	Yes
42	Skype	Business- Enterprise	Private	Strategic 4	Transactional	Athens	Yes
43	Face-to-face	Business- Enterprise	Private	Tactical 1	Transformational	London	Yes
44	Skype	Business- Enterprise	Private	Tactical 2	Transformational	Dubai	Yes
45	Face-to-face	Management consulting	Private	Strategic 1	Transformational	Tehran	Yes
46	Skype	Management consulting	Private	Strategic 2	Transformational	Toronto	Yes
47	Face-to-face	Management consulting	Private	Strategic 3	Transformational	London	Yes
48	Face-to-face	Management consulting	Private	Tactical 1	Transformational	London	Yes
49	Face-to-face	Management consulting	Private	Tactical 2	Transformational	London	Yes
50	Face-to-face	Management consulting	Private	Tactical 3	Transformational	London	Yes
51	Face-to-face	Management consulting	Private	Tactical 4	Transformational	London	Yes
52	Face-to-face	Management consulting	Private	Tactical 5	Transformational	London	Yes
53	Face-to-face	Management consulting	Private	Operational	Transformational	London	Yes
54	Skype	Banking- Insurance	Private	Strategic 1	Transactional	Dubai	Yes
55	Skype	Banking- Insurance	Private	Strategic 2	Transactional	Geneva	Yes
56	Skype	Banking- Insurance	Private	Strategic 3	Transactional	New York	Yes
57	Face-to face	Banking- Insurance	Public	Tactical 1	Transactional	Tehran	Yes
58	Skype	Banking- Insurance	Private	Tactical 2	Transactional	Kuwait city	Yes
59	Skype	Banking- Insurance	Private	Tactical 3	Transactional	Buenos Aires	Yes

Source: Field work

4.8 The research data

I identified many emerging concepts during the initial analysis of the collected data. However, as well as the interviews, I used the companies' intranets, with the permission of the companies, as a secondary source of data. This approach could provide a richer source of data for my interpretations and thus strengthen my research findings. For instance, I investigated the companies' historical backgrounds, their vision and mission statements, and their general and specific policies and procedures, as relevant to project manager development. These documents provided information about how project managers' effectiveness is established in each project-oriented organisation. I judged this approach to be another way of validating my data sets.

4.9 Conclusions

Four unstructured interviews were conducted as the pilot study in order to better understand the research area. These interviews allowed me to sharpen my research questions for the main data collection process. I asked the pilot study informants to express themselves freely on the research topic. The aim was to encourage the informants to share their knowledge and thoughts. In this process, some notes were made that assisted me in deriving fresh meaning from the data. As Glaser (1978) emphasises, through fieldwork the researcher can observe the basic social and psychological processes involved in the research domain and realise from whose view the phenomena is important or unimportant.

Hence, the pilot study assisted me in gaining a more general understanding of the phenomenon under study.

In fact, the pilot study could represent a small-scale piece of fieldwork that assisted me in investigating the experiences of the four informants from different companies, identifying more focused research questions, and building relationships with the collaborating companies to collect more data for the main research project.

Moreover, in accordance with the chosen research methodology, the unstructured form of interview was selected as the main data collection method of this study in order to gather in-depth data to understand the research subject and fulfil the research aim and objectives (Strauss and Corbin, 1997; Corbin and Strauss, 2008).

The main reason for this selection was that the list of themes was varied in terms of the flow of conversation and the area of interest under investigation, as the informants would be given the opportunity to speak freely about their thoughts in relation to the topic. In this respect, the unstructured interviews allowed me to explore the research issues and make newer insights into the research subject. They helped me develop an understanding of the informants' ideas.

The initial part of the interviews dealt with general organisational issues to encourage the flow of the conversation, while later, the issues based on the informants' experiences would be explored. In this way, I was able to obtain an understanding of their lived experiences and how they interacted with others to carry out their projects (Corbin and Strauss, 2008).

The main data were collected by using 39 unstructured interviews through face-to-face and 20 unstructured interviews by means of Skype software via the internet. Overall, interviews were conducted with 59 informants with dissimilar organisational levels from twelve different types of company.

In this chapter, the pilot and main study interviews along with the basic observation have been described. The profiles of the pilot and main study informants have also been demonstrated. In addition, the approaches, activities, and sampling in relation to the data collection process have been explained. Furthermore, an outline of how and under what situations the data were collected has been provided.

In the following chapters (5, 6 and 7), based on the interview transcripts, the observational records, and the secondary data source, a comprehensive data analysis will be carried out in order to provide valuable research findings.

In chapter 5, an overview of the coding procedure of the data analysis will be presented.

Chapter 5: Overview of coding procedure

5.1 Introduction

In this chapter, an overview of the coding procedure of the data analysis is demonstrated. The chapter explains the process of data coding, the development of the concepts and categories, and the formation of the conceptual and practical models. The overall purpose of this chapter is to provide an outline of the findings of the research project.

The chapter first aims to describe the coding procedure of the data analysis. Then, the conceptual model is illustrated. Next, the three core categories of the conceptual model and their categories are explained. After that, the relationships between the core categories and the categories are illustrated. Afterwards, the significance of the role of leadership in the effectiveness of project managers within project-oriented organisations is explained. Subsequently, the practical model of this research project is demonstrated. Finally, a brief summary and conclusions of this chapter are presented.

5.2 Coding procedures

In this study, grounded theory, as a means of developing a theory based on the collected data, was employed in order to construct a concept-driven model (Strauss, 1995). Hence, the relevant coding system followed the structure suggested by Corbin and Strauss (2008). It was based on two levels of codes: higher and lower. Higher level codes were used to represent the main concepts that explained my interpretation of the data. However, the lower level codes were used to further explain the higher level codes. Each of these shared common properties and dimensions that would collectively fall under one resembling cluster and form a category.

Within this coding system, I used different highlighter pens and markers in order to manually code my collected data. This approach facilitates analysis of the collected data. It allowed me to generate a better conceptual understanding of the effectiveness of project managers within project-oriented organisations. However, I also used NVivo 8 to organise, manage, and store my different sources of data.

In fact, the task of coding procedure was laborious and time consuming; however, it allowed me to use all of my data to capture the informants' lived experience. It took

place immediately after each interview so as to inform the subsequent interviews. First, after each interview, I noted down the major points along with short profiles of the informants so as to see the trends of the interviews and rationalise my research findings. After that, I carefully transcribed the interviews and started to make notes for each paragraph and identify the key points. Then, I performed labelling and coding the collected data by segmenting the data through making sense of individual fragments of information (Corbin and Strauss, 2008).

I labelled each paragraph of the transcript in order to use any excerpt with its accurate reference (relevant informant). So, each excerpt was labelled by the use of a specific coding system including the informant's type of company, the informant's organisational level, and the paragraph number of the interview's transcript. For instance, in the code (Construction, S 1, 10), construction refers to the type of company, S denotes the strategic management organisational level (i.e. S, T, and O mean strategic, tactical, and operational management, see Figure 4.1) and number 1 specifies the particular informant (i.e. there is more than one informant with the same organisational level in each type of company, see Table 4.5), and 10 signifies the paragraph number 10 of the interview's transcript. This labelling system enabled me to analyse the informants' profiles (Corbin and Strauss, 2008).

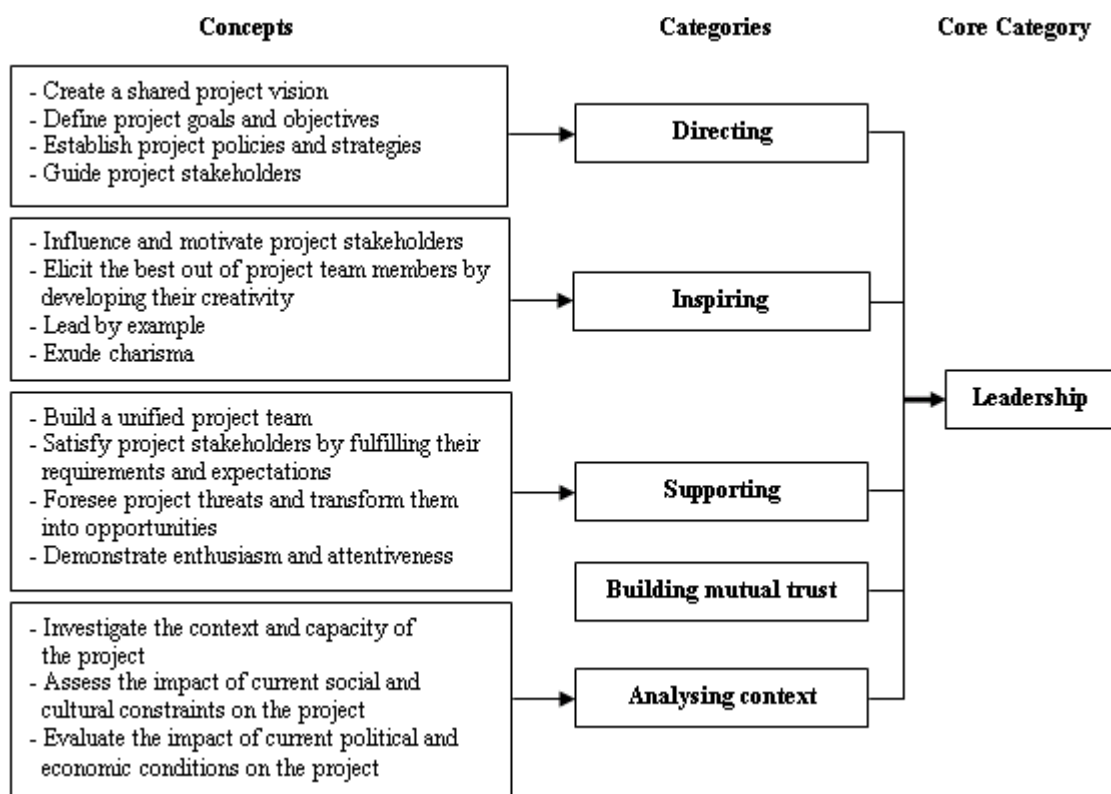
I also created codes within each paragraph by focusing on the key points so as to identify the concepts first. After that, I began memoing in order to reflect my view into the relevant paragraph. Thus, I constructed the various conceptual labels that could reflect my interpretations and inform the subsequent concepts (Corbin and Strauss, 2008). Each of these concepts, as Bazeley (2009) notes, can be identified by constantly comparing and contrasting them with those already identified in order to establish relationships. In addition, I analysed the codes through interpretation of the symbolic meanings in order to uncover the deeper meaning and provide a rationale for informants' statements (Berg, 2009). This interpretation allowed me to realise the contexts and interactions among the actors more deeply (Corbin and Strauss, 2008). It also helped me comprehend the data, discover rational relationships, and condense the data (Miles and Huberman, 1994).

I developed the concepts into the categories (i.e. open coding process) and established their relationships (i.e. axial coding process) to organise and integrate them so as to generate the conceptual model (i.e. selective coding process) (Corbin and Strauss, 2008;

Saunders et al., 2012). This interactive process allowed me to deeply explore the data, gain a broader understating of the subject under investigation, and identify fresh meaning. It enabled me to create a comprehensive interpretative account of the informants' statements, understand the data, and develop the concepts and categories. It also helped me produce new sets of questions for subsequent interviews, reduce the data, and reach the point of saturation.

Throughout this process, I fitted the codes into the developed conceptual understanding reflecting my accurate interpretation of the data (Strauss, 1995). The overall purpose of this process was to generate the concepts that could clearly address the research domain and organise them under separate categories. Accordingly, the concepts repeated more than others among the informants were considered as the higher level concepts, and I reduced them to a few main categories by linking their dimensions and properties (Corbin and Strauss, 2008). See Figure 5.1.

Figure 5.1: The process of developing core categories



Source: Field work

Thus, the integrated concepts as categories were interpreted in terms of their links to the core categories (Corbin and Strauss, 2008). These different levels of concepts provide a better understanding of the context under study and led me to construct the conceptual model that would be distinct from mainstream thinking (Strauss, 1995).

I used a system of conceptual descriptions, along with the various tables and figures, in order to explain the understood meaning of each construct (i.e. concept, category, and core category) of the conceptual model and their relationships. This could enhance the rigour in analysing the collected data.

I also showed the conceptual model to the thirty-five research informants in order to ensure that they would share their knowledge and experience. All the informants mentioned that the conceptual model was true and would be valuable and helpful.

Briefly, first, I created codes by focusing on the key points of the collected data through constant comparisons in order to identify the concepts. Next, I developed the concepts with similar contents (i.e. dimensions and properties) into the categories. Then, I developed the categories with similar contents into the core categories. Finally, I conceptually linked the categories to the core categories in order to construct the conceptual model (Corbin and Strauss, 2008).

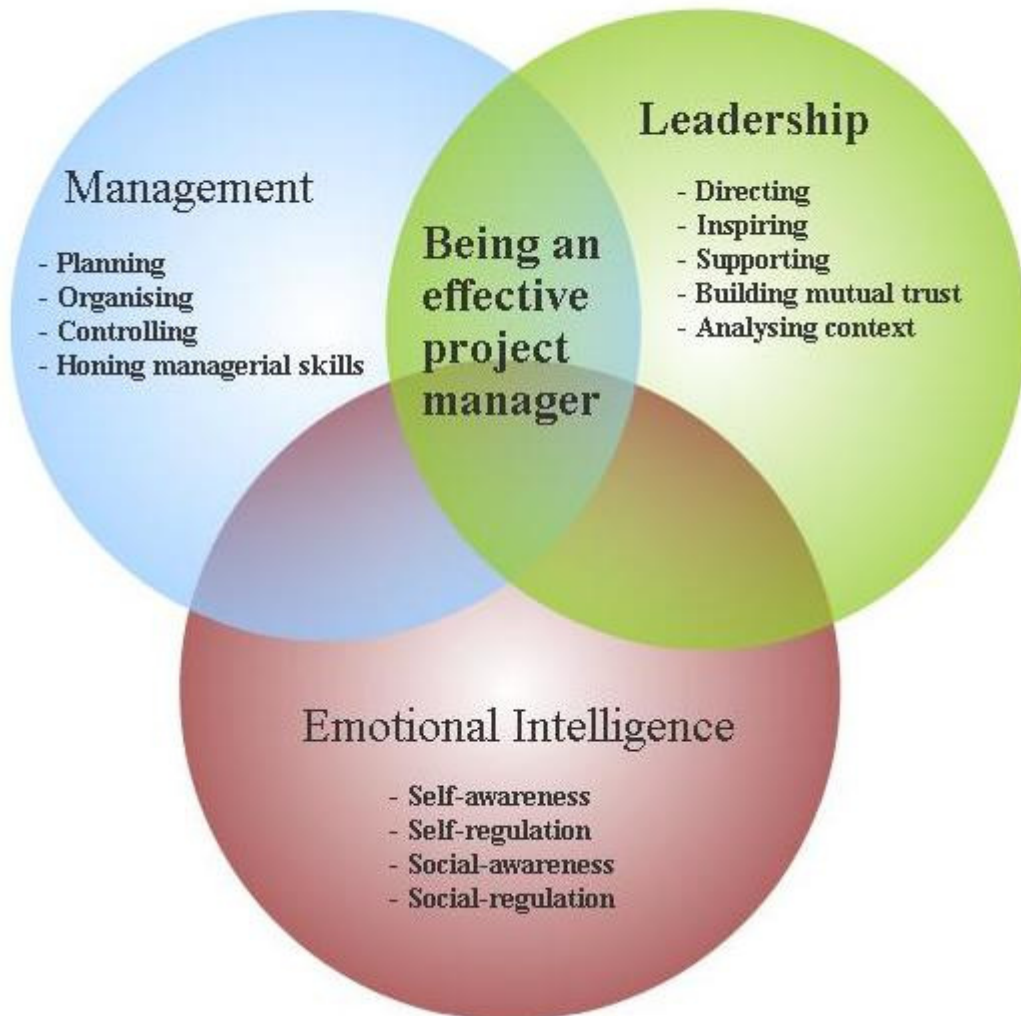
5.3 The conceptual model

I generated the conceptual model: *Leadership: Being an effective project manager*, based on the various levels of the concepts derived from the collected data. I constructed this model by developing the different constructs (core categories, categories, and concepts).

The conceptual model is the combination of three core categories with different categories and concepts. The leadership core category contains five categories: directing, inspiring, supporting, building mutual trust, and analysing context; the management core category includes four categories: planning, organising, controlling, and honing managerial skills; and the emotional intelligence core category involves four categories: self-awareness, self-regulation, social-awareness, and social-regulation. See Figure 5.2.

Figure 5.2: The core categories and categories of the conceptual model

Leadership: Being an effective project manager



Source: Field work

Moreover, the categories of the leadership core category contain fifteen concepts; the categories of the management core category include twelve concepts, and the categories of the emotional intelligence core category involve eleven concepts.

Overall, the conceptual model is the combination of the various constructs: thirty-eight concepts, thirteen categories, and three core categories. See Table 5.1.

In the following subsections, explanations of the core categories and the categories of the conceptual model are presented.

Table 5.1: The conceptual model

LEADERSHIP: BEING AN EFFECTIVE PROJECT MANAGER

- **Leadership**
 - (1) **Directing**
 - (a) Create a shared project vision
 - (b) Define project goals and objectives
 - (c) Establish project policies and strategies
 - (d) Guide project stakeholders
 - (2) **Inspiring**
 - (a) Influence and motivate project stakeholders
 - (b) Elicit the best out of project team members by developing their creativity
 - (c) Lead by example
 - (d) Exude charisma
 - (3) **Supporting**
 - (a) Build a unified project team
 - (b) Satisfy project stakeholders by fulfilling their requirements and expectations
 - (c) Foresee project threats and transform them into opportunities
 - (d) Demonstrate enthusiasm and attentiveness
 - (4) **Building mutual trust**
 - (5) **Analysing context**
 - (a) Investigate the context and capacity of the project
 - (b) Assess the impact of current social and cultural constraints on the project
 - (c) Evaluate the impact of current political and economic conditions on the project

 - **Management**
 - (1) **Planning**
 - (a) Set project plans and schedules
 - (b) Budget and allocate project resources
 - (c) Define project tasks and assign them to the right project team members
 - (2) **Organising**
 - (a) Establish appropriate project incentive schemes
 - (b) Use appropriate project management tools and techniques
 - (c) Recruit and train competent individuals
 - (3) **Controlling**
 - (a) Monitor and troubleshoot project tasks proactively
 - (b) Develop a self-managed project team
 - (c) Meet project performance and purpose
 - (4) **Honing managerial skills**
 - (a) Enhance project knowledge and experience
 - (b) Improve interpersonal communication skills
 - (c) Strengthen decision making abilities

 - **Emotional intelligence**
 - (1) **Self-awareness**
 - (a) Perform self-assessment
 - (b) Build self-confidence
 - (2) **Self-regulation**
 - (a) Maintain self-control
 - (b) Evoke conscientiousness
 - (c) Demonstrate high adaptability
 - (d) Exhibit high innovation
 - (e) Keep self-motivated
 - (f) Exude optimism
 - (3) **Social-awareness**
 - (a) Promote intuition and empathy towards project stakeholders
 - (4) **Social-regulation**
 - (a) Build cooperation and teamwork among project team members
 - (b) Resolve project conflicts and disputes
-

Source: Field work

5.3.1 Leadership

Leadership is the most significant construct within the conceptual model. This core category is the combination of five categories: directing, inspiring, supporting, building mutual trust, and analysing context; and fifteen concepts. The directing category, inspiring category and supporting category all have four concepts each; the building mutual trust category has no concept; and finally, the analysing context category embraces three concepts.

Within project-oriented organisations, the matter of leadership is one of the most significant concerns for project managers since organisational projects are considerably affected by leadership due to its great impact on the procedures of project tasks and the relationship between project managers and project stakeholders.

In fact, leadership assists project managers to gather, influence, and guide their members in order to achieve project goals. It enables them to deal with their project stakeholders, handle their project tasks, and cope with projects' difficulties. It also facilitates a wide range of activities, services, and opportunities to carry out their projects more effectively.

The research informants emphasised that if project managers wish to successfully accomplish their projects, they must pay more attention to the different aspects of leadership such as directing, inspiring, supporting, building mutual trust and analysing context. Hence, they implied that project managers can differentiate themselves from other typical project managers by developing their leadership. For instance, the tactical manager (T 1) of the banking and insurance company stated that:

“In my opinion leadership is management in addition to managing hearts. The leader of an organisation’s project should have an influence on the hearts of his team members besides his management. He should in fact have the ability to influence people, make them excited and be able to plan forward and make decisions. I mean most emphasis is on mental and social abilities of people (Banking & Insurance, T 1, 12).”

The tactical manager (T 2) of the advertising and marketing company also stated that:

“My leadership style changes from project task to task, individual to individual, you have to understand people, how they go, the most important part is understanding your team as the project leader, so you need to know what makes them quick, where to switch and help them to accomplish the goal that you are searching for; projects are not programmed, it can’t work like that to give them the orders and then just go; you need to be a little bit more human, so leadership is very important in my opinion (Advertising & Marketing, T 2, 10).”

In addition, the strategic manager (S 3) of the computer company stated that:

“Leadership is very important, especially, when it comes to making people work, inspiring them as to why they should work, why what we are doing is within the strategy of the project and why it is important to stick to the time-lines, these are really important aspects of the project (Computer, S 3, 3).”

Furthermore, the strategic manager (S 2) of the management consulting company stated that:

“I think leadership is very important, depending on the level of that project manager and the type of project, but definitely leadership is what makes the project team go forward and performing more than what is really on the page, which is required to truly establish leadership. I would say if the project manager is a leader that makes the working area more sustainable and more productive (Management consulting, S 2, 2).”

Moreover, the tactical manager of the automotive company stated that:

“I think there is a difference between leadership and management. I see a difference between a manager and a commander, in my opinion a project leader is like a decisive commander that

commands, but in management this commandership is weaker. Maybe there would be less need of consultation in leadership and the project leader's tastes would play a more important role. But in management a collection of opinions is important. This is my personal opinion and it might be different in books (Automotive, T, 15)."

Briefly, leadership plays a very significant role in the effectiveness of project managers within project-oriented organisations.

In the following subsections, the five categories of the leadership core category are explained.

5.3.1.1 Directing

Directing is the first category of the leadership core category. It consists of four concepts: create a shared project vision, define project goals and objectives, establish project policies and strategies, and guide project stakeholders.

Directing is one of the eminent aspects of leadership for the effectiveness of project managers within project-oriented organisations. It is mainly concerned with guiding a project from the start point all the way through to its completion. It encompasses determining a project vision and objectives, delineating project strategies, and conducting project stakeholders. Therefore, it is necessary for project managers to show the direction of projects to their project stakeholders, particularly team members, so as to achieve the common goal successfully.

The research informants emphasised that the direction of projects should be established by project managers based on the projects' purpose, in order to make sure that projects are on the right track. They also stressed that project managers need to know how to move their projects towards the big image of the project's future which they have in mind and thus to ensure that all their stakeholders, particularly team members, work towards this image as the vision and ultimate purpose. Hence, the informants implied that effective project managers are those who can achieve their project vision through their accurate direction. For instance, the strategic manager (S 1) of the business and enterprise company stated that:

“One aspect of leadership is to know how to get to the vision point from the first step, and directing the project accurately to the goal; this is more difficult than having a vision (Business & Enterprise, S 1, 2).”

The strategic manager (S 3) of the business and enterprise company also stated that:

“I think the key; the core element of leadership is to make the project team feel the direction. For all projects there’s an element that is the direction of the project and there’s someone out there to help and give them instructions, but at the same time a good leader will also bring up the end. I think that’s one of the elements of a good leader (Business & Enterprise, S 3, 4).”

Moreover, the tactical manager (T 1) of the business and enterprise company stated that:

“I think leadership needs to be quite liquid, that’s my view. I think leadership should be a liquid process, in the sense that you know, if you have a team, they have different expertise, sometimes it might be extremely technical , sometimes it might be very good time management, so it should be liquid in that nobody feels that they are inferior to someone else. I think the main role of the leader is to provide some directionality and then let others just manage it without overly micro-managing everything. I think that’s the role of a good leader, someone, who provides some guidance, who sort of helps move things forward (Business & Enterprise, T 1, 5).”

5.3.1.2 Inspiring

Inspiring is the second category of the leadership core category. It consists of four concepts: influence and motivate project stakeholders, elicit the best out of project team members by developing their creativity, lead by example, and exude charisma.

Inspiring is one of the remarkable aspects of leadership for the effectiveness of project managers within project-oriented organisations. It mainly refers to influencing project team members, developing them, and leading them by example. It is also chiefly used to

build more coherent project teams, establish profound trust and transparency among stakeholders, and obtain the best out of team members. So, it is necessary for project managers to inspire their team members so as to achieve more valuable results throughout their projects.

The research informants emphasised that project managers need to know how to approach their project team members to influence and motivate them effectively in order to get the best out of them. They asserted that if a project manager does not inspire his or her project stakeholders, he or she will not be able to accomplish the project effectively. Hence, they implied that one of the most significant differences between effective project managers and typical project managers is inspiring the project stakeholders. For instance, the operational manager of the management consulting company stated that:

“A project manager is somebody who executes a certain list of actions; a project manager in my view is somebody who delegates project tasks to project team members, but a project leader is somebody, who inspires, in my view a project leader is somebody who doesn’t get too involved in details. A project manager and a project leader could be one and the same, but someone who is leading a project is someone who inspires the others in a project to come together and to deliver more than they would have done individually (Management consulting, O, 8).”

The tactical manager (T 5) of the management consulting company also stated that:

“It’s very important that project managers know how to manage authority in terms of their interpersonal skills. They should also have, you know, what I call sort of, you know, I wouldn’t call it manipulation, but I would say being good at getting in their way, being able to convince people, the power of persuasion, the power of motivation is very important, you know, because a lot of the time they need to fire-fight, they need to fix things (Management consulting, T 5, 4).”

Moreover, the strategic manager (S 4) of the construction company stated that:

“I think one of the leader’s factors is good talking, especially the power to influence. The power of influence should be a quality of every project leader, if you have five team members, and if someday you want to gather them and lecture for them, you can transform your ideas and have the power for it. The effect on people in any level of management should be considered, and certainly if there was a much larger system, there is a need for more power to influence; now this power of influence has different levels, such as dressing, looking at people, speaking to people, etc. (Construction, S 4, 5).”

5.3.1.3 Supporting

Supporting is the third category of the leadership core category. It includes four concepts: build a unified project team, satisfy project stakeholders by fulfilling their requirements and expectations, foresee project threats and transform them into opportunities, and demonstrate enthusiasm and attentiveness.

Supporting is one of the key aspects of leadership for the effectiveness of project managers within project-oriented organisations. It is mainly concerned with setting up a coherent project team, satisfying project team members, and anticipating problems and hurdles of the project. Thus, it is essential for project managers to support their team members so as to enable them to work on project tasks and provide deliverables successfully.

The research informants emphasised that project managers need to know how to approach their project team members to assist them in performing their project tasks in order to get the best outcomes from their works and efforts. They asserted that if a project manager does not adequately support his or her team members throughout the project, he or she will not be able to accomplish the project effectively. Hence, they implied that effective project managers are those who act in the way that team members feel comfortable, safe, and secure throughout projects. For instance, the strategic manager (S 1) of the automotive company stated that:

“Both the business and the leadership should be human oriented; meaning all the goals and visions should benefit humans. Therefore you have some employees (the human resource topic) and some customers, so for them you need a goal. This is what the whole community is, nothing more. You are giving services and a kind of product and these should all be from humans and for humans. Understanding this, you should support them, because if you don’t, your organisation won’t beat the competitors. If you don’t support your project team members, they won’t do their best professional work for you or won’t give you the best advice and if you don’t support your customers, they will buy less from you or use your services less often (Automotive, S 1, 3).”

The strategic manager (S 1) of the construction company also stated that:

“If you read management books and articles, you’ll learn that the further we go, the more important become people’s needs. This means the needs that the human working resources of that system have. In the past there wasn’t much difference between the machinery working resources and the human working resources for the leaders, but now the subject of human needs has become too important. They feel that in order to become successful, they will need to pay more attention to this subject. In fact the human resources should be in a situation that they would like to put more effort into that work and maintain the company’s advantages. So it is so important for a project leader to satisfy team members, clients, and other stakeholders (Construction, S 1, 11).”

Moreover, the strategic manager (S 1) of the telecommunications company stated that:

“Well, I mean especially in complex projects, in which you don’t only deal with your client or the organisation, but you also have other stakeholders and they affect the project a lot, for example; if you are going to build a highway in a city, then you obviously affect the life of people living nearby, so in this case you need

maybe other, let's say, abilities like crisis management, like the ability to learn about the situation you need to work, being able to communicate with the language of the people to understand their needs, so you need to study about the problems or their wishes about this project, you need to support them (Telecommunications, S 1, 7)."

5.3.1.4 Building mutual trust

Building mutual trust is the fourth category of the leadership core category, however it has no concept.

Trust is one of the most significant aspects of leadership for the effectiveness of project managers within project-oriented organisations. It is a vital element for members of any type of project team with a shared vision and common goal; as it is associated with trustworthiness, integrity, and transparency of project team members, especially project managers.

The research informants emphasised that project tasks cannot proceed without establishing trust within a project team. They asserted that if team members of a project do not trust each other, they will not be able to work together effectively; in addition, if they do not trust their project manager, they will not be able to perform their tasks effectively; on the other hand, if their project manager does not trust them, he or she will not be able to assign project tasks to them.

The research informants also stressed that project managers need to develop a sense of trust among their team members to increase the social coherence and solidarity within their project team; as this solidarity can enhance the performance of project team members and quality of project outcomes. They indicated that building mutual trust enables project managers to provide more authority and freedom for their team members in order to innovate, produce, and work together more effectively throughout projects. Hence, they implied that trust is one of the most important factors in developing an effective project manager. For instance, the strategic manager (S 1) of the banking and insurance company stated that:

"All the relationships are dependent on trust, so without it a project manager can't get the project done. And that's what

happens when project team members don't trust each other: they don't share information, they don't allow others to just get on with the work, and they do too much work themselves (Banking & Insurance, S 1, 10)."

The tactical manager (T 2) of the paper manufacturing company also stated that:

"I care for everyone in my work, but there are different ways of paying attention to different members, what is important is creating the trust. If there is trust, the members would mention the mistakes they might have made themselves, I never ask a member why he has made such and such a mistake; instead I look for the reason that has allowed that mistake to happen (Paper manufacturing, T 2, 3)."

Furthermore, the strategic manager (S 1) of the business and enterprise company stated that:

"Trust is obviously very important, because the work wouldn't proceed without it. A project leader or manager could decide on salaries, he could discipline etc... but there would come a point when he couldn't do all the things alone so he would have to distribute the tasks between others (Business & Enterprise, S 1, 25)."

Moreover, the strategic manager (S 4) of the business and enterprise company stated that:

"In order to deliver trust in the project, you need to develop transparency. What I mean is you need to give stakeholders a view, a correct view of what is going on, because the stakeholders may need to make some decisions as well. However, this trust is one of the most difficult things to do because it's based on the personality traits of the project manager (Business & Enterprise, S 4, 8)."

5.3.1.5 Analysing context

Analysing context is the fifth and last category of the leadership core category. It contains three concepts: investigate the context and capacity of the project, assess the impact of current social and cultural constraints on the project, and evaluate the impact of current political and economic conditions on the project.

Analysing context is one of the key aspects of leadership for the effectiveness of project managers within project-oriented organisations. It is associated with context and capacity of projects, relevant social and cultural constraints, and relevant political and economic conditions. Generally, it refers to some proactive and reactive activities which can prevent projects from collapsing, overturning, and failing. However, in some types of projects such as construction, this is more significant than in others.

The research informants emphasised that project managers need to spend more time analysing the circumstances of their projects as they can seriously affect project initiation, execution, and outcomes. They also stressed that one of the major differences between leading projects and managing projects is related to the matter of analysing context. Hence, they implied that if project managers wished to evolve from ordinary to effective project managers, they would have to pay more careful attention to analysing the context of their projects. For instance, the strategic manager (S 1) of the business and enterprise company stated that:

“A project manager should know the project’s context, circumstances, and financial situation, so as to be able to feel the problems of that project (Business & Enterprise, S 1, 12).”

The tactical manager (T 4) of the advertising and marketing company also stated that:

“I guess the success of a project will depend on what the project is; so success is related to the context of the project (Advertising & Marketing, T 4, 5).”

Moreover, the strategic manager (S 2) of the construction company stated that:

“One of the main principles of the project management is to analyse the context of the project. This should be done with pre-studies, how long it takes to equip the workroom, preparing the

maps, and so on. It is important for a project manager to supply essential materials, accessories and equipment for his team members in a timely manner (Construction, S 2, 5)."

5.3.2 Management

Management is another core category of the conceptual model. It is the combination of four categories: planning, organising, controlling, and honing managerial skills; and twelve concepts. The planning category, organising category, controlling category and honing managerial skills category all have three concepts each.

Within project-oriented organisations, the matter of management is one of the most important concerns for project managers since organisational projects are significantly affected by management due to its huge impact on the procedures of project tasks.

The research informants asserted that management which is concerned with planning, organising, controlling, and honing managerial skills can assist project managers in performing their projects effectively. They emphasised that management enables project managers to accomplish their projects on schedule, within budget, and with high quality standards; as it provides a wide range of facilities for them to execute their project tasks more effectively. Thus, they implied that project managers need to focus more on their management in order to develop themselves into effective project managers. For instance, the strategic manager (S 3) of the business and enterprise company stated that:

"It is very important for project managers of organisations to understand the managerial issues: cost associated with each activity, strengths and weaknesses and risks; they should make sure that project team members understand their roles and responsibilities (Business & Enterprise, S 3, 2)."

The strategic manager (S 2) of the trading company also stated that:

"The management mechanism is inductive, however leadership is associative and, in some cases, it's even operational. Management is like a spring: a resource; some people believe that leadership is higher than management, but in my opinion it's management that brings up the leadership (Trading, S 2, 16)."

Moreover, the tactical manager (T 1) of the banking and insurance company stated that:

“One of the most important duties of the project managers of organisations is setting schedules and plans; they should know their managing and controlling roles and should organise them (Banking & Insurance, T 1, 2).”

Briefly, management plays a significant role in the effectiveness of project managers within project-oriented organisations.

In the following subsections, the four categories of the management core category are explained.

5.3.2.1 Planning

Planning is the first category of the management core category. It includes three concepts: set project plans and schedules, budget and allocate project resources, and define project tasks and assign them to the right project team members.

Planning is one of the eminent aspects of management for the effectiveness of project managers within project-oriented organisations. It refers to making project plans, allocating project resources, and assigning project tasks to team members.

The research informants emphasised that each task should be ascertained and included in the project schedule by project managers at the planning stage of their projects. They stressed that project managers need to design their plans precisely and follow them accurately in order to be able to achieve their project goals successfully. They asserted that if project managers do not spend enough time planning, they will not be able to finish their projects in a timely manner. Thus, they implied that in order to be effective, project managers need to make an appropriate plan which can cover all tasks, deliverables, and milestones throughout their projects. For instance, the tactical manager (T 3) of the management consulting company stated that:

“For planning, it is important to use the right resource planning and set the right achievable target for the whole project. So the most important issue is choosing the right task and members for that task (Management consulting, T 3, 4).”

The strategic manager (S 2) of the trading company also stated that:

“The higher you reach, the more fragile you become. A project manager shouldn’t make mistakes at the beginning, he should plan 8 months and work 4 months, not work 8 months and be miserable for 4 months; accordingly, he should first make plans before carrying out the project (Trading, S 2, 9).”

Moreover, the strategic manager (S 3) of the management consulting company stated that:

“I think a project manager should plan to do the project on time, on budget, and to meet or exceed expectations. I mean he needs a plan to accomplish the project within a certain budget and within a certain time (Management consulting, S 3, 6).”

5.3.2.2 Organising

Organising is the second category of the management core category. It consists of three concepts: establish appropriate project incentive schemes, use appropriate project management tools and techniques, and recruit and train competent individuals.

Organising is one of the significant aspects of management for the effectiveness of project managers within project-oriented organisations. It is mainly concerned with systematising projects, running and administering project tasks, and recruiting and staffing project team members.

The research informants emphasised that organising should be carefully considered by project managers as it can seriously affect the procedures of project tasks. They asserted that if project managers do not organise their projects effectively, they will not be able to accomplish their projects successfully. They also declared that project managers should establish an accurate incentive system for their project team members; apply appropriate tools and approaches to their projects; adopt a proper recruitment system for their projects; and provide suitable training courses, brainstorming classes, and a participative working environment. Thus, they implied that in order to be effective, project managers need to organise various activities accurately. For instance, the strategic manager (S 1) of the trading company stated that:

“Project manager means someone who is able to manage groups of people in his team or community. There are several groups in each community and when we are talking about a manager; it means someone who is organising a number of these groups and their tasks (Trading, S 1, 1).”

The tactical manager (T 2) of the banking and insurance company also stated that:

“I think organising as the key element of management is essential for delegating project tasks. I think organising means making sure you delegate the right jobs to the right people and making sure it’s the most effective way of doing something (Banking & Insurance, T 2, 1).”

Moreover, the strategic manager (S 2) of the telecommunications company stated that:

“Organising people is so important. The project manager requires organisation to engage and involve people in such a way that even if it's not a hundred percent exactly what he is planning, they are still moving in the right direction (Telecommunications, S 2, 9).”

5.3.2.3 Controlling

Controlling is the third category of the management core category. It encompasses three concepts: monitor and troubleshoot project tasks proactively, develop a self-managed project team, and meet project performance and purpose.

Controlling is one of the important aspects of management for the effectiveness of project managers within project-oriented organisations. It refers to proactively monitoring project tasks, allowing team members to self-manage their works, and reaching an acceptable level of project performance.

The research informants asserted that controlling should be carefully considered by project managers as it can impact enormously on project outcomes. They emphasised that project managers need to know how to handle their project works and make a balance between taking greater control over their team members and giving them more freedom and authority. They also stressed that project managers need to make sure that each member of their project team is accountable, has a clear sense of his or her role,

and contributes to projects. Thus, they implied that in order to be effective, project managers should achieve the high level quality outcomes through constantly controlling all works, individuals, and deliverables throughout projects. For instance, the strategic manager (S 2) of the construction company stated that:

“If we didn’t have continuous supervision in the procedure of the project and did the qualifying control at the end of the project, it would be useless and we would have to do everything again from the beginning (Construction, S 2, 2).”

The tactical manager (T 1) of the paper manufacturing company also stated that:

“A good project manager is someone who will supervise and control his project team members to make sure they are doing their tasks right (Paper manufacturing, T 1, 13).”

Moreover, the tactical manager of the construction company stated that:

“I had my special method in this regard and when I started the project I told myself that I trust everybody in the project, but I had regular checks in different aspects of the project, for example; I assigned the financial issues to one of my team members and I completely trusted her, but just regularly once a month or once in two weeks, I just had accidental checks to be sure that everything was going well, or I had a guy who was supposed to buy materials for the projects and again I had full trust in him , but just once or twice, in order to assure myself, when he bought the things for me, I called the seller and asked about the price to make sure that the price that the guy told me was the right price; this is everyone in my projects that I’m talking about, I rely on them all, but I don’t forget to check on them regularly (Construction, T, 13).”

5.3.2.4 Honing managerial skills

Honing managerial skills is the fourth and last category of the management core category. It contains three concepts: enhance project knowledge and experience, improve interpersonal communication skills, and strengthen decision making abilities.

Honing managerial skills is one of the key aspects of management for the effectiveness of project managers within project-oriented organisations. It refers to improving the essential set of skills needed for project managers and playing an important role in managing projects. These managerial skills were indicated differently by the research informants.

The research informants emphasised that project managers need to equip themselves with the essential managerial skills to guide their team members accurately. They stressed that project managers should attempt to evaluate their managerial potentials, identify their strengths and weaknesses, and transform the weaknesses into strengths. They also asserted that if project managers do not develop the essential managerial skills, they will not be able to obtain satisfactory results. Thus, they implied that in order to be effective, project managers need to hone managerial skills. For instance, the strategic manager (S 1) of the green energy technologies company stated that:

“If I want to name these skills as a list, I should say: know the management parameters, have academic knowledge, be able to have an appropriate relationship with his team members, be completely familiar with the market of the project he is working with, and experience (Green energy technologies, S 1, 1).”

The tactical manager (T 1) of the banking and insurance company also stated that:

“I think a project manager should first have control over managing rules; he should have knowledge and experience if he wants to be successful, he should understand his subordinates and have a professional and technical relationship with them. There are 5-6 characteristics for a project manager that are important to have at the best level: (1) proficiency, (2) experience, (3) managing roles, (4) being moral oriented (ethic values), and (5) individual and social proficiencies; these managerial skills are very important in my opinion (Banking & Insurance, T 1, 2).”

Moreover, the strategic manager (S 2) of the green energy technologies company stated that:

“I think a project manager needs to have experience. He should have discipline, be sharp, and be knowledgeable (Green energy technologies, S 2, 2).”

5.3.3 Emotional intelligence

Emotional intelligence is the other core category of the conceptual model. It is the combination of four categories: self-awareness, self-regulation, social-awareness, and social-regulation. The self-awareness category contains two concepts; self-regulation category encompasses six concepts; social-awareness category entails one concept; and social-regulation category involves two concepts.

Within project-oriented organisations, the matter of emotional intelligence is one of the most important concerns for project managers since organisational projects are seriously affected by emotional intelligence due to its great impact on the thoughts, behaviours, words and decisions of project managers.

In fact, emotional intelligence is the set of competencies (e.g. self-awareness, self-regulation, social-awareness, and social-regulation) that assists project managers to act and react more effectively during their projects. It enables them to better understand their own feelings, identify their own strengths and weaknesses, and recognise their own views. It also aids them to better control their own emotions, handle their own difficulties, and induce their own creativities. On the other hand, it enables them to better appreciate their project stakeholders' feelings, realise their potencies and flaws, and recognise their viewpoints. It also helps them better deal with their project stakeholders' emotions, cope with their troubles, and build their sense of cooperation.

The research informants emphasised that project managers need emotional intelligence as it can facilitate a broad range of self and social understanding development for them to communicate more effectively with their project stakeholders, particularly team members, and thus to enhance collaboration and teamwork. Hence, they implied that emotional intelligence assists project managers to evolve from typical project managers to emotionally intelligent, effective project managers. For example, the strategic manager (S 1) of the computer company expressed that:

“Effective project managers are not those of higher grades or higher IQ, effective ones are those with higher emotional intelligence (Computer, S 1, 11).”

The tactical manager (T 1) of the business and enterprise company also expressed that:

“I think if you want to be a true project leader you need to have emotional intelligence; so it comes back to my point if members are not performing well, you need to kind of figure out what could be the reasons and it’s not because they’re not intelligent, it could be that they are having issues at home, they might have financial problems and so on, and having that sense by just speaking to them or going for a coffee , those things you know as a leader are very important key factors, because otherwise you will be seen as an insensitive sort of autocrat and those things in the long run wouldn’t help anyone, but instead you would have the respect of your team members (Business & Enterprise, T 1, 6).”

Moreover, the strategic manager (S 2) of the automotive company expressed that:

“One of the success factors for a project leader could be self-confidence; in fact the ability to do the job is enjoying the work you are doing, now compare how the quality of a work that was done with joy could be different from a job that was done due to duty; the first one doesn’t need supervising and that lowers the costs (Automotive, S 2, 20).”

Briefly, emotional intelligence plays a key role in the effectiveness of project managers within project-oriented organisations.

In the following subsections, the four categories of the emotional intelligence core category are explained.

5.3.3.1 Self-awareness

Self-awareness is the first category of the emotional intelligence core category. It encompasses two concepts: perform self-assessment and build self-confidence.

Self-awareness is one of the key facets of emotional intelligence for the effectiveness of project managers within project-oriented organisations. It is the personal ability of project managers which is related to understanding their own interior conditions through performing self-assessments and building self-confidence.

The research informants emphasised that project managers need to appreciate themselves in order to be able to better decide throughout their projects. They also asserted that if project managers know themselves very well and understand their own emotions, weaknesses, and strengths accurately; then they will be able to carry out their projects more effectively. Hence, they implied that in order to be effective, project managers need to recognise themselves before knowing and communicating with project stakeholders, as their self-awareness can indirectly influence their relationships with others. For example, the strategic manager (S 1) of the computer company expressed that:

“A project manager should know himself and be able to control his emotions. He should know his own characters, emotions, motivations and why he is working, and then the next step would be knowing others and their relationships (Computer, S 1, 5).”

The strategic manager (S 1) of the construction company also expressed that:

“A project manager should know himself; know his abilities to do the job, even if he doesn’t know anything of the job, he should spend enough energy on gaining the sufficient information on that subject (Construction, S 1, 4).”

Moreover, the strategic manager (S 2) of the banking and insurance company expressed that:

“A project manager should know himself and know how to keep himself to the limits as much as possible, and know also where he has to be rigid. I think these are the key things (Banking & Insurance, S 2, 2).”

5.3.3.2 Self-regulation

Self-regulation is the second category of the emotional intelligence core category. It consists of six concepts: maintain self-control, evoke conscientiousness, demonstrate high adaptability, exhibit high innovation, keep self-motivated, and exude optimism.

Self-regulation is one of the significant facets of emotional intelligence for the effectiveness of project managers within project-oriented organisations. It is the personal ability of project managers which is related to considering patience, conscientiousness, adaptability, innovation, motivation, and optimism during their projects.

The research informants emphasised that project managers, after knowing themselves well and identifying their emotions accurately, need to regulate themselves and control their emotions. They also asserted that if project managers manage themselves well and control their feelings and concerns accurately, they will behave towards their team members more appropriately and thus better manage them. Hence, they implied that in order to be effective, project managers need to have self-regulation as there is a strong connection between managing themselves and managing project stakeholders. For example, the strategic manager (S 1) of the computer company expressed that:

“All my successful managers are those who know their emotions and have great control over them. They manage themselves well because they feel relaxed inside and have enough self-confidence (Computer, S 1, 9).”

The strategic manager (S 2) of the automotive company also expressed that:

“Stability and self satisfaction are factors such that if a project manager has them, he would become successful; however they result from self-management; if you don’t manage yourself, thus naturally your final satisfaction won’t be appreciated (Automotive, S 2, 7).”

Moreover, the strategic manager (S 1) of the business and enterprise company expressed that:

“A project leader should be a perseverant and challenging person, and at the same time he should be a little bit of a perfectionist so that he will never accept failure easily. As long as he has that image in mind and he is certain that he is sure to reach it, he will try every possible way to make it come true. He would think about it day and night and in some ways, it will become an obsession for him. Being obsessive in business is not a bad trait as he could direct this obsession in pursuit of the goal (Business & Enterprise, S 1, 6).”

5.3.3.3 Social-awareness

Social-awareness is the third category of the emotional intelligence core category. It involves only one concept: promote intuition and empathy towards project stakeholders.

Social-awareness is one of the remarkable facets of emotional intelligence for the effectiveness of project managers within project-oriented organisations. It is the particular capability of project managers which is concerned with recognising their project stakeholders’ feelings, concerns, and expectations.

The research informants emphasised that project managers need to feel, realise, and respond to their project team members’ anxieties, troubles, and demands. They also stressed that this approach can build effective communications, develop useful connections, and create accurate networks. Hence, they implied that in order to be effective, project managers should be aware of the emotional state of different groups engaged in their projects through their social-awareness. For example, the tactical manager of the trading company expressed that:

“A project manager should know the status of the project team, even the concerns of its individuals. He should be aware of the main issues and activities in his team (Trading, T, 1).”

The tactical manager (T 1) of the banking and insurance company also expressed that:

“There is a term known as “organisational wisdom” that I was working on, I realised that according to this, one of the most important factors that affects the organisations’ projects in taking the right move is intuition. This can make a project leader more effective within organisations (Banking & Insurance, T 1, 1).”

Moreover, the strategic manager (S 1) of the business and enterprise company expressed that:

“A part of the human brain is dedicated to the person’s feelings towards others when he first meets with another. Let’s put business aside and think about a friendship between two human beings. When two people talk, unconsciously, all of their characteristics are having an effect on the other. That is why people care how the other person felt or thought when he or she was listening to that specific subject they were talking about; this results in sensitivity towards other people (Business & Enterprise, S 1, 9).”

5.3.3.4 Social-regulation

Social-regulation is the fourth and last category of the emotional intelligence core category. It encompasses two concepts: build cooperation and teamwork among project team members, and resolve project conflicts and disputes.

Social-regulation is one of the important facets of emotional intelligence for the effectiveness of project managers within project-oriented organisations. It is the particular capability of project managers which is concerned with managing relationships, emotions, and concerns of their project stakeholders.

The research informants emphasised that project managers need to know how to approach their project stakeholders, particularly team members, in order to better solve their problems and fulfil their requests, desires, and expectations. They also stressed that project managers should handle the conflicts between their team members so as to enhance the solidarity and collaboration in their project teams. Hence, they implied that

in order to be effective, project managers need to manage and control project stakeholders through their social-regulation. For example, the tactical manager (T 1) of the advertising and marketing company expressed that:

“While you’re the project manager, the pressure is too much, so you should be a kind of challenging person first, also you should be able to manage relationships between people and control your relationships with others (Advertising & Marketing, T 1, 2).”

The tactical manager (T 3) of the banking and insurance company also expressed that:

“I think when you as a project manager are working in a project team, you have to have a really close relationship with others, sometimes you have to step down from your seniority and work side by side with others; this can improve the teamwork (Banking & Insurance, T 3, 6).”

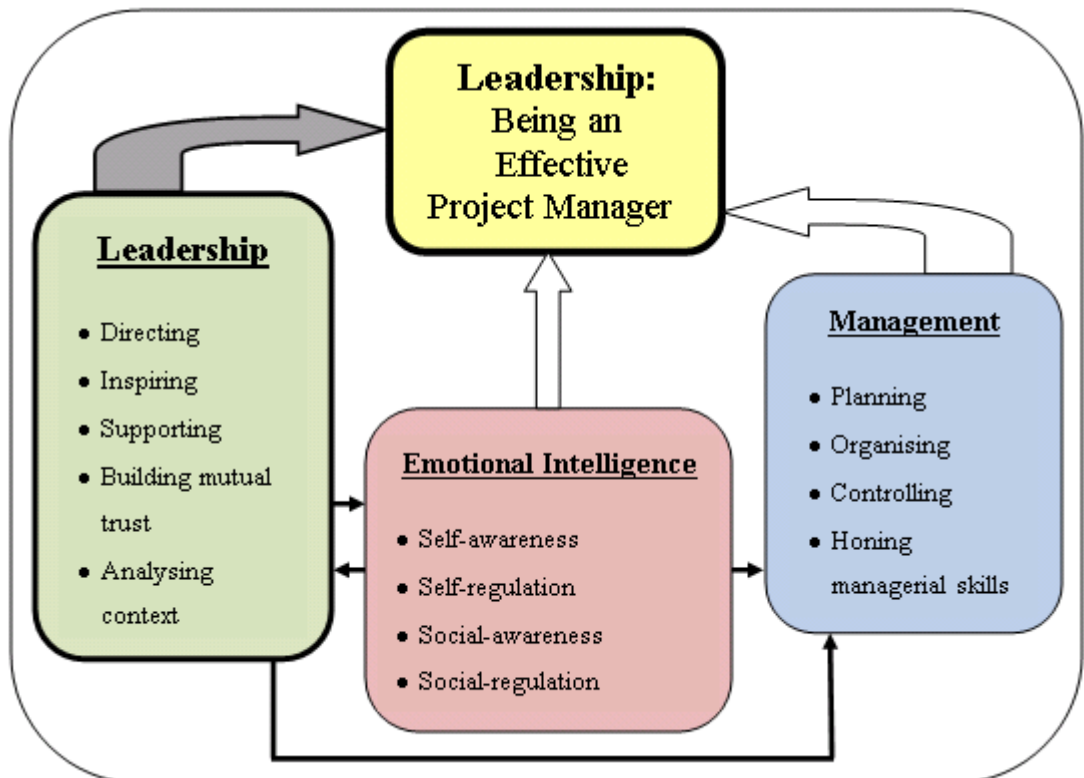
Moreover, the tactical manager (T 3) of the advertising and marketing company expressed that:

“I think project management is all about effective teamwork; it is about conflict management; it is about being able to have regular check points in which there is enough participation and engagement of the relevant groups (Advertising & Marketing, T 3, 3).”

5.4 Relationships between the constructs of the conceptual model

Based on my data analysis, I discovered the relationships between the constructs (i.e. core categories, categories, and concepts) in order to enhance understanding of the conceptual model. However, herein, only the relationships between the core categories and categories are demonstrated; the concepts and their relationships will be demonstrated in the next chapter. See Figure 5.3. In all the figures, all the path relationships are positive.

Figure 5.3: Relationships within the conceptual model



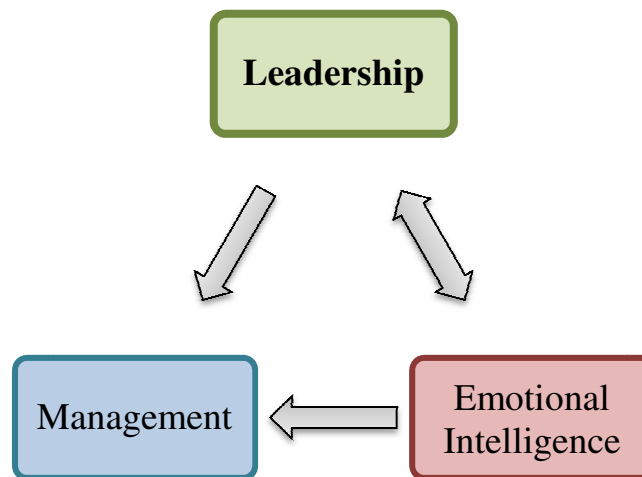
Source: Field work

This figure implies that the leadership core category, which connects with the grey arrow to the conceptual model, contributes more than others in generating the conceptual model. More detailed explanations about the relationships between the constructs of the conceptual model are presented in the following subsections.

5.4.1 Relationships between the core categories of the conceptual model

Based on my data analysis, I found that emotional intelligence can influence leadership and management; leadership can influence management and emotional intelligence; however, management cannot influence leadership and emotional intelligence. See Figure 5.4.

Figure 5.4: Relationships between the core categories



Source: Field work

Management should be established by project managers based on their leadership throughout their projects; since management is considerably affected by leadership due to its great impact on the procedures for managing project tasks. For instance, project managers need to set their project plans and schedules based on their project vision, goals and objectives, policies and strategies, stakeholders, and context of the project. In fact, project managers need to plan, organise, control, and hone their managerial skills based on their directing, inspiring, supporting, building mutual trust, and analysing context. Therefore, they need to manage their projects based on their leadership. Hence, leadership can influence management.

Emotional intelligence should also be developed by project managers based on their leadership; since project managers need to use their self and social awareness and regulation throughout their projects based on their project vision, goals, and strategies, stakeholders, level of trust, and context of the project. Hence, leadership can influence emotional intelligence.

Emotional intelligence can facilitate a broad range of self and social understanding development for managing and leading projects. For instance, promoting intuition and empathy can assist project managers in influencing and motivating their project stakeholders and training their project team members. In fact, self-awareness, self-regulation, social-awareness, and social-regulation can assist project managers in leading and managing their projects effectively. Hence, emotional intelligence can influence leadership and management.

5.4.2 Relationships between the categories of the conceptual model

Based on my data analysis, I found that all the categories of leadership can influence all the categories of management. Accordingly, directing, inspiring, supporting, building mutual trust, and analysing context can influence planning, organising, controlling, and honing managerial skills. See Figure 5.5.

I also found that all the categories of leadership can influence all the categories of emotional intelligence. Accordingly, directing, inspiring, supporting, building mutual trust, and analysing context can influence self-awareness, self-regulation, social-awareness, and social-regulation. See Figure 5.6.

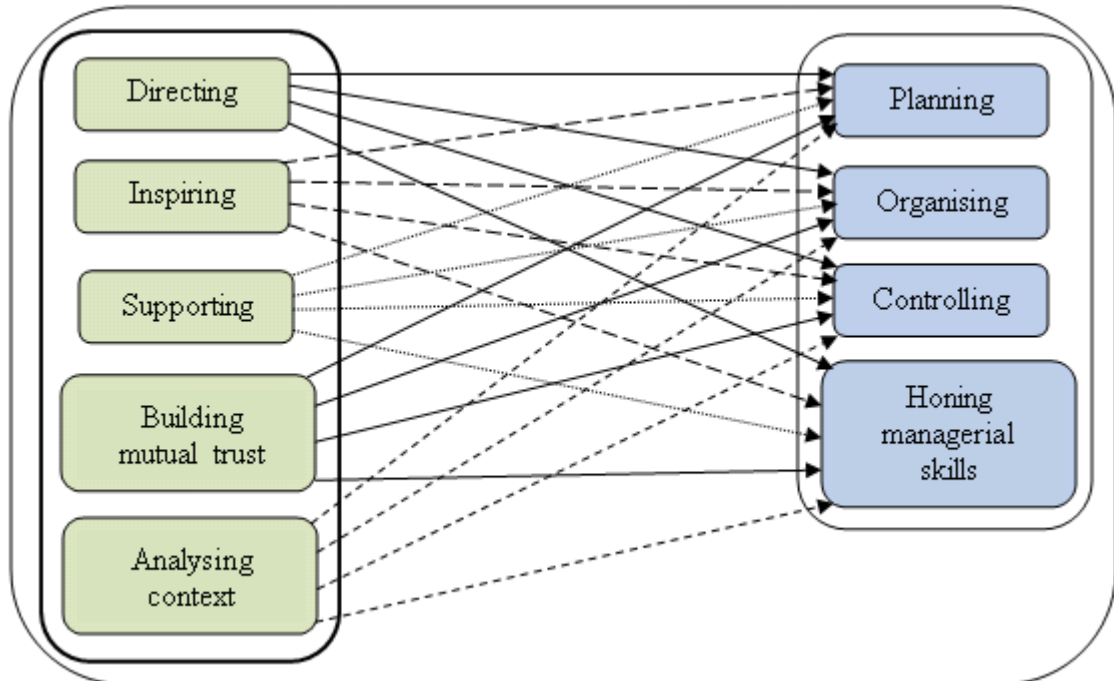
In addition, I found that all the categories of emotional intelligence can influence all the categories of leadership. Accordingly, self-awareness, self-regulation, social-awareness, and social-regulation can influence directing, inspiring, supporting, building mutual trust, and analysing context. See Figure 5.7.

Furthermore, I found that all the categories of emotional intelligence can influence all the categories of management. Accordingly, self-awareness, self-regulation, social-awareness, and social-regulation can influence planning, organising, controlling, and honing managerial skills. See Figure 5.8.

However, I found that categories of management cannot influence the categories of leadership and emotional intelligence. Accordingly, planning, organising, controlling, and honing managerial skills cannot influence directing, inspiring, supporting, building mutual trust, and analysing context as well as self-awareness, self-regulation, social-awareness, and social-regulation.

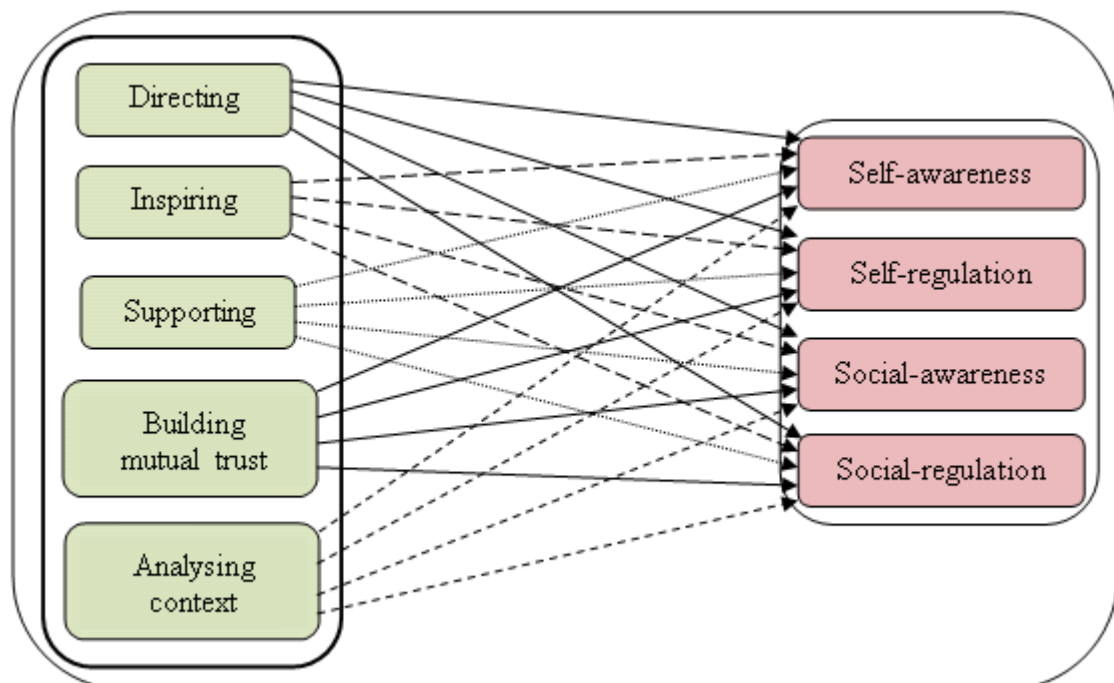
Moreover, I found that all the categories of each core category can influence each other. Accordingly, in the leadership core category, directing, inspiring, supporting, building mutual trust, and analysing context can influence each other; in the management core category, planning, organising, controlling, and honing managerial skills can influence each other; and in the emotional intelligence core category, self-awareness, self-regulation, social-awareness, and social-regulation can influence each other.

Figure 5.5: Relationships between the categories of leadership and management



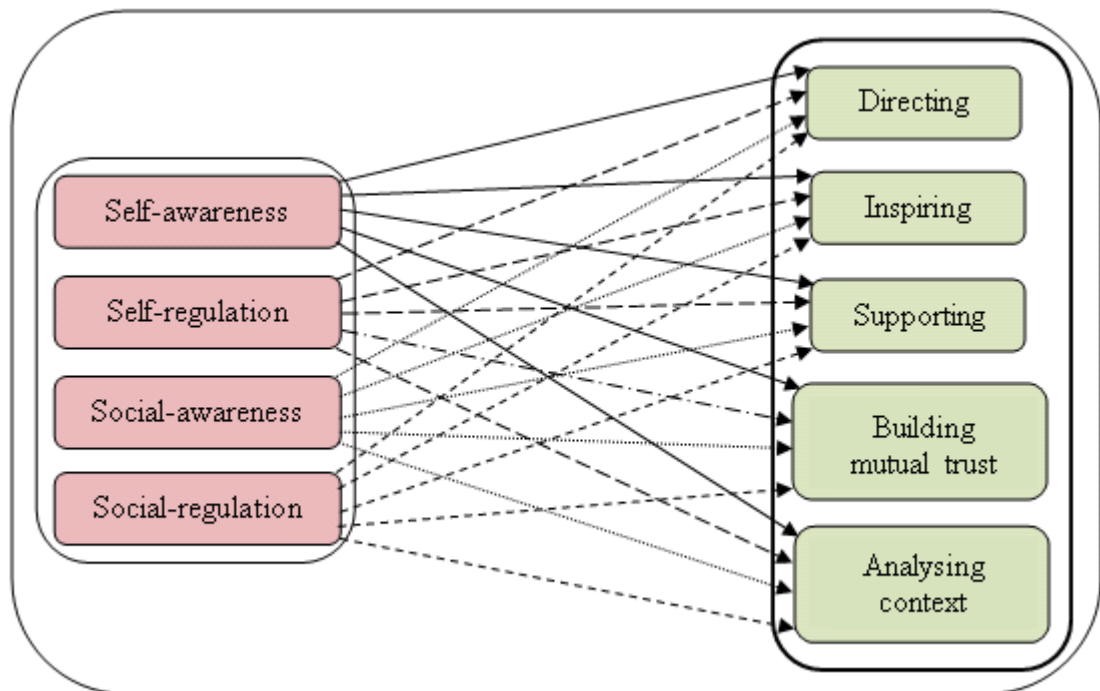
Source: Field work

Figure 5.6: Relationships between the categories of leadership and emotional intelligence



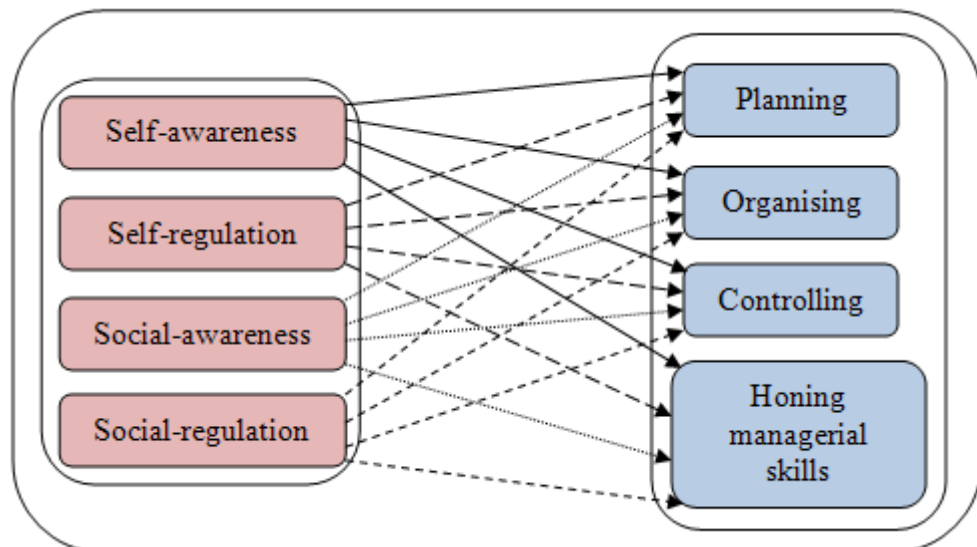
Source: Field work

Figure 5.7: Relationships between the categories of emotional intelligence and leadership



Source: Field work

Figure 5.8: Relationships between the categories of emotional intelligence and management



Source: Field work

Planning, organising, controlling, and honing managerial skills should be established by project managers based on their directing, inspiring, supporting, building mutual trust, and analysing context. For instance, project managers need to assign their project tasks, train their team members, meet their project performance, and improve their interpersonal communications skills based on their project vision, goals, and strategies, stakeholders, level of trust, and context of the project. Hence, directing, inspiring, supporting, building mutual trust, and analysing context can influence planning, organising, controlling, and honing managerial skills.

Self-awareness, self-regulation, social-awareness, and social-regulation should also be developed by project managers based on their directing, inspiring, supporting, building mutual trust, and analysing context. For instance, project managers need to build their self-confidence, demonstrate their high adaptability, promote intuition and empathy towards their project stakeholders, and build cooperation and teamwork among their project team members based on their project vision, goals, and strategies, stakeholders, level of trust, and context of the project. Hence, directing, inspiring, supporting, building mutual trust, and analysing context can influence self-awareness, self-regulation, social-awareness, and social-regulation.

Self-awareness, self-regulation, social-awareness, and social-regulation can assist project manager in directing, inspiring, supporting, building mutual trust, and analysing context throughout their projects. For instance, building self-confidence, keeping self-motivated, promoting intuition and empathy, and resolving project conflicts and disputes can assist project managers in guiding their project stakeholders, influencing and motivating their project stakeholders, building a unified project team, building mutual trust, and investigating the context and capacity of their projects. Hence, self-awareness, self-regulation, social-awareness, and social-regulation can influence directing, inspiring, supporting, building mutual trust, and analysing context.

Self-awareness, self-regulation, social-awareness, and social-regulation can also assist project manager in planning, organising, controlling, and honing managerial skills throughout their projects. For instance, building self-confidence, exuding optimism, promoting intuition and empathy, and building cooperation and teamwork can assist project managers in defining and assigning their project tasks, training their project team members, meeting their project performance, and strengthening their decision

making abilities. Hence, self-awareness, self-regulation, social-awareness, and social-regulation can influence planning, organising, controlling, and honing managerial skills.

5.5 The role of leadership

Based on my data analysis, I found that leadership was emphasised by the research informants more than other concepts. I also found that the significance of the role of leadership in the effectiveness of project managers was implied by the research informants. Thus, I found that a project manager without leadership would certainly not be able to prove himself or herself as an effective project manager within project-oriented organisations. This encouraged me to name my conceptual model *Leadership: Being an effective project manager*. Furthermore, in all the figures related to the conceptual model, the significance of leadership can also be seen.

Moreover, I found that the first and most important core category of the conceptual model would be leadership (more important than management and much more important than emotional intelligence), and the second core category would be management (more important than emotional intelligence), while the third core category would be emotional intelligence. These findings will be further explained in chapter 7.

5.6 The practical model

I attempted to create a practical model, based on my conceptual model, in order to approximately evaluate the effectiveness of project managers within project-oriented organisations. Hence, I used the concepts of the conceptual model along with ‘building mutual trust’, as this category has no concept, in order to make this model. See Table 5.2.

In this practical model, each concept is evaluated based on a scale of 1-5:

(1) poor, (2) fair, (3) good, (4) very good, and (5) excellent.

For instance, the effectiveness of a project manager in terms of ‘create a shared project vision’ concept could be evaluated and judged as having a scale of 1, 2, 3, 4 or 5. Accordingly, the evaluation of all the concepts could show his or her overall effectiveness. Hence, the effectiveness of project managers within project-oriented organisations could be evaluated by this model as an assessment or self-assessment tool through highlighting their strengths and weaknesses.

Table 5.2: The practical model

No	Item	Scale (1-5)
-	Leadership	-
1	Create a shared project vision	
2	Define project goals and objectives	
3	Establish project policies and strategies	
4	Guide project stakeholders	
5	Influence and motivate project stakeholders	
6	Elicit the best out of project team members by developing their creativity	
7	Lead by example	
8	Exude charisma	
9	Build a unified project team	
10	Satisfy project stakeholders by fulfilling their requirements and expectations	
11	Foresee project threats and transform them into opportunities	
12	Demonstrate enthusiasm and attentiveness	
13	Building mutual trust	
14	Investigate the context and capacity of the project	
15	Assess the impact of current social and cultural constraints on the project	
16	Evaluate the impact of current political and economic conditions on the project	
Sum	-	
-	Management	-
1	Set project plans and schedules	
2	Budget and allocate project resources	
3	Define project tasks and assign them to the right project team members	
4	Establish appropriate project incentive schemes	
5	Use appropriate project management tools and techniques	
6	Recruit and train competent individuals	
7	Monitor and troubleshoot project tasks proactively	
8	Develop a self-managed project team	
9	Meet project performance and purpose	
10	Enhance project knowledge and experience	
11	Improve interpersonal communication skills	
12	Strengthen decision making abilities	
Sum	-	
-	Emotional intelligence	-
1	Perform self-assessment	
2	Build self-confidence	
3	Maintain self-control	
4	Evoke conscientiousness	
5	Demonstrate high adaptability	
6	Exhibit high innovation	
7	Keep self-motivated	
8	Exude optimism	
9	Promote intuition and empathy towards project stakeholders	
10	Build cooperation and teamwork among project team members	
11	Resolve project conflicts and disputes	
Sum	-	

Source: Field work

This model could assist project-oriented organisations in identifying their project managers' strengths and weaknesses in order to enhance their project managers' effectiveness. It could enable them to enhance the level of their popularity and credibility by improving their project managers' effectiveness, and hence by providing high-quality products and services. It could also be used as a self-assessment tool by project managers to recognise their own strengths and weaknesses in order to develop themselves into effective project managers.

I also showed this model to the thirty-five research informants in order to ensure the applicability of this model. All the informants mentioned that this model was true and would be valuable and helpful.

5.7 Conclusions

In this chapter, an overview of the coding procedure of the data analysis has been demonstrated. Accordingly, the process of coding has been explained and a justification of the development of the concepts and categories has been provided. How the different levels of concepts are grounded in the research data has been explained and a demonstration of the conceptual model and its constructs has also been given.

Herein, the core categories (leadership, management, and emotional intelligence) and the categories (directing, inspiring, supporting, building mutual trust, and analysing context; planning, organising, controlling, and honing managerial skills; and self-awareness, self-regulation, social-awareness, and social-regulation) have been explained based on analysis of the research data. Some of the research informants' statements have also been used in order to provide robust rationales for the research findings as well as to enhance understanding of the research findings.

In addition, in order to enhance understanding of the conceptual model, the relationships between the core categories and the categories have been demonstrated. The relationships indicated that leadership could be influenced only by emotional intelligence; management could be influenced by both emotional intelligence and leadership; and emotional intelligence could be influenced only by leadership. All the categories of each core category could also influence each other.

Furthermore, the significance of the role of leadership in the effectiveness of project managers within project-oriented organisations has been explained in order to justify the significance of leadership core category within the conceptual model. Herein, it was

found that a project manager without leadership would certainly not be able to prove himself or herself as an effective project manager within project-oriented organisations.

Moreover, the practical model, which was created based on the conceptual model, has been demonstrated. This model could assist project-oriented organisations in identifying their project managers' strengths and weaknesses in order to enhance their project managers' effectiveness. It could enable them to enhance the level of their popularity and credibility by improving their project managers' effectiveness, and hence by providing high-quality products and services. It could also be used as a self-assessment tool by project managers to recognise their own strengths and weaknesses in order to develop themselves into effective project managers.

This chapter has provided explanations of the concepts' and categories' development in order to provide abstractive accounts of the dissected data. It has also demonstrated the conceptual model, the constructs, and the relationships. In addition, it has provided the explanations and justifications for the core categories and categories. Furthermore, it has explained the significance of leadership core category within the conceptual model and demonstrated the practical model.

In chapter 6, based on the core categories and the categories, the concepts of the conceptual model will be explained.

Chapter 6: Data analysis

6.1 Introduction

In this chapter, analysis of the collected data is carried out comprehensively. The chapter explains the concepts of the conceptual model based on the core categories and the categories. The overall purpose of this chapter is to provide explanations of the findings of the research project.

In this chapter, first, the concepts of the leadership core category are explained. Then, explanations of the concepts of the management and emotional intelligence core categories are presented respectively. After that, the relationships between the concepts of the conceptual model are explained. Finally, a brief summary and conclusions of this chapter are presented.

6.2 The leadership core category

This core category consists of five categories: directing, inspiring, supporting, building mutual trust, and analysing context. Each of their concepts is explained in the following subsections.

6.2.1 The directing category

There are four concepts in this category: create a shared project vision, define project goals and objectives, establish project policies and strategies, and guide project stakeholders.

6.2.1.1 Create a shared project vision

‘Create a shared project vision’ is one of the major components of the directing aspect of leadership that plays a critical role in the effectiveness of project managers within project-oriented organisations.

The research informants indicated that a project vision is an image of the future of a project for stakeholders who are willing to reach this image in reality. They emphasised that before starting projects, project managers need to depict the image of their projects so as to be able to effectively convey the future and perception of the projects to their stakeholders, particularly team members. They asserted that without having a shared vision, the way or direction of a project towards its goal would be lost. Hence, they implied that project managers should attempt to evolve into effective visionary project

managers through the creation of a shared project vision. For instance, the strategic manager (S 1) of the business and enterprise company stated that:

“In my opinion, the most important of all leadership factors is having a vision. I mean when someone comes to a corporation and decides to manage different projects and help them move forward; he should have a vision, a clear image, a specific programme to know what he’s going to do in that corporation in 5 years’ time (Business & Enterprise, S 1, 1).”

The strategic manager (S 2) of the computer company also stated that:

“I think number one would be having a good vision and strategy, so creating a vision is the top line that will form the strategy that you need to take when managing the project (Computer, S 2, 1).”

6.2.1.2 Define project goals and objectives

‘Define project goals and objectives’ is one of the key elements of the directing aspect of leadership that plays an important role in the effectiveness of project managers within project-oriented organisations.

The research informants indicated that project objectives show exactly the path and direction a project should follow and where it should end up. They emphasised that project managers need to define their project goals and objectives in order to clarify the end point of their projects for their project stakeholders, to ascertain what exactly their projects are, and to elucidate what their project team members should seek. They stressed that in projects with clear goals and objectives, project managers will encounter fewer problems throughout projects. They asserted that if project managers do not define their project goals and objectives, they will not be able to delineate their project plans and schedules. They also pointed out that project managers should effectively convey their project goals and objectives to their project stakeholders. Hence, they implied that in order to be effective, project managers should define their project goals and objectives. For instance, the tactical manager (T 1) of the telecommunications company stated that:

“I think what is important is outlining and understanding goals and objectives at the beginning of projects and ensuring everyone is on the same page for the process so the success can be measured, if you don’t know what the objectives are, success can’t be determined (Telecommunications, T 1, 5).”

The strategic manager (S 2) of the computer company also stated that:

“A project leader needs to clearly define what the project or product or service is about and outline the scope and target of the project (Computer, S 2, 2).”

6.2.1.3 Establish project policies and strategies

‘Establish project policies and strategies’ is one of the major facets of the directing aspect of leadership that plays a significant role in the effectiveness of project managers within project-oriented organisations.

The research informants emphasised that project managers need to determine accurate policies and effective strategies for their projects to ensure that they are directed towards their vision successfully. They stressed that project policies and strategies should be regularly updated by project managers, based on their project goals and objectives, and also carefully reviewed by project stakeholders, particularly team members, as these issues can greatly affect their deliverables. Hence, they implied that in order to be effective, project managers should establish the policies and strategies of their projects. For instance, the tactical manager of the printing technologies company stated that:

“I believe that first we should realise what we want, what our project goals and objectives are and what our potency is, then afterwards we could establish our project policies, strategies, and principles; these would be set up based upon the human abilities (Printing technologies, T, 8).”

The strategic manager (S 4) of the construction company also stated that:

“The matter of strategy is very important for an organisation’s project. A project manager should be able to provide a strategy for his project in order to achieve his project vision; he needs to establish suitable policies and regulations to implement this strategy (Construction, S 4, 14).”

6.2.1.4 Guide project stakeholders

‘Guide project stakeholders’ is one of the most significant elements of the directing aspect of leadership that plays a crucial role in the effectiveness of project managers within project-oriented organisations.

The research informants emphasised that all stakeholders of a project, especially team members, should be carefully considered by their project manager since they can heavily affect the processes and outcomes of a project. They stressed that project managers need to move their project stakeholders towards their shared vision successfully. They also asserted that if stakeholders of a project are not guided by their project manager, they will not contribute to the project and thus the project will most likely fail. Hence, they implied that in order to be effective, project managers should guide stakeholders of their projects. For instance, the strategic manager of the printing technologies company stated that:

“One of the most important factors is to guide stakeholders. In fact, an effective project manager is a leader who can be aware, focus on his vision, and direct his stakeholders; in order to achieve final goals (Printing technologies, S, 1).”

The tactical manager (T 1) of the paper manufacturing company also stated that:

“All stakeholders should be guided by their project managers. Indeed, project managers should instruct all the individuals involved in the project (Paper manufacturing, T 1, 7).”

6.2.2 The inspiring category

There are four concepts in this category: influence and motivate project stakeholders, elicit the best out of project team members by developing their creativity, lead by example, and exude charisma.

6.2.2.1 Influence and motivate project stakeholders

‘Influence and motivate project stakeholders’ is one of the major components of the inspiring aspect of leadership that plays a critical role in the effectiveness of project managers within project-oriented organisations.

The research informants emphasised that project managers need to accurately approach their stakeholders, particularly team members, in order to influence them effectively. They stressed that in this way, project managers are enabled to direct their project stakeholders towards their shared vision and obtain their project goals. They also asserted that if project managers do not motivate their project stakeholders, their projects will not be accomplished on time, within budget, on scope and strategy, and with high quality standards. Hence, they implied that effective project managers are those who can influence and motivate their project stakeholders. For instance, the strategic manager (S 1) of the business and enterprise company stated that:

“A project manager should lead the projects by means of inspiring, influencing, and giving material or moral motivations to stakeholders (Business & Enterprise, S 1, 4).”

The tactical manager (T 1) of the paper manufacturing company also stated that:

“Those project managers who claim to be leaders should know how to influence their followers and then motivate them based on the goals. Motivating people is not just giving them bonuses for being on time; they should have influence on their souls (Paper manufacturing, T 1, 6).”

6.2.2.2 Elicit the best out of project team members by developing their creativity

‘Elicit the best out of project team members by developing their creativity’ is one of the main elements of the inspiring aspect of leadership that plays an important role in the effectiveness of project managers within project-oriented organisations.

The research informants indicated that extracting the best out of project team members is vital for project managers in accomplishing their projects successfully. However, they mentioned that this matter may be more significant in those projects that require more innovation and creativity, such as high-tech projects (e.g. IT, software, internet and social network, telecommunications, and so on). They also emphasised that project managers need to be aware of how to approach their team members to enhance their creativity in order to draw out the best results from their works and efforts. Hence, they implied that project managers, to evolve into effective project managers, need to pay more attention to elicit the best out of their team members by developing their creativity. For instance, the strategic manager (S 1) of the advertising and marketing company stated that:

“The only way you can get the best out of your project team members is by having the leadership qualities to inspire people, to motivate people to go the extra step. It is important for project managers to make team members more creative (Advertising & Marketing, S 1, 2).”

The tactical manager (T 2) of the telecommunications company also stated that:

“I think a project manager can get the best out of his or her team members if he or she can help them deliver high quality works. He or she needs to develop the team members’ creativity and productivity. I think this approach is going to lead to more effective delivery (Telecommunications, T 2, 5).”

6.2.2.3 Lead by example

‘Lead by example’ is one of the major facets of the inspiring aspect of leadership that plays a significant role in the effectiveness of project managers within project-oriented organisations.

The research informants indicated that members of a project team usually expect their project manager to *do rather than say*. They emphasised that project managers need to show themselves to their team members as participative persons who would like to be engaged in doing project tasks, since this approach (i.e. leading by example) can assist them in greatly influencing their team members. They stressed that leading by example

enables project managers to build trust among their team members, unify them, and motivate and encourage them. They also asserted that if a project manager does not truthfully perform leading by example in his or her project, he or she will not be able to inspire his or her team members. Hence, they implied that project managers should lead by example throughout their projects in order to be effective. For instance, the operational manager of the telecommunications company stated that:

“I think leading by example can make the project successful; and the project manager, who’s doing that, will have team members who will listen to him; and this can bring a lot of motivation (Telecommunications, O, 7).”

The tactical manager (T 1) of the management consulting company also stated that:

“You can’t expect others to work enthusiastically and deliver high quality outcomes, if you are not doing the same. Leading by example can show that the project manager himself is sticking to the idea of the project and instils in his members the importance of the project, so when people see that the project manager is doing something the same, it will be very simple to tell them to do the same and that’s great, but if the management is doing something not particularly in the line with the project, then you can’t expect the rest of the team to maintain the same enthusiasm (Management consulting, T 1, 7).”

6.2.2.4 Exude charisma

‘Exude charisma’ is one of the most significant elements of the inspiring aspect of leadership that plays a crucial role in the effectiveness of project managers within project-oriented organisations.

The research informants indicated that charisma is more likely to be an innate, inherent, and natural characteristic; however, it can be developed by project managers throughout their working life. They mentioned that charismatic project managers are more effective compared to those who are non-charismatic. They emphasised that charisma enables project managers to inspire, persuade, and convince their project stakeholders, especially team members, more effectively. They also stressed that charismatic project

managers can better handle various difficulties throughout their projects. Hence, they implied that project managers should attempt to exude charisma throughout their projects in order to be effective. For instance, the strategic manager (S 1) of the business and enterprise company stated that:

“It is extremely important to have charisma, which means to have a lovely character and being nice is an important characteristic of leadership for every effective project manager (Business & enterprise, S 1, 7).”

The strategic manager (S 1) of the trading company also stated that:

“If between 2 project managers with the same fixed abilities, one has the ability to smile; and be charismatic; he could be up to 30% more successful, this has been proved practically in management; public relations, smiling, and even good-looks and smart appearance could help the person to become 30% more successful (Trading, S 1, 8).”

6.2.3 The supporting category

There are four concepts in this category: build a unified project team, satisfy project stakeholders by fulfilling their requirements and expectations, foresee project threats and transform them into opportunities, and demonstrate enthusiasm and attentiveness.

6.2.3.1 Build a unified project team

‘Build a unified project team’ is one of the major components of the supporting aspect of leadership that plays a critical role in the effectiveness of project managers within project-oriented organisations.

The research informants emphasised that project managers need to bring all members of their project team under an umbrella in order to make a coherent project team. They stressed that a unified project team assists its project manager in reaching the shared vision and goals successfully. They emphasised that this kind of project team encourages members to contribute more to the project. They asserted that if project managers consider their project team members’ needs and opinions, they will be able to unify their team members. Hence, they implied that in order to be effective, project

managers should build a unified project team. For instance, the tactical manager (T 3) of the paper manufacturing company stated that:

“I think that now project managers of organisations are moving towards Gandhi’s moral leadership that was based on humans’ moral needs in order to unify members (Paper manufacturing, T 3, 9).”

The tactical manager (T 1) of the management consulting company also stated that:

“Usually in big projects there are a lot of issues and project managers should be able to build solidarity and unify people, they should be able to hold everybody on one page (Management consulting, T 1, 2).”

6.2.3.2 Satisfy project stakeholders by fulfilling their requirements and expectations

‘Satisfy project stakeholders by fulfilling their requirements and expectations’ is one of the main elements of the supporting aspect of leadership that plays an important role in the effectiveness of project managers within project-oriented organisations.

The research informants emphasised that project managers need to make their project stakeholders, particularly team members, happy and satisfied by solving their problems and removing their impediments. They stressed that project managers need to meet their stakeholders’ requirements, wishes, and expectations in order to encourage them to contribute more to their projects. They indicated that each project’s product or service has its own features, and thus project managers need to know its market and business, distributors and dealers, and customers and consumers. They mentioned that project managers must specifically be familiar with the needs and desires of customers or end users within their work domain. They asserted that if project managers do not pay enough attention to the requirements, wishes, and demands of their project stakeholders, they will not be able to complete their projects on time, within budget, and with high quality. Hence, they implied that effective project managers are those who can satisfy their project stakeholders by fulfilling their requirements and expectations. For instance, the strategic manager (S 1) of the automotive company stated that:

“Being customer or client centric is very important for an organisation. In a university, the customers would be the students. If it’s a producing company, the customers are those who pay to buy these products. One of the basic things is to provide a safe, comfortable, and convenient work place for people. Being customer centric shouldn’t be discussed just as a theory, it should be used practically, meaning project managers should know exactly what stakeholders, particularly customers, want and should satisfy them and connect with them well (Automotive, S 1, 2).”

The strategic manager (S 3) of the construction company also stated that:

“As a project manager of a company, I should know about my team members’ problems and requirements. I should listen to them; sometimes they might give solutions that might not have come to my mind. I should provide a suitable environment to encourage them to make decisions. At the same time, when they notice that they are taking part in the work more, they will put more effort into that work (Construction, S 3, 17). ”

6.2.3.3 Foresee project threats and transform them into opportunities

‘Foresee project threats and transform them into opportunities’ is one of the major facets of the supporting aspect of leadership that plays a significant role in the effectiveness of project managers within project-oriented organisations.

The research informants emphasised that project managers, based on their experiences and knowledge, need to feel and anticipate their projects’ serious difficulties and risky and uncertain situations that may occur in the future. They pointed out that project managers should attempt to convert these severe challenges and risks into opportunities in order to reach the target of their projects successfully. They stressed that this matter has been neglected by most of project managers due to focusing on day-to-day works. They also indicated that project managers should attempt to prove themselves at critical stages of their projects through making the best out of the worst situation by seeking appropriate solutions. Hence, they implied that effective project managers are those who

can foresee their project threats and transform them into opportunities. For instance, the strategic manager (S 3) of the construction company stated that:

“I think if a project manager wants his team members to work well, he should help them and have sufficient supervision over their work, be close to them, care for their needs, and anticipate their problems and concerns. Then, he would be able to direct the project better (Construction, S 3, 15).”

The strategic manager of the paper manufacturing company also stated that:

“If a leader wants to keep his organisation, he should face the projects’ problems himself beforehand. He should be an anticipator and act proactively. For instance, I noticed that the machines in our country are old, they consume more fuel and more energy and thus so do the workers, therefore I decided to update our machines sooner, so that if the subsidies were removed, they could still continue working (Paper manufacturing, S, 2).”

6.2.3.4 Demonstrate enthusiasm and attentiveness

‘Demonstrate enthusiasm and attentiveness’ is one of the most significant elements of the supporting aspect of leadership that plays a crucial role in the effectiveness of project managers within project-oriented organisations.

The research informants indicated that project managers need to possess enthusiasm which is concerned with great eagerness to be involved in project works. They emphasised that enthusiasm enables project managers to greatly influence their project team members. They also stressed that project managers should attempt to show their enthusiasm throughout their projects in order to enhance the sense of cooperation in their project teams and thus get better results from their members’ efforts; as the tactical manager of the automotive company stated:

“If you could establish a good relationship with your project team members and show interest in their interests and families, and be sensitive and enthusiastic, you could easily make your way into

their hearts and get a better result from your work (Automotive, T, 6).”

They also indicated that project managers need to possess attentiveness, which is concerned with thoughtfulness and courteousness during projects. They emphasised that attentiveness enables project managers to improve their relationships with their team members and thus enhance collaboration in their project teams. They also stressed that project managers should try to show their attentiveness throughout their projects so as to encourage their team members to contribute more to their projects; as the strategic manager (S 2) of the trading company stated:

“A project manager should talk to his team members properly and should make them happy. He is in contact with different people, and should know that every decision he makes and every word he says, might make many people happy or upset. He should be a sociable and friendly person in his work, it is important not to be self-concerned and pay attention to others’ suggestions. He knows that reaching that goal will profit his team, the market and his investors (Trading, S 2, 9).”

Hence, the research informants implied that project managers should attempt to demonstrate enthusiasm and attentiveness throughout their projects in order to be effective.

6.2.4 The building mutual trust category

There is no concept in this category.

6.2.5 The analysing context category

There are three concepts in this category: investigate the context and capacity of the project, assess the impact of current social and cultural constraints on the project, and evaluate the impact of current political and economic conditions on the project.

6.2.5.1 Investigate the context and capacity of the project

‘Investigate the context and capacity of the project’ is one of the major components of the analysing context aspect of leadership that plays a critical role in the effectiveness of project managers within project-oriented organisations.

The research informants indicated that each project has its own specific context (i.e. situation and environment) and capacity (i.e. size: small, medium, or large scale; and level of complexity: number of team members and groups, types of task, level of management, and so on). They also pointed out that context and capacity would vary from one project to another within a company. They emphasised that project managers need to carefully analyse the context and capacity of their projects in order to adopt the appropriate leadership style to overcome obstacles and achieve their project goals successfully. Hence, they implied that in order to be effective, project managers should investigate the context and capacity of their projects. For instance, the tactical manager of the automotive company stated that:

“Managing of a project depends on the context and capacity of an organisation, project, and team members (Automotive, T, 12).”

The strategic manager (S 3) of the telecommunications company also stated that:

“There are a few different things a project manager has to be able to do but these depend on the project itself; for example if there are only a few individuals in his project, then obviously delegation is no longer an issue (Telecommunications, S 3, 1).”

6.2.5.2 Assess the impact of current social and cultural constraints on the project

‘Assess the impact of current social and cultural constraints on the project’ is one of the main elements of the analysing context aspect of leadership that plays an important role in the effectiveness of project managers within project-oriented organisations.

The research informants indicated that each project has its own specific constraints in terms of its location and environment which might be rooted in historical, traditional, and religious and ideological backgrounds; or moral, customary, and habitual conditions. However, they asserted that these constraints may greatly affect some types of project such as construction more than others. They emphasised that project managers need to carefully analyse the current social and cultural constraints affecting the processes and outcomes of their projects in order to select the appropriate leadership style to cope with the relevant difficulties. Hence, they implied that in order to be effective, project managers should assess the impact of current social and cultural

constraints on their projects. For instance, the strategic manager (S1) of the trading company stated that:

“Style of leadership is directly connected with the culture, morality and behaviours of that level of society you are going to lead. Historical, religious, and ideological backgrounds of each society can greatly affect the work environment. So, within a project, a project manager should choose his leadership style in accordance with the social and cultural constraints (Trading, S 1, 9).”

The strategic manager (S 1) of the business and enterprise company also stated that:

“A project manager should know the social and cultural norms; he should know the culture and the traditions of the project’s location; he should learn about the culture to see what the situation is like in that location (Business & Enterprise, S 1, 13).”

6.2.5.3 Evaluate the impact of current political and economic conditions on the project

‘Evaluate the impact of current political and economic conditions on the project’ is one of the major facets of the analysing context aspect of leadership that plays a significant role in the effectiveness of project managers within project-oriented organisations.

The research informants indicated that each project has its own specific timeline and should be carried out at a certain time of year; however, this time might not be appropriate for doing certain activities and tasks or even starting projects, due to current political and economic conditions. They emphasised that project managers need to carefully analyse the current political and economic conditions affecting the processes and outcomes of their projects in order to choose the appropriate leadership style to handle the relevant problems. Hence, they implied that effective project managers are those who can evolve into political and economic visionary project managers through evaluating the impact of current political and economic conditions on their projects. For instance, the strategic manager of the paper manufacturing (S 1) company stated that:

“Political issues along with economic conditions affect the leadership style, therefore the project manager shouldn’t think

only economically. He or she should have a strong political vision, so that he/she could analyse how these political issues and changes may affect his/her working strategies (Paper manufacturing, S, 1).”

The strategic manager (S 1) of the business and enterprise company also stated that:

“An effective project manager should consider the economy as it has ups and downs and the financial situation changes and probably many other events will occur that might change the situation. He should not lose his vision; he should be politically and economically visionary (Business & Enterprise, S 1, 14).”

6.3 The management core category

This core category consists of four categories: planning, organising, controlling, and honing managerial skills. Each of their concepts is explained in the following subsections.

6.3.1 The planning category

There are three concepts in this category: set project plans and schedules, budget and allocate project resources, and define project tasks and assign them to the right project team members.

6.3.1.1 Set project plans and schedules

‘Set project plans and schedules’ is one of the major components of the planning aspect of management that contributes to the effectiveness of project managers within project-oriented organisations.

The research informants emphasised that project managers need to design plans and timetables of their projects precisely in order to conduct them towards the end point. They asserted that if a project manager starts his or her project without considering its plans and schedules, he or she will definitely not be able to finish it on-time, within budget, and with high quality. Hence, they implied that in order to be effective, project managers should set plans and schedules for their projects. For instance, the strategic manager (S 2) of the construction company stated that:

“If a project manager sets the plans and tables and distributes each member’s tasks correctly, his/her project will be performed without any problem and in the right way. This way the result will also be approximately what we predicted in the first place (Construction, S 2, 6).”

The strategic manager (S 2) of the automotive company also stated that:

“An organisation’s project manager should be a good planner so as to be able to manage his team members. He should be able to create accurate plans and suitable schedules for his project in order to be able to accomplish the project on time (Automotive, S 2, 6).”

6.3.1.2 Budget and allocate project resources

‘Budget and allocate project resources’ is one of the main elements of the planning aspect of management that contributes to the effectiveness of project managers within project-oriented organisations.

The research informants indicated that resources are vital for project managers as they can provide convenient services, facilities, and situations for project managers to manage their stakeholders, tasks, and deliverables effectively. They emphasised that project managers need to design a budget precisely through devising useful financial schemes and optimising project resources, in order to anticipate probable risks and uncertainties and thus overcome unpredictable barriers and difficulties. Hence, they implied that in order to be effective, project managers should budget and allocate resources for their projects. For instance, the strategic manager (S 1) of the management consulting company stated that:

“The most important point is budgeting and allocating resources. This means that a project manager should have the financial support to have work output (Management consulting, S 1, 1).”

The strategic manager (S 3) of the computer company also stated that:

“What I have found so far, is that there are two main things that the project manager needs to do, the first one is to plan financially and the other is to plan resources, there’s always a resource problem and the question of how the resources will be secured and prioritised (Computer, S 3, 2).”

6.3.1.3 Define project tasks and assign them to the right project team members

‘Define project tasks and assign them to the right project team members’ is one of the major facets of the planning aspect of management that contributes to the effectiveness of project managers within project-oriented organisations.

The research informants indicated that elucidating assignments should be carried out during the planning phase of projects; otherwise, project managers would encounter different kinds of problems throughout their projects. They emphasised that first, project managers need to define project works for their team members, and then assign them to those capable of carrying out the work. They asserted that if project managers do not accurately convey roles and responsibilities to their team members, they will not be able to deliver high quality outcomes. Hence, they implied that in order to be effective, project managers should define their project tasks and assign them to the right project team members. For instance, the tactical manager of the automotive company stated that:

“An effective project manager should be able to define the tasks and delegate the missions well; he should also determine priorities, the sequence of activities, and those works which need to be broken down into different tasks (Automotive, T, 3).”

The strategic manager (S 2) of the computer company also stated that:

“Project managers should determine what the different members of the team should do; they should be able to define tasks effectively; they need to decide which pieces of work different people should be working on and be able to delegate those pieces of work (Computer, S 2, 3).”

6.3.2 The organising category

There are three concepts in this category: establish appropriate project incentive schemes, use appropriate project management tools and techniques, and recruit and train competent individuals.

6.3.2.1 Establish appropriate project incentive schemes

‘Establish appropriate project incentive schemes’ is one of the major components of the organising aspect of management that contributes to the effectiveness of project managers within project-oriented organisations.

The research informants indicated that each project requires its own specific type of incentive scheme since it can significantly affect the performance, contribution, and deliverables of project team members. They mentioned that incentive schemes such as financial incentives (e.g. targeted bonus scheme) should be employed in a timely manner, be compatible with project context and structure, and consistent with project strategies and policies. They also emphasised that incentive schemes enable project managers to support, promote, and encourage their project team members, appreciate their efforts, sustain their innovation, and maintain their high level of performance. Hence, they implied that in order to be effective, project managers should establish appropriate project incentive schemes for their projects. For example, the strategic manager (S 1) of the green energy technologies company expressed that:

“An effective project manager should develop accurate incentives and promotions for his project. I usually give them bonuses, which means each member who has advanced a stage would get his bonus there. The more progress he makes, the more bonuses he gets (Green energy technologies, S 1, 3).”

The strategic manager (S 1) of the automotive company also expressed that:

“There’s always an exchange happening between people. In business as well we want to add something to each other, whether we want to give a production or services or we want to give money to each other. We are exchanging a value here. We’re exchanging a value with money. For example you educate my child, or give a specific product or sell medications. The point is that we are both

conducting an exchange and we both want to win. The whole story is that in a project, a project manager should provide a specific financial system where all members feel like the winner and achieve something (Automotive, S 1, 11).”

6.3.2.2 Use appropriate project management tools and techniques

‘Use appropriate project management tools and techniques’ is one of the main elements of the organising aspect of management that contributes to the effectiveness of project managers within project-oriented organisations.

The research informants indicated that project managers need to use appropriate tools and techniques during their projects in order to better manage their project stakeholders and project works. They stressed that project managers need to select their tools and techniques based on the context of their projects, in order to better handle their various project difficulties. Hence, they implied that effective project managers are those who can use appropriate project management tools and techniques throughout their projects. For example, the strategic manager (S 2) of the construction company expressed that:

“We should first select tools and techniques in order not to have problems later. If we first do the surveys for our project, adopt proper tools for it, and give a new definition for it, the project will definitely reach the perfect result (Construction, S 2, 1).”

The tactical manager of the printing technologies company also expressed that:

“Project managers need to use suitable and modern tools and techniques to manage their projects. They would not be able to deliver high quality projects by using the old versions of approaches. They have to use proper methods to perform their tasks accurately (Printing technologies, T, 10).”

6.3.2.3 Recruit and train competent individuals

‘Recruit and train competent individuals’ is one of the major facets of the organising aspect of management that contributes to the effectiveness of project managers within project-oriented organisations.

The research informants indicated that an accurate process of recruiting and training is required in order to provide a proper workplace where all project team members' opinions and concerns can be taken into account. They emphasised that project managers need to recruit talented and proficient people for their projects. They stressed that project managers should provide appropriate training courses and brainstorming classes for their project team members to help them perform project tasks more effectively. They also mentioned that this approach aids project managers to provide a shared decision making and participative environment for their project team members. Hence, they implied that effective project managers are those who can recruit and train competent individuals. For example, the strategic manager (S 1) of the automotive company expressed that:

“A good project manager is someone, who gathers the most talented people, helps them progress and at the same time provides them with the necessary training and brainstorming classes to become more knowledgeable, and rewards them financially (Automotive, S 1, 1).”

The strategic manager (S 1) of the business and enterprise company also expressed that:

“Team members’ tasks should be checked step by step by the project manager. I do the same thing when I want to recruit a new team member. Firstly I interview him and try to make sure he is the suitable person that I’m searching for. But then again, I’d be nervous for the first 3 months, because you cannot get to know someone through a 2 hour interview and be able to come to a definite conclusion about him. I mean I will supervise him in his 3 first months on a trial period. I will train him, and then later I will check to see if he has made errors and if so, I will tell him openly (Business & Enterprise, S 1, 27).”

6.3.3 The controlling category

There are three concepts in this category: monitor and troubleshoot project tasks proactively, develop a self-managed project team, and meet project performance and purpose.

6.3.3.1 Monitor and troubleshoot project tasks proactively

‘Monitor and troubleshoot project tasks proactively’ is one of the major components of the controlling aspect of management that contributes to the effectiveness of project managers within project-oriented organisations.

The research informants indicated that eliminating mistakes, errors, and defects of a project task requires accurate troubleshooting. They emphasised that project managers need to proactively monitor the progress of their project tasks in order to detect deficiencies and resolve problems in a timely manner. Hence, they implied that effective project managers are those who can monitor and troubleshoot their project tasks proactively. For instance, the tactical manager of the automotive company stated that:

“A good project manager is someone who does proactive problem solving. He must go towards the problems himself, instead of waiting for them to come to him (Automotive, T, 3).”

The strategic manager (S 2) of the automotive company also stated that:

“An organisations’ project manager should be proactive. He should be able to foresee the major problems to proactively solve them. He should be able to constantly monitor his project’s works in order to fix any mistake or error (Automotive, S 2, 13).”

6.3.3.2 Develop a self-managed project team

‘Develop a self-managed project team’ is one of the main elements of the controlling aspect of management that contributes to the effectiveness of project managers within project-oriented organisations.

The research informants emphasised that project managers should rely on their team members and give them more freedom and authority to encourage them to manage and control their own works independently, and thus develop their project team into a self-managed project team. However, they mentioned that project managers should check and verify their team members’ works regularly during their projects. They indicated that this approach assists project managers in obtaining the best outcomes from their project team members’ works. They also pointed out that this approach enables project team members to feel more confident in their abilities, to work on their tasks more

creatively and enthusiastically, and to become more participative and committed in the decision making process. Hence, they implied that effective project managers are those who can develop a self-managed project team. For instance, the strategic manager (S 1) of the automotive company stated that:

“Many large American companies establish a system which has no entrance and exit time for their employees. This provides full freedom and does not limit them; all the efforts are to bring out the creativity to enhance the results of projects. A project manager should give team members freedom by not limiting them, not dictating to them what to do and what not to do; he should set them a goal and reach an understanding about it with them (Automotive, S 1, 6).”

The tactical manager of the construction company also stated that:

“I think the general approach in the world is moving towards this style. I mean, giving more freedom to human resources and letting them be more free in the way that they desire, that’s my own experience, I mean I work better at nights, so if I work better at nights and I’m not efficient in the morning, why should I come to work in the morning when I’m not efficient. I can talk to my director and say if you allow me I can come at 5 pm and stay at work until 2 am or midnight and that’s the time I can work most efficiently and as far as I know, to be more precise, many companies (for example those in Japan) appreciate this style and they say as long as one person can work efficiently, we respect the way that he prefers to work and it doesn’t matter how many hours exactly he works, what we really need is the output of the work (Construction, T, 8).”

Moreover, the strategic manager (S 1) of the business and enterprise company stated that:

“I try to develop a friendly relationship and after a while, the team member would have the same way of thinking as I do and I would also understand his expectations so a synergy would develop between us. Once this synergy has happened between us, I would no longer have to call him every two hours or supervise him every now and then; I would trust him. Little by little I will change this to once or twice a day or in case I am busy and not present there to talk to him every day, we could do lots of our work via e-mail. I will never stop supervising but there would be no need for micromanaging as well (Business & Enterprise, S 1, 28).”

6.3.3.3 Meet project performance and purpose

‘Meet project performance and purpose’ is one of the major facets of the controlling aspect of management that contributes to the effectiveness of project managers within project-oriented organisations.

The research informants indicated that the performance of a project should be measured in terms of its quality, timeline, and budget as constraints. They emphasised that project managers need to reach an acceptable level of their projects’ performance through fulfilling these constraints. They pointed out that project managers should attempt to accomplish their projects with lower costs, higher quality, and in a quicker time. However, they mentioned that project managers should avoid sacrificing quality to decrease costs or time; as the tactical manager (T 5) of the management consulting company stated:

“A project manager has to think about a triangle: cost, time and quality; and know how to play these factors against each other (Management consulting, T 5, 2).”

The tactical manager (T 2) of the advertising and marketing company also stated that:

“There are 3 different aspects in the project: time, budget, and quality; the projects completed on time, on budget, and with high quality are successful (Advertising & Marketing, T 2, 7).”

However, despite these constraints, the informants indicated that the key point is whether or not the purpose of a project would be met, since this matter can show whether or not a project would be successful at the end of its timeline; as the tactical manager (T 4) of the management consulting company stated:

“The key project success factor is whether a project manager can meet the purpose of the project (Management consulting, T 4, 5).”

Hence, the research informants implied that effective project managers are those who can meet their projects’ performance and purpose.

6.3.4 The honing managerial skills category

There are three concepts in this category: enhance project knowledge and experience, improve interpersonal communication skills, and strengthen decision making abilities.

6.3.4.1 Enhance project knowledge and experience

‘Enhance project knowledge and experience’ is one of the major components of the honing managerial skills aspect of management that contributes to the effectiveness of project managers within project-oriented organisations.

The research informants indicated that adequate knowledge and experience are required to accomplish a project successfully. They pointed out that project managers need to be familiar with the knowledge domain of their projects and possess adequate experience in the domain of their projects. They asserted that without knowledge and experience, project managers would encounter serious problems throughout their projects. Hence, they implied that in order to be effective, project managers should enhance their knowledge and experience related to their projects. For example, the tactical manager (T 2) of the telecommunications company expressed that:

“A project manager should first of all know the project; he/she should have experience and whatever he is going to ask of the

team member, he should have done it before. If, he has not done it, he should at least have got a feeling of how to carry out that duty (Telecommunications, T 2, 1)."

The strategic manager (S 1) of the banking and insurance company also expressed that:

"I think experience is the most important thing; the project managers who have done similar tasks in the past are likely to be more successful (Banking & Insurance, S 1, 10)."

Moreover, the tactical manager (T 2) of the business and enterprise company expressed that:

"It is important for project managers to develop knowledge of their project domains (Business & Enterprise, T 2, 1)."

6.3.4.2 Improve interpersonal communication skills

'Improve interpersonal communication skills' is one of the main elements of the honing managerial skills aspect of management that contributes to the effectiveness of project managers within project-oriented organisations.

The research informants indicated that adequate interpersonal communication skills are required to accomplish a project successfully. They pointed out that these skills enable project managers to better communicate with their project stakeholders and better convey their project visions, goals, and strategies to them. They asserted that if project managers do not communicate with their team members accurately, then information and ideas will not be exchanged well within their projects and consequently the deadline will not be met. Hence, they implied that in order to be effective, project managers should improve their interpersonal communication skills. For example, the strategic manager (S 1) of the telecommunications company expressed that:

"As a project manager, you will be in contact with a lot of different people, with different backgrounds, so interpersonal communication skills are a very important factor for a project manager (Telecommunications, S 1, 1)."

The strategic manager (S 2) of the business and enterprise company also expressed that:

“I think the most important thing is communication; I think external communication is important as well as you need to communicate with your clients and make sure they are aware of the situation in which you are operating and trying to get results (Business & Enterprise, S 2, 1).”

Moreover, the strategic manager (S 3) of the banking and insurance company expressed that:

“Certainly communication is at the top of the essential skills for a project manager. He should be able to communicate with all different types of people with various personalities. He should be able to quickly figure out and determine what others’ personalities are, and know how to approach them to get information out of them (Banking & Insurance, S3, 1).”

6.3.4.3 Strengthen decision making abilities

‘Strengthen decision making abilities’ is one of the most significant elements of the honing managerial skills aspect of management that contributes to the effectiveness of project managers within project-oriented organisations.

The research informants indicated that adequate decision making abilities are required to accomplish a project successfully. They pointed out that these abilities enable project managers to act and react rationally during their projects. They mentioned that a project manager needs to first imagine his or her project’s problem, then analyse it, after that judge the optimised approach, and finally make the best decision for solving it. They stressed that project managers need to reinforce these abilities since they can assist them in finalising their decisions. They asserted that if project managers do not strengthen these abilities, they will not be able to decide rapidly and precisely during their projects. Hence, they implied that in order to be effective, project managers should strengthen their decision making abilities. For example, the strategic manager (S 1) of the trading company expressed that:

“In a project, an important factor for a manager is a fast analytical and imaginative ability to processing his thoughts; he must be able to analyse processes and conclude all the receiving information like a computer; he should have strong judgment and decision making abilities (Trading, S 1, 2).”

The operational manager of the construction company also expressed that:

“The project manager first of all has to have a very high listening ability in order to be able to decide accurately. Indeed, he or she has to improve personal skills: attention, take initiative, being active, high listening ability, and decision making abilities (Construction, O, 2).”

6.4 The emotional intelligence core category

This core category consists of four categories: self-awareness, self-regulation, social-awareness, and social-regulation. Each of their concepts is explained in the following subsections.

6.4.1 The self-awareness category

There are two concepts in this category: perform self-assessment, and build self-confidence.

6.4.1.1 Perform self-assessment

‘Perform self-assessment’ is one of the major components of the self-awareness aspect of emotional intelligence that influences the effectiveness of project managers within project-oriented organisations.

The research informants indicated that project managers need to critically examine themselves in order to identify their own feelings, emotions, and thoughts precisely and thus better recognise themselves. They pointed out that self-assessment enables project managers to carefully estimate the quality level of their own abilities. They asserted that if project managers assess themselves regularly throughout their projects, they will be able to better identify their capabilities, strengths, and weaknesses, and thus to carry out their projects more effectively. Hence, they implied that effective project managers are

those who can perform self-assessment. For example, the strategic manager (S 1) of the computer company expressed that:

“A project manager should have self-scrutiny as much as possible to know why he’s doing his job. He should first assess himself accurately and then assess others. From self-assessment we can learn how to affect the work (Computer, S 1, 5).”

The strategic manager (S 4) of the construction company also expressed that:

“I think an effective project manager is one who is multidimensional, not one-dimensional. He needs to know his personal strengths and weakness to have a better relationship with others and thus obtain the better results (Construction, S 4, 13).”

6.4.1.2 Build self-confidence

‘Build self-confidence’ is one of the main elements of the self-awareness aspect of emotional intelligence that influences the effectiveness of project managers within project-oriented organisations.

The research informants indicated that self-confidence enables project managers to feel sure of themselves, their qualities, and their values. They pointed out that self-confidence assists project managers to be confident and believe in what they think, say, and do throughout their projects. They emphasised that project managers require self-confidence in order to rely on their abilities and knowledge to carry out their projects more effectively. Hence, they implied that effective project managers are those who can build their self-confidence. For example, the strategic manager (S 2) of the construction company expressed that:

“A project manager should have self-confidence. If he doesn’t have it, others would manage him. If he has it, he will trust his own knowledge; otherwise he will have doubts all the time that he doesn’t know anything (Construction, S 2, 16).”

The strategic manager (S 1) of the trading company also expressed that:

“Self-confidence is an important factor to influence project team members. They will be impressed by the self-confidence of their project manager. Indeed, being a self-confident person would be a remarkable advantage for a project manager in any type of project (Trading, S 1, 6).”

6.4.2 The self-regulation category

There are six concepts in this category: maintain self-control, evoke conscientiousness, demonstrate high adaptability, exhibit high innovation, keep self-motivated, and exude optimism.

6.4.2.1 Maintain self-control

‘Maintain self-control’ is one of the major components of the self-regulation aspect of emotional intelligence that influences the effectiveness of project managers within project-oriented organisations.

The research informants indicated that self-control enables project managers to better manage themselves and thus better solve their social and managerial problems throughout their projects. They pointed out that this ability assists project managers in being tolerant throughout their projects in order to listen carefully to different ideas and manage various relationships more effectively. Hence, they implied that in order to be effective, project managers should maintain self-control. For example, the strategic manager of the printing technologies company expressed that:

“Listening needs patience. It’s of theosophy that God has given us two ears and one tongue, meaning we should be patient and listen two times more than we speak. Some project managers know this, but cannot obey it practically, because they react quickly towards others, this is their character (Printing technologies, S, 7).”

The operational manager of the trading company also expressed that:

“I think the hardest work for a project manager is to manage himself during his project. He should be patient and control his emotions under pressure. This can assist him in listening to his

team members effectively and thus enable him to make better decisions (Trading, O, 6)."

6.4.2.2 Evoke conscientiousness

'Evoke conscientiousness' is one of the main elements of the self-regulation aspect of emotional intelligence that influences the effectiveness of project managers within project-oriented organisations.

The research informants indicated that conscientiousness enables project managers to take their responsibilities seriously, to be compliant with their contracts, preset goals, and stakeholders' expectations, and thus to properly accomplish their projects. They pointed out that the level of conscientiousness of project managers during their projects show the degree of their commitment, honesty and integrity, and trustworthiness. They asserted that if the conscientiousness of project managers is not adequate, their performance will definitely not be satisfactory. Hence, they implied that in order to be effective, project managers should evoke their conscientiousness. For example, the tactical manager (T 2) of the management consulting company expressed that:

"There should be a person in a project who is accountable, conscientious, has commitment, takes the lead and can change the process (Management consulting, T 2, 5)."

The strategic manager (S 1) of the computer company also expressed that:

"Caring for humans, environmental issues, the relations between people and people's rights are all important. Thus, project leaders need to exhibit conscientiousness throughout their projects (Computer, S 1, 15)."

6.4.2.3 Demonstrate high adaptability

'Demonstrate high adaptability' is one of the main elements of the self-regulation aspect of emotional intelligence that influences the effectiveness of project managers within project-oriented organisations.

The research informants indicated that adaptability enables project managers to effectively manage long-term or short-term changes, adjust themselves to unfamiliar situations, and deal with new conditions and unexpected occurrences. They pointed out

that project managers need adaptability throughout their projects in order to be able to cope with various difficulties that may emerge throughout their duration. Hence, they implied that in order to be effective, project managers should demonstrate high adaptability. For example, the strategic manager (S 1) of the construction company expressed that:

“An effective project manager is someone who can adapt himself to the situation in the shortest time possible (Construction, S 1, 7).”

The strategic manager (S 2) of the management consulting company also expressed that:

“From culture to culture what matters is that you adapt yourself to what is important for your own client and also adapt your team to accept the way you are delivering the project, so that’s more adaptability I think (Management consulting, S 2, 5).”

6.4.2.4 Exhibit high innovation

‘Exhibit high innovation’ is one of the most significant elements of the self-regulation aspect of emotional intelligence that influences the effectiveness of project managers within project-oriented organisations.

The research informants indicated that innovation enables project managers to offer new thoughts, products, or techniques; and aids them in being open to project stakeholders’ novel ideas. However, they mentioned that in some types of project (for example high-tech projects such as IT, computer, electrical, telecommunication and so on), innovation is much more important than in others; as a project manager needs more innovation to design a unique software than to build a typical construction or to manufacture and engineer a product. They emphasised that project managers need high innovation in order to deliver high quality outcomes. They also pointed out that the innovation of project managers could encourage their team members to be more creative during their projects. Hence, they implied that in order to be effective, project managers should exhibit high innovation. For example, the strategic manager of the printing technologies company expressed that:

“For project managers, having innovative methods for solving the problems can be very effective. You can’t depend on some classic methods and you can’t always use certain fixed formulas when you face problems (Printing technologies, S, 16).”

The strategic manager (S 1) of the automotive company also expressed that:

“You see that a company has produced a new item that has become successful and then you realise that behind it there is lots of innovation and hidden thoughts. These thoughts belong to the project manager of the company and this innovation has been brought out because he feels happy, it’s that simple (Automotive, S 1, 9).”

6.4.2.5 Keep self-motivated

‘Keep self-motivated’ is one of the major components of the self-regulation aspect of emotional intelligence that influences the effectiveness of project managers within project-oriented organisations.

The research informants indicated that self-motivation enables project managers to be keen and interested in their projects in order to act eagerly and work productively throughout their projects. They pointed out that this ability assists project managers in maintaining a high standard of excellence in performing their projects by pursuing perfection therethroughout. They emphasised that project managers need this ability in order to deliver project results beyond their expectations. They also stressed that self-motivated project managers could better encourage their team members to work enthusiastically. Hence, they implied that in order to be effective, project managers should keep themselves self-motivated. For example, the strategic manager (S 1) of the computer company expressed that:

“Self-motivation is very important and usually no one pays attention to that. There are project managers that are eligible theoretically and experientially, but are not interested in their works and don’t like to progress (Computer, S 1, 2).”

The strategic manager (S 2) of the green energy technologies also expressed that:

“Project managers have to keep themselves motivated during their projects. If they do not have enough self-motivation, they will definitely not be able to deliver high quality projects that are, on time and on budget (Green energy technologies, S 2, 4).”

6.4.2.6 Exude optimism

‘Exude optimism’ is one of the main elements of the self-regulation aspect of emotional intelligence that influences the effectiveness of project managers within project-oriented organisations.

The research informants indicated that optimism enables project managers to be helpful, hopeful, and persistent throughout their projects. They pointed out that this ability assists project managers in being positive with their project stakeholders, optimistic about the success of their projects in the future, and perseverant in pursuing their project goals despite difficulties and barriers. They stressed that project managers must not lose hope and stop working on projects; on the contrary, it is imperative that they are affirmative and insist on striving towards their visions. They also mentioned that optimistic project managers could better influence their team members, and thus be more likely to reach their shared project visions. Hence, they implied that in order to be effective, project managers should exude optimism. For example, the strategic manager (S 1) of the business and enterprise company expressed that:

“Most importantly, the first characteristic of a project manager is his optimism. The optimistic project manager has a better chance of becoming successful but at the same time he must have the vision to know what that success is. He is positive and says; I see this image and I persistently try to reach it (Business & Enterprise, S 1, 5).”

The tactical manager of the printing technologies company also expressed that:

“No matter in what circumstances a project manager finds himself, he should always give off positive energy, because

everybody is looking at him as a model, he should be optimistic (Printing technologies, T, 13)."

6.4.3 The social-awareness category

There is only one concept in this category: promote intuition and empathy towards project stakeholders.

6.4.3.1 Promote intuition and empathy towards project stakeholders

'Promote intuition and empathy towards project stakeholders' is the major component of the social-awareness aspect of emotional intelligence that influences the effectiveness of project managers within project-oriented organisations.

The research informants indicated that intuition enables project managers to understand some of their project issues and problems through their feelings. They also pointed out that empathy enables project managers to better understand the emotions, concerns, and views of their stakeholders, especially team members. They emphasised that intuition and empathy can greatly assist project managers in solving their project stakeholders' problems and conflicts, improving their project team members' relationships, developing their project stakeholders' connections and networks, and enhancing the quality of their project team members' deliverables. Hence, they implied that effective project managers are those who can promote their intuition and empathy towards their project stakeholders. For example, the strategic manager (S 1) of the automotive company expressed that:

"The main factor for good leadership is having a two-way relationship between a project leader and team members. There should be empathy, good feeling, and sensitivity between them; this means that the team members should like their project leader; and he/she should like them as well (Automotive, S 1, 11)."

The strategic manager (S 2) of the telecommunications company also expressed that:

"A project leader needs to show empathy towards his team in order to make them feel comfortable and make them feel engaged. I believe that he has to make them feel comfortable in order to get the best out of them (Telecommunications, S 2, 6)."

Moreover, the strategic manager (S 1) of the computer company expressed that:

“Some issues in management are related to intuitiveness. When someone enters my room, I understand what kind of a person he is. Or even with regard to customers, I can realise their character even through talking with them on the phone; these are all connected to the intuitiveness (Computer, S 1, 13).”

6.4.4 The social-regulation category

There are two concepts in this category: build cooperation and teamwork among project team members, and resolve project conflicts and disputes.

6.4.4.1 Build cooperation and teamwork among project team members

‘Build cooperation and teamwork among project team members’ is one of the major components of the social-regulation aspect of emotional intelligence that influences the effectiveness of project managers within project-oriented organisations.

The research informants indicated that relationships between project team members should be carefully considered by their project managers since their relationships can significantly impact on the processes and outcomes of projects. They pointed out that project managers need to persuade their team members to assist each other and exchange their ideas about various project issues since this approach can enhance the level of solidarity, fellowship, and participation among their project team members. They asserted that if the team members of a project work together effectively, they will certainly be able to produce valuable project results. Hence, they implied that in order to be effective, project managers should build cooperation and teamwork among their project team members. For example, the strategic manager (S 1) of the construction company expressed that:

“We’ve seen that some projects with smaller problems have seen those broken down, but others with bigger problems have not; this all goes back to human relations between the team members, their cooperation and the effective teamwork in those projects; and not the economic relations they might have with each other (Construction, S 1, 5).”

The strategic manager (S 2) of the advertising and marketing company also expressed that:

“You as a project manager can’t lead your project if your team doesn’t have effective teamwork. You’ll always be in need of collaboration and corporation. I think project leadership will become more collaborative than it used to be (Advertising & Marketing, S 2, 8).”

6.4.4.2 Resolve project conflicts and disputes

‘Resolve project conflicts and disputes’ is one of the main elements of the social-regulation aspect of emotional intelligence that influences the effectiveness of project managers within project-oriented organisations.

The research informants indicated that these days, project conflicts and disputes become extremely complicated and need much more attention. They emphasised that project managers need to keep themselves up-to-date in order to be able to cope with the latest conflicts and disputes in their projects. They stressed that project managers have to convince their project team members to prevent destructive disagreement and serious arguments during their projects. They asserted that if project managers do not handle the complex conflicts and disputes, they will not be able to complete their projects successfully. Hence, they implied that in order to be effective, project managers should resolve conflicts and disputes in their projects. For example, the tactical manager of the printing technologies company expressed that:

“A project manager should be familiar with the updated knowledge and technology in order to manage and rectify complex problems; he should carry out accurate conflict and dispute management (Printing technologies, T, 14).”

The strategic manager (S 2) of the trading company also expressed that:

“A project manager should manage his project’s conflicts and resolve the disagreements between the project team members. However, he should find the right method to approach the members and handle their disputes (Trading, S 2, 3).”

6.5 Relationships between the concepts of the conceptual model

Based on my data analysis, I found that all the concepts of leadership can influence all the concepts of management and emotional intelligence. I also found that all the concepts of emotional intelligence can influence all the concepts of leadership and management. However, I found that the concepts of management cannot influence the concepts of leadership and emotional intelligence. Moreover, I found that all the concepts of each core category can influence each other.

The concepts of management could be influenced by the concepts of leadership since management should be established by project managers throughout their projects based on their leadership. For instance, project managers need to set their project plans, allocate their project resources, and assign their project tasks based on their project vision, goals and objectives, policies and strategies, and stakeholders. Hence, ‘create a shared project vision’, ‘define project goals and objectives’, ‘establish project policies and strategies’, and ‘guide project stakeholders’ can influence ‘set project plans and schedules’, ‘budget and allocate project resources’, and ‘define project tasks and assign them to the right project team members’.

The concepts of emotional intelligence also could be influenced by the concepts of leadership since emotional intelligence should be developed by project managers throughout their projects based on their leadership. For instance, project managers need to promote their intuition and empathy towards their project stakeholders based on the context of their projects. Hence, ‘investigate the context and capacity of the project’, ‘assess the impact of current social and cultural constraints on the project’, and ‘evaluate the impact of current political and economic conditions on the project’ can influence ‘promote intuition and empathy towards project stakeholders’.

In addition, the concepts of leadership could be influenced by the concepts of emotional intelligence since emotional intelligence can assist project managers in leading their projects effectively. For instance, understanding project stakeholders’ feelings enables project managers to unify and satisfy their stakeholders, anticipate their stakeholders’ serious difficulties, and show their enthusiasm effectively throughout the projects. Hence, ‘promote intuition and empathy towards project stakeholders’ can influence ‘build a unified project team’, ‘satisfy project stakeholders by fulfilling their

requirements and expectations’, ‘foresee project threats and transform them into opportunities’, and ‘demonstrate enthusiasm and attentiveness’.

Moreover, the concepts of management could be influenced by the concepts of emotional intelligence since emotional intelligence can assist project managers in managing their projects effectively. For instance, building cooperation and resolving conflicts enable project managers to monitor their project tasks effectively, give more authority to their project team members, and accomplish their projects on-time, on-budget, and with high quality. Hence, ‘build cooperation and teamwork among project team members’ and ‘resolve project conflicts and disputes’ can influence ‘monitor and troubleshoot project tasks proactively’, ‘develop a self-managed project team’, and ‘meet project performance and purpose’.

6.6 Conclusions

In this chapter, the analysis of the research data has been carried out comprehensively. Accordingly, the concepts of the conceptual model have been explained based on the core categories and the categories. Some of the research informants’ statements have also been used in order to provide robust rationales for the research findings as well as to enhance understanding of the research findings.

Herein, first, the concepts of the leadership core category (create a shared project vision, define project goals and objectives, establish project policies and strategies, and guide project stakeholders; influence and motivate project stakeholders, elicit the best out of project team members by developing their creativity, lead by example, and exude charisma; build a unified project team, satisfy project stakeholders by fulfilling their requirements and expectations, foresee project threats and transform them into opportunities, and demonstrate enthusiasm and attentiveness; and investigate the context and capacity of the project, assess the impact of current social and cultural constraints on the project, and evaluate the impact of current political and economic conditions on the project) have been explained.

After that, the concepts of the management core category (set project plans and schedules, budget and allocate project resources, and define project tasks and assign them to the right project team members; establish appropriate project incentive schemes, use appropriate project management tools and techniques, and recruit and train competent individuals; monitor and troubleshoot project tasks proactively, develop a

self-managed project team, and meet project performance and purpose; and enhance project knowledge and experience, improve interpersonal communication skills, and strengthen decision making abilities) have been explained.

Finally, the concepts of the emotional intelligence core category (perform self-assessment, and build self-confidence; maintain self-control, evoke conscientiousness, demonstrate high adaptability, exhibit high innovation, keep self-motivated, and exude optimism; promote intuition and empathy towards project stakeholders; and build cooperation and teamwork among project team members, and resolve project conflicts and disputes) have been explained.

Moreover, in order to enhance understanding of the conceptual model, the relationships between the concepts have been explained. The relationships indicated that all the concepts of leadership could influence all the concepts of management and emotional intelligence; all the concepts of emotional intelligence could influence all the concepts of leadership and management; however, the concepts of management could not influence the concepts of leadership and emotional intelligence. Furthermore, all the concepts of each core category could influence each other.

This chapter has provided explanations and justifications for the concepts of the conceptual model. It has also explained the relationships between the concepts in order to enhance understanding of the conceptual model of this research project.

In chapter 7, based on the research findings, particularly the conceptual model, a comparative data analysis will be conducted.

Chapter 7: Comparative data analysis

7.1 Introduction

In this chapter, a comparative analysis of the research data is carried out. The chapter demonstrates the comparative works based on the research findings. The overall purpose of this chapter is to highlight the research findings in terms of the types of participating company in order to enhance understanding of the subject under investigation.

In the chapter, first, the twelve types of company are compared based on the research findings through three separate clusters (leadership, management, and emotional intelligence). Next, two cases are created based on the industry of the participating companies. Then, the cases are compared with each other based on the research findings. After that, the leadership styles of the participating companies are compared. Finally, a brief summary and conclusions of this chapter are presented.

7.2 Comparing the types of company based on the research findings

A systematic approach was taken to examine and highlight each construct (core category, category, and concept) in each type of company in turn. This technique assisted me in verifying the data, since they were investigated in different contexts (Miles and Huberman, 1994). Accordingly, I compared the twelve types of company based on the research findings in order to show which construct of the conceptual model is significant for which type of company. In the following subsections, these comparisons are demonstrated through three separate clusters: leadership, management, and emotional intelligence.

7.2.1 Comparing the types of company based on the leadership cluster

Based on the data analysis, I found that in the *printing technologies* type of company, an effective project manager should focus on a vision; set goals, policy, and strategy; support and satisfy people; coach and inspire stakeholders; build mutual trust; change threats into opportunities; motivate people; lead by example; and show charisma and enthusiasm. In this type of company, leadership is very important for effective project managers and depends on cultural perception, environment, and the size of the project.

In the *paper manufacturing* type of company, an effective project manager is one who can determine goals and strategy; inspire and motivate people; support and satisfy stakeholders; inspire others' creativity; create a coherent team; have charisma; predict issues; build honesty; and analyse cultural, political and economic situations. In summary, leadership is very effective for project managers in this type of company.

In the *automotive* type of company, an effective project manager needs to show direction; make a vision and goals; guide, inspire, and encourage people; support and satisfy stakeholders; be sensitive and enthusiastic; foster members' creativity; predict problems; lead by example; create a solidified team; establish mutual honesty; and recognise the context and culture of the project. Indeed, leadership is mainly related to the vision and direction of the project.

In the *computer* type of company, an effective project manager should have a vision and a strategy; define project goals and objectives; inspire, influence, and motivate individuals; lead by example; be charismatic; have the right team; satisfy stakeholders; foresee serious challenges; develop mutual trust; and consider the size and type of project. In fact, leadership can make effective project managers in this type of company.

In the *green energy technologies* type of company, an effective project manager is one who can direct a project based on a vision; have charisma; create a unified team; be enthusiastic and attentive; create transparency; analyse project circumstances and current social and political conditions. In fact, without leadership, nothing can be done within this type of company.

In the *construction* type of company, an effective project manager should show the direction of the project; make a vision; define the project and its goals; set policies and strategies; guide, influence, and motivate people; support and satisfy stakeholders; get the best out of members' works; show charisma; anticipate problems; establish trust; and analyse the context of the project as well as the current social and political conditions. Indeed, without leadership, nothing works within this type of company.

Table 7.1 demonstrates the comparisons between these six types of company based on the leadership aspect of the research findings.

Table 7.1: Comparing the types of company (1-6) based on the leadership cluster

Company Type	Printing technologies	Paper manufacturing	Automotive	Computer	Green energy technologies	Construction
Leadership	Leadership is essential	Leadership is very effective in total	Vision and direction of project	Leadership makes effective project managers	Without leadership nothing can be done	Without leadership nothing is going to work
Directing			Show direction			Show the direction of project
Create a shared project vision	Focus on vision, do not be involved in details		Make a project vision	Have a vision	Direct project based on vision and do not be involved in details	Make a vision
Define project goals and objective	Set project goals	Determine project goals	Make project goals	Define project goal and objectives clearly		Define project and its goal
Establish project policies and strategies	Set up policy and strategy	Define strategies		Have a strategy		Set policies and strategies
Guide project stakeholders	Coach stakeholders		Guide people accurately			Accurately guide people
Inspiring	Inspire stakeholders	Inspire people	Inspire people	Inspire individuals		Influence and emotionally manipulate others
Influence and motivate project stakeholders	Motivate people	Motivate team members	Encourage people	Influence and motivate individuals		Motivating people
Elicit the best out of project team members by developing their creativity		Inspire others' creativity	Foster members' creativity			Get the best out of members' works
Lead by example	Lead by example		Lead by example	Leading by example		
Exude charisma	Show charisma	Have Charisma	Show charisma	Be charismatic	Have charisma	Show charisma
Supporting	Support people	Support stakeholders	Support project stakeholders			Support stakeholders
Build a unified project team		Create a coherent team	Create a solidified team	Have the right team with the same culture	Create a unified team	
Satisfy project stakeholders by fulfilling their requirements and expectations	Satisfy everyone	Satisfy employees	Be customer-oriented, Satisfy stakeholders	Satisfy project stakeholders (customers)		Satisfy stakeholders
Foresee project threats and transform them into opportunities	Change threats into opportunities	Predict the issues	Predict problems and go towards them	Foresee serious challenges		Anticipate problems and risks
Demonstrate enthusiasm and attentiveness	Show enthusiasm and attentiveness		Be sensitive and enthusiastic		Be enthusiastic and attentive	
Building mutual trust	Build mutual trust	Build honesty	Establish mutual honesty	Develop mutual trust	Create transparency	Establish trust
Analysing context	Level of leadership depends on environment				Analyse project circumstances	Analyse the environment
Investigate the context and capacity of the project	Leadership depends on size of company and project		Context and capacity of organisational projects are important	Effectiveness depends on the size and type of the project	Leading a project depends on its size	Analyse context of project
Assess the impact of current social and cultural constraints on the project	Cultural perception is effective in environment.	Analyse cultural situations	Recognition of the society's culture and historical background		Analyse the social and cultural, and historical background	Analyse social and cultural conditions
Evaluate the impact of current political and economic conditions on the project		Analyse political and economic situations			Analyse the current political conditions	Be aware of political and economical conditions

Source: Field work

Moreover, in the *telecommunications* type of company, an effective project manager should set the direction and a shared vision; outline goals and objectives; determine strategy; guide stakeholders; inspire and motivate people; support and satisfy stakeholders; lead by example; be charismatic; transform weaknesses into strengths; build reliability and trust; investigate the context of the project; and assess social and cultural constraints. Within this type of company, the most important aspect of project management is leadership.

In the *trading* type of company, an effective project manager is one who can direct different groups; set a vision; determine goals and objectives; motivate and influence others; derive creativity from members; attract people using charisma; support stakeholders; unify project team members; fulfill stakeholders' needs and expectations; be attentive and enthusiastic; build trust and loyalty; and analyse social and cultural constraints. In this type of company, leadership as the associative function deals with spiritualities.

In the *advertising and marketing* type of company, an effective project manager needs to provide direction; make a shared vision; define goals and objectives; guide people; inspire and motivate people; get the best out of team members; lead by example; exude charisma; create a cohesive team; predict problems; establish honesty and trust; and assess the project environment and social and cultural situations. Within this type of company, leadership transforms project managers into project leaders.

In the *business and enterprise* type of company, an effective project manager should conduct and direct people towards a vision and goals; set strategies and policies; guide stakeholders; inspire and stimulate members; develop members' creativity; be charismatic and a perfectionist; be truly passionate; support and satisfy stakeholders; make an effective team; create mutual trust and transparency; and analyse the context, size, and circumstances of the project; analyse the social and cultural constraints; and analyse the political and economic situation. In this type of company, leadership functions as a liquid process.

In the *management consulting* type of company, an effective project manager is one who can direct projects; define visions, goals, and strategies; direct stakeholders; inspire and encourage people; derive the best from members; lead by example; show charisma; create a cohesive team; support and satisfy stakeholders; anticipate problems; establish

mutual trust; analyse the project context and circumstances; and analyse cultural, political, and economic situations. In this type of company, leadership moves the project team forward.

In the *banking and insurance* type of company, an effective project manager should inspire and influence members; lead by example; support team members; create a unified team; satisfy stakeholders; foresee problems and difficulties; establish mutual trust; investigate the environment, industry, and type of project; assess social and cultural conditions; and evaluate political and economic conditions. In this type of project, leadership can push forward project tasks.

Table 7.2 demonstrates the comparisons between these six types of company based on the leadership aspect of the research findings.

Table 7.2: Comparing the types of company (7-12) based on the leadership cluster

Company Type	Telecommunications	Trading	Advertising & Marketing	Business & Enterprise	Management consulting	Banking & Insurance
Leadership	The most important aspects of project management	Leadership is associative and deals with spiritualities	Transform project managers into project leaders	Liquid process	Leadership moves project team forward	Leadership means pushing forward tasks
Directing	Set direction	Direct different groups	Provide direction	Conduct and direct people to obtain the vision	Direct projects	
Create a shared project vision	Set a shared vision	Set a vision	Make a shared vision	Have a vision	Define visions	
Define project goals and objective	Outline project goals and objectives	Determine project goal and objectives	Define goals and objectives	Have a goal and objectives	Define project goals	
Establish project policies and strategies	Determine strategy			Set project strategies and policies	Define policies and strategies	
Guide project stakeholders	Guide project stakeholders		Guide people	Guide stakeholders	Direct stakeholders	
Inspiring	Inspire project team	Motivate and induce others	Inspire people	Inspire stakeholders	Inspire people	Inspire team members
Influence and motivate project stakeholders	Motivate people	Influence others	Motivate people to go the extra step	Stimulate, motivate, and influence members	Encourage and energise people	Motivate and influence team members
Elicit the best out of project team members by developing their creativity		Derive creativity from members	Know how to get the best out of members	Develop members' productivity	Derive the best from members	
Lead by example	Lead by example, brings lots of motivation		Lead by example		Lead by example	Lead by example
Exude charisma	Be charismatic	Attract people using charisma	Exude charisma	Be charismatic and a perfectionist	Show charisma	
Supporting	Support stakeholders	Support stakeholders		Support all stakeholders	Support stakeholders	Support team members
Build a unified project team		Unify project team members	Create cohesive team	Make an effective project team	Create a cohesive project team	Create a unified team
Satisfy project stakeholders by fulfilling their requirements and expectations	Satisfy stakeholders to contribute more and exceed expectations	Fulfill stakeholders' needs and expectations		Make happy and satisfy stakeholders	Satisfy stakeholders to exceed expectations	Satisfy all stakeholders
Foresee project threats and transform them into opportunities	Identify weaknesses and change into strengths		Predict problems		Anticipate problems	Foresee problems and difficulties
Demonstrate enthusiasm and attentiveness		Be attentive and enthusiastic		Be truly passionate		
Building mutual trust	Build reliability and trust	Build trust and loyalty	Establish honesty and trust	Create mutual trust and transparency	Establish mutual trust	Establish mutual trust
Analysing context			Assess project environment	Analyse project context and circumstances	Assess circumstances	Analyse circumstances
Investigate the context and capacity of the project	Investigate context of project		Analyse scope and context of project	Consider size of project	Analyse project size and type, and industry	Investigate project type and industry
Assess the impact of current social and cultural constraints on the project	Assess cultural and social constraints	Analyse social and cultural constraints	Assess social and cultural situations	Analyse social and cultural constraints	Assess cultural situations	Assess social and cultural conditions
Evaluate the impact of current political and economic conditions on the project				Analyse political and economic situation	Analyse political and economic situations	Evaluate political and economic conditions

Source: Field work

7.2.2 Comparing the types of company based on the management cluster

Based on the data analysis, I found that in the *printing technologies* type of company, an effective project manager should plan project tasks; organise tasks; control tasks; use suitable and modern tools and techniques; give more authority to members to self-control their works; develop management abilities; gain experience and academic knowledge; improve communication skills; and react and make decisions quickly in different situations.

In the *paper manufacturing* type of company, an effective project manager is one who can plan project tasks; set a plan and timetable; provide resources; define project works for members; organise issues; set an accurate bonus system; use appropriate managerial tools and approaches; employ and train effective people; supervise and control project team members; monitor tasks regularly; achieve high quality products with low expenditure and on-time; improve managerial skills; enhance academic knowledge and experience; and focus on interpersonal communication skills.

In the *automotive* type of company, an effective project manager needs to plan project works; make project plans and schedules; define and distribute tasks; organise people and duties; give bonuses to project team members; recruit talented people and train them; control tasks; conduct monitoring and proactive problem solving; supervise members and let them monitor themselves; obtain knowledge and experience; establish relationships and connections; and develop judgment, decision-making, and imagination abilities. In this type of company, management is mainly concerned with performing works.

In the *computer* type of company, an effective project manager should make a project plan and stay within the timeline; determine resource prioritisation; define project tasks before delegating them; organise works; train people effectively; complete the project within budget, schedule, and preset specification; obtain up-to-date knowledge and experience; and enhance communication skills.

In the *green energy technologies* type of company, an effective project manager is one who can organise project duties; give bonuses based on progress; encourage members to share their ideas; monitor project works; consider time, cost, and quality; pay attention to managerial skills; improve academic knowledge and experience; and improve interpersonal communication skills.

In the *construction* type of company, an effective project manager should plan project issues; make accurate plans and timetables; clarify resources and allocate a budget; define the mission and give the tasks to the right people; organise people and issues; provide an appropriate bonus system; use proper project management tools and techniques; and employ qualified people and provide brainstorming classes for them. He or she should control and supervise continuously; monitor tasks regularly; rely on members and give them more freedom but check their work regularly; complete the project within budget and schedule; attain knowledge and experience; have high listening, speaking, and communication abilities; and enhance reaction, imagination, and decision-making abilities.

Table 7.3 illustrates the comparisons between these six types of company based on the management aspect of the research findings.

Table 7.3: Comparing the types of company (1-6) based on the management cluster

Company Type	Printing technologies	Paper manufacturing	Automotive	Computer	Green energy technologies	Construction
Findings						
Management			Performing works			Includes planning, , controlling, and organisation
Planning	Plan project tasks	Plan project tasks	Plan project works			Plan project issues
Set project plans and schedules		Set plan and timetable	Make project plans and schedules	Make project plan and stay within timeline		Make accurate plans and timetables
Budget and allocate project resources		Provide resources		Determine resource prioritization		Clarify resources and allocate budget
Define project tasks and assign them to the right project team members		Define project works for members	Clarify roles, and define and distribute tasks	Define project tasks before delegating them to members		Define mission and give tasks to right people
Organising	Organise tasks	Organise issues	Organise people and duties	Organise works	Organise project duties	Organise people and issues
Establish appropriate project incentive schemes		Set accurate bonus system	Give bonuses to project team members		Give bonuses based on progress	Provide appropriate bonus system
Use appropriate project management tools and techniques	Use suitable and modern tools and techniques	Use appropriate managerial tools and approaches				Use proper project management tools and techniques
Recruit and train competent individuals		Employ and train effective people	Recruit talented people, and train them	Train people effectively	Encourage members to share their ideas	Employ qualified people and provide brainstorming classes
Controlling	Control tasks	Supervise and control project team members	Control tasks			Control and supervise continuously
Monitor and troubleshoot project tasks proactively		Monitor tasks regularly	Conduct monitoring and proactive problem solving		Monitor project works	Monitor tasks regularly
Develop a self-managed project team	Give more authority to members to self-control their works		Supervise members and let them monitor themselves			Rely on members and give them more freedom but check their work regularly
Meet project performance and purpose		Achieve high quality product with low expenditure and on-time		Complete project within budget, schedule, and preset specifications	Consider time, cost, and quality	Complete project within budget and schedule
Honing managerial skills	Develop management abilities	Improve managerial skills			Pay attention to managerial skills	
Enhance project knowledge and experience	Gain experience and academic knowledge	Enhance academic knowledge and experience	Obtain knowledge and experience	Obtain up-to-date knowledge, and experience	Improve academic knowledge and experience	Attain knowledge and experience
Improve interpersonal communication skills	Improve communication skills	Focus on interpersonal communication skills	Establish relationships and connections	Enhance communication skills	Improve interpersonal communication skills	Have high listening, speaking, and communication abilities
Strengthen decision making abilities	React and make decisions quickly in different situations		Develop judgement, decision-making , and imagination abilities			Enhance reaction, imagination, and decision-making abilities

Source: Field work

Moreover, in the *telecommunications* type of company, an effective project manager should plan and organise tasks; choose the right people for the team; control tasks and give feedback; deliver the project within budget and schedule; acquire knowledge and experience; develop communications skills; and be able to decide quickly. In this type of company, management is about administering careers.

In the *trading* type of company, an effective project manager is one who can organise groups and works; use appropriate tools and techniques; gain knowledge and experience; have a high listening ability; and strengthen his or her ability to imagine, process, and analyse. In this type of company, management is inductive and has different layers.

In the *advertising and marketing* type of company, an effective project manager needs to provide a plan and schedule; organise works; accomplish the project on-time, on-cost, with high quality, and on-purpose; and enhance knowledge, experience, and communication.

In the *business and enterprise* type of company, an effective project manager should plan and organise tasks; consider time and people management; define roles and responsibilities for each task and give them to the right people; and recruit and train talented individuals. He or she should monitor tasks; give freedom to members but regularly check them; finish the project on-schedule, on-budget, and with high quality; hone managerial skills; develop experience and knowledge; and develop interpersonal communication skills. Within this type of company, an effective project manager should understand the management function very well.

In the *management consulting* type of company, an effective project manager is one who can set planning; provide financial resources; budget and assign financial resources; define duties and responsibilities of members; organise people and tasks; set a bonus system; adopt appropriate project management approaches; and employ suitable people. He or she should control tasks; proactively monitor and troubleshoot problems; rely on people but regularly control them; meet project purpose, time, cost, and quality; develop managerial skills; enhance experience, knowledge, and interpersonal communication skills; and improve his or her ability to decide quickly and decisively.

In the *banking and insurance* type of company, an effective project manager should plan and organise works; set a plan and timetable; define tasks and delegate them to the

right individuals; recruit people with the right skills; consider time, cost, and quality; hone essential managerial skills; obtain experience and knowledge; and develop interpersonal communication skills.

Table 7.4 illustrates the comparisons between these six types of company based on the management aspect of the research findings.

Table 7.4: Comparing the types of company (7-12) based on the management cluster

Company Type	Telecommunications	Trading	Advertising & Marketing	Business & Enterprise	Management consulting	Banking & Insurance
Findings						
Management	Administering careers	Management is inductive and has different layers		Understand management function		Know managing and controlling roles
Planning	Plan tasks	Make plan		Plan tasks	Set planning	Plan works
Set project plans and schedules			Provide plan and schedule	Consider time and people management	Provide financial resources	Ste plan and timetable
Budget and allocate project resources					Budget and assign financial resources	
Define project tasks and assign them to the right project team members				Define roles and responsibilities of each task and give them to the right people	Define duties and responsibilities of members	Define tasks and delegate them to right individuals
Organising	Organise tasks	Organise groups and works	Organise works	Organise tasks	Organise people and tasks	Organise works
Establish appropriate project incentive schemes					Set bonus system	
Use appropriate project management tools and techniques		Use appropriate tools and techniques			Adopt appropriate project management approaches	
Recruit and train competent individuals	Choose right people for the team			Recruit and train talented individuals	Employ suitable people	Recruit people with the right skills
Controlling					Control tasks	
Monitor and troubleshoot project tasks proactively	Control tasks and give feedback			Monitor tasks	Proactively monitor and troubleshoot problems	
Develop a self-managed project team				Give freedom to members but regularly check them	Rely on people but regularly control them	
Meet project performance and purpose	Deliver project within budget and schedule		Accomplish projects on-time, on-cost, with high quality, and on-purpose	Finish project on-schedule, on-budget, and with high quality	Meet project purpose, time, cost, and quality	Consider time, cost, and quality
Honing managerial skills				Hone managerial skills	Develop managerial skills	Hone essential managerial skills
Enhance project knowledge and experience	Acquire knowledge and experience	Gain knowledge and experience	Enhance knowledge and experience	Develop experience and knowledge	Enhance experience and knowledge	Obtain experience and knowledge
Improve interpersonal communication skills	Develop communication skills	Have high listening ability	Communication is the key to success	Develop interpersonal communication skills	Enhance interpersonal communication skills	Develop interpersonal communication skills
Strengthen decision making abilities	Be able to decide quickly	Strengthen ability to imagine, process, and analyse			Improve ability to decide quickly and decisively	

Source: Field work

7.2.3 Comparing the types of company based on the emotional intelligence cluster

Based on the data analysis, I found that in the *printing technologies* type of company, an effective project manager should create self-confidence; have tolerance and patience; show adaptability; take the initiative and have innovative methods; be optimistic; manage and control others' emotions and concerns; promote intuition and empathy; and conduct accurate conflict and dispute management. In this type of company, an effective project manager should have emotional wisdom.

In the *paper manufacturing* type of company, an effective project manager is one who can recognise himself or herself and his or her abilities; build self-confidence; spread happiness and positive energy; know the potential of the project team; pay attention to community and social relations; and control stakeholders' feelings. In this type of company, an effective project manager should consider emotional and psychological issues.

In the *automotive* type of company, an effective project manager should have emotional intelligence and self-confidence; develop professional behaviours and learning attitudes; develop creativity and innovation; understand the abilities and characteristics of the project team; display empathy, good feelings, and sensitivity; manage others' relationships; enhance teamwork; and carry out conflict management.

In the *computer* type of company, an effective project manager should know emotions; perform self-assessment before assessing others; have great control over himself or herself and feel relaxed inside; possess the ability to control emotions; show commitment; show flexibility and adaptability; possess self-motivation; and improve intuitiveness. In this type of company, effective project managers are those with higher EIs rather than those with higher IQs.

In the *green energy technologies* type of company, an effective project manager is one who can handle emotions and possess sufficient self-motivation.

In the *construction* type of company, an effective project manager should know himself and his abilities; know his personal strengths and weaknesses; adapt in the shortest time possible and be flexible in dealing with others; recognise others' emotions and concerns; increase empathy towards others; develop cooperation, collaboration, and

teamwork; and solve stakeholders' disputes and conflicts. In this type of company, effective project managers need to pay attention to people's feelings and concerns.

Table 7.5 demonstrates the comparisons between these six types of company based on the emotional intelligence aspect of the research findings.

Table 7.5: Comparing the types of company (1-6) based on the emotional intelligence cluster

Company Type	Printing technologies	Paper manufacturing	Automotive	Computer	Green energy technologies	Construction
Emotional intelligence	Have emotional wisdom	Consider emotional and psychological issues	Have emotional intelligence	Effective PMs are those with higher EIs (not IQs)	Capable of handling emotions	Pay attentions to people's feelings and concerns
Self-awareness		Recognise themselves and their abilities		Know emotions		Know themselves and their abilities
Perform self-assessment				Perform self-assessment before assessing others		Know personal strengths and weaknesses
Build self-confidence	Create self-confidence	Build self-confidence	Have self-confidence			Have self-confidence
Self-regulation			Develop professional behaviours and learning attitudes	Have great control over himself and feel relaxed inside		
Maintain self-control	Have tolerance and patience			Possess ability to control emotions		
Evoke conscientiousness				Show commitment		
Demonstrate high adaptability	Show adaptability			Show flexibility and adaptability		Adapt in the shortest time possible and be flexible in dealing with others
Exhibit high innovation	Take the initiative and have innovative methods		Develop creativity and innovation			
Keep self-motivated				Possess self-motivation	Possess sufficient self-motivation	
Exude optimism	Be optimistic	Spreads happiness and positive energy				
Social-awareness		Know the potential of the project team	Understand abilities and characteristics of project team			Recognise others' emotions and concerns
Promote intuition and empathy towards project stakeholders	Promote intuitions and empathy	Pay attention to community and social relations	Display empathy, good feelings and sensitivity	Improve intuitiveness		Increase empathy toward others
Social-regulation	Manage and control others' emotions and concerns	Control stakeholders' feelings	Manage others' relationships			
Build cooperation and teamwork among project team members			Enhance teamwork			Develop cooperation, collaboration, and teamwork
Resolve project conflicts and disputes	Conduct accurate conflict and dispute management		Carry out conflict management			Solve stakeholders' disputes and conflicts

Source: Field work

Moreover, in the *telecommunications* type of company, an effective project manager should understand his or her emotions; assess himself or herself; have self-confidence; evoke conscientiousness; show initiative; show optimism; recognise others' emotions; show empathy; enhance cooperation and collaboration; and manage conflicts and resolve disagreements. In this type of company, emotional intelligence affects team performance directly.

In the *trading* type of company, an effective project manager is one who can build self-confidence; have patience and tolerance under pressure; be adaptable during the project; exude optimism; know others' feelings; improve intuition and empathy; and develop coordination ability. In this type of company, it is important for project managers to pay attention to emotional and psychological matters.

In the *advertising and marketing* type of company, an effective project manager should know his or her potentials; show high innovation; promote intuition and empathy towards stakeholders; manage others' relationships; and develop teamwork and collaboration. In this type of company, EQ is placed higher than IQ.

In the *business and enterprise* type of company, an effective project manager should know his or her abilities; be self-confident; control his or her emotions; show adaptability; be positive and optimistic; understand situations and people; understand members' desires and feelings; and consult, cooperate, and collaborate with members. In this type of company, effective project managers should consider emotional intelligence.

In the *management consulting* type of company, an effective project manager is one who can recognise himself or herself; assess himself or herself; have self-confidence; manage himself or herself; be responsible and committed; show high flexibility and adapt style and behaviours to the environment; stay self-motivated; be optimistic and persistent; understand stakeholders' emotions; manage members' emotions; cooperate and collaborate with others; and solve conflicts. In this type of company, understanding and manipulating emotional intelligence is very important for project managers.

In the *banking and insurance* type of company, an effective project manager should know himself; increase self-confidence; be flexible and adaptable; be motivated; consider intuition; develop intuition and empathy; manipulate people and their

relationships; and resolve conflicts and disputes. In this type of company, emotional intelligence greatly affects project outcomes.

Table 7.6 demonstrates the comparisons between these six types of company based on the emotional intelligence aspect of the research findings.

Table 7.6: Comparing the types of company (7-12) based on the emotional intelligence cluster

Company Type	Telecommunications	Trading	Advertising & Marketing	Business & Enterprise	Management consulting	Banking & Insurance
Emotional intelligence	EI affects team performance directly	Pay attention to emotional and psychological matters	EQ placed higher than IQ	Consider emotional intelligence	Understand and manipulate Emotional intelligence	EI greatly affects outcomes
Self-awareness	Understand their emotions		Know their potentials	Know their abilities	Recognise themselves and their personality	Know themselves
Perform self-assessment	Assess themselves				Assess themselves	
Build self-confidence	Have self-confidence	Build self-confidence		Be self-confident	Have self-confidence	Increase self-confidence
Self-regulation				Control their emotions	Manage themselves and their authority	
Maintain self-control		Have patience and tolerance under pressure				
Evoke conscientiousness	Evoke conscientiousness				Be responsible and committed	
Demonstrate high adaptability		Be adaptable during project		Show adaptability in the work	Show high flexibility and adapt style and behaviours to the environment	Be flexible and adaptable during project
Exhibit high innovation	Show initiative in project		Show high innovation			
Keep self-motivated					Stay self-motivated	Be motivated
Exude optimism	Show optimism	Exude optimism		Be positive and optimistic	Be optimistic and persistent during project	
Social-awareness	Recognise others' emotions	Know others' feelings and know the status of the team		Understand situations and people	Understand stakeholders' emotions	Consider intuition
Promote intuition and empathy towards project stakeholders	Show empathy	Improve intuition and empathy	Promote intuition and empathy towards stakeholders	Understand members' desires and feelings		Develop intuition and empathy
Social-regulation			Manage others' relationships		Manage members' emotions	Manipulate people and their relationships
Build cooperation and teamwork among project team members	Enhance cooperation and collaboration	Develop coordination ability	Develop teamwork and collaboration	Consult, cooperate and collaborate with members	Consult, cooperate., and collaborate with others	
Resolve project conflicts and disputes	Manage conflicts and resolve disagreements				Solve conflicts	Resolve conflicts and disputes

Source: Field work

The comparisons show that leadership is more important than management and much more important than emotional intelligence; and management is more important than emotional intelligence. Accordingly, in order to be effective within project-oriented organisations, project managers need first to enhance their leadership (i.e. directing, inspiring, supporting, building mutual trust, and analysing context), then their management (i.e. planning, organising, controlling, and honing managerial skills), and finally their emotional intelligence (i.e. self-awareness, self-regulation, social-awareness, and social-regulation).

The comparisons also show that the demand for effectiveness of project managers may vary from one project-oriented organisation to another.

7.3 Two cases

As business organisations produce products or provide services or rarely do both (Krause and Scannell, 2002); I decided to classify the participating companies into two major groups based on their industry and nature. Hence, I created two cases: product-based industry and service-based industry; since case exploration provided me the opportunities to learn about and understand similarities and differences in the different types of company (Stake, 2005; Yin, 2009). Analysing these cases enabled me to highlight the effectiveness of project managers within project-oriented organisations.

7.3.1 Product-based industry

Case 1 as product-based industry encompasses the six different types of product-based company: printing technologies, paper manufacturing, automotive, computer, green energy technologies, and construction.

7.3.2 Service-based industry

Case 2 as service-based industry encompasses the six different types of service-based company: telecommunications, trading, advertising and marketing, business and enterprise, management consulting, and banking and insurance.

7.4 Comparing the cases based on the research findings

I compared the two cases based on the research findings in order to show which construct of the conceptual model would be more significant for the product-based companies or the service-based companies.

In accordance with the previous sections of this chapter, the emerging data suggest that leadership and emotional intelligence in case 2 are more significant than in case 1. This implies that leadership and emotional intelligence would be more critical for project managers of service-based companies than it would be for project managers of product-based companies. Conversely, the emerging data suggest that management in case 1 is more significant than in case 2. This implies that management would be more crucial for project managers of product-based companies than it would be for project managers of service-based companies.

Accordingly, the project managers of service-based companies require more directing, inspiring, supporting, building mutual trust, and analysing context than project managers of product-based companies. Also, project managers of service-based companies require more self-awareness, self-regulation, social-awareness, and social-regulation than project managers of product-based companies; however, project managers of product-based companies require more planning, organising, controlling, and honing managerial skills than project managers of service-based companies.

Thus, in order to be effective, project managers of service-based companies require more leadership, less management, and more emotional intelligence than project managers of product-based companies.

7.5 Comparing the leadership styles of the companies

In order to enhance understanding of the subject under investigation, the leadership styles of the participating companies were compared.

The transformational leadership style was adopted by 38 informants, the transactional leadership style was adopted by 20 informants, and the laissez-faire leadership style was adopted by one informant (see Table 4.5). Therefore, the most popular leadership style among the participating companies was transformational. After transformational, the transactional leadership style was next most popular. The least popular leadership style was laissez-faire. This implies that transformational may be the most valuable leadership style for project-oriented organisations; as the tactical manager of the computer company stated:

“I think the transformational leadership style with flexible and adaptive approach is really needed for an organisation’s project

manager; as certain project team members perform better if their project manager can give them tasks and let them just finish the way they want to (Computer, T, 11).”

Thus, within project-oriented organisations, a project manager who would like to become an effective project manager should attempt to evolve from a typical project manager to a transformational project leader by developing his or her transformational leadership style.

I also showed the summary of the findings of this chapter to the thirty-five research informants in order to ensure that the findings were valuable and trustworthy. All the informants mentioned that these findings were true and would be useful.

7.6 Conclusions

In this chapter, the comparative data analysis has been carried out.

Accordingly, the twelve types of participating company have been compared based on the research findings through three separate clusters (leadership, management, and emotional intelligence) in order to show which construct of the conceptual model is significant for which type of company.

The comparisons showed that leadership is more important than management and much more important than emotional intelligence; and management is more important than emotional intelligence. Accordingly, in order to be effective within project-oriented organisations, project managers need first to enhance their leadership (i.e. directing, inspiring, supporting, building mutual trust, and analysing context), then their management (i.e. planning, organising, controlling, and honing managerial skills), and finally their emotional intelligence (i.e. self-awareness, self-regulation, social-awareness, and social-regulation). The comparisons also showed that the demand for effectiveness of project managers may vary from one project-oriented organisation to another.

Two cases have also been created based on the industry and nature of the participating companies: product-based industry and service-based industry. These have been compared based on the research findings in order to show which construct of the conceptual model would be more critical for project managers of the product-based companies (printing technologies, paper manufacturing, automotive, computer, green

energy technologies, and construction) or the service-based companies (telecommunications, trading, advertising and marketing, business and enterprise, management consulting, and banking and insurance).

The comparisons indicated that in order to be effective, project managers of service-based companies require more leadership, less management, and more emotional intelligence than project managers of product-based companies.

Moreover, the leadership styles (transformational, transactional, and laissez-faire) of the participating companies have been compared. The comparisons indicated that in order to be effective, project managers need to evolve into transformational project leaders by developing their transformational leadership style.

This chapter has provided comparative works based on the findings of the research project in order to enhance understanding of the subject under investigation.

In chapter 8, further discussion of the research findings will be provided.

Chapter 8: Discussion of findings

8.1 Introduction

In the preceding three chapters, the research findings were presented. In this chapter, these findings are discussed, evaluated against the existing literature, and explained in terms of their theoretical and practical contributions.

In fact, it is necessary for researchers to relate their research findings to relevant existing literature. This can provide a meaningful contribution to existing knowledge; enable researchers to present their findings beyond the current theoretical domain, and enrich the validity and overall quality of the research (Eisenhardt, 2002). However, Lock (2001) emphasises that in engaging with existing theoretical concepts in grounded theory research as a data-driven methodology, the major challenge is to find out which concepts are most relevant to the research findings. Furthermore, these findings may relate to theoretical concepts from diverse research fields which were not expected at the outset.

The chapter first aims to demonstrate the key points of this research project. Next, the matter of an effective project manager along with its comparison with the extant literature is shown in order to determine the position of this research project within the literature. Accordingly, leadership, management and emotional intelligence of an effective project manager are discussed and compared with the extant literature. After that, the conceptual and practical models of this study are discussed and compared with the existing theoretical and practical models respectively. Then, the comparative works are discussed and compared with the existing literature. Afterwards, the theoretical and practical contributions of this research are presented respectively in order to show the value of this study. Finally, a brief summary and conclusions of this chapter are presented.

8.2 The research project

The purpose of this research project is to bring the practical view of the effectiveness of project managers into the theoretical perspective in the form of a conceptual model as the combination of constructs (three core categories, thirteen categories, and thirty-eight concepts).

However, according to the data analyses, the leadership core category is more significant than the management and emotional intelligence core categories. The name of this conceptual model (*Leadership: Being an effective project manager*) also implies this significance as well.

Herein, each of the core categories represents different aspects of the effectiveness of project managers within project-oriented organisations. Mainly, leadership is concerned with directing and inspiring; management is concerned with planning and controlling; and emotional intelligence is concerned with self and social regulation.

In general, the topic under study has been underexplored; however, each of the core categories has been separately defined and discussed by various researchers in a number of different ways. The most important point of this research project is that the investigation was carried out under the context of the project-oriented organisation. Thus, this matter should be taken into account during discussion of the research findings.

8.3 An effective project manager

I discovered that within project-oriented organisations, a project manager who would like to evolve from a typical project manager to an effective project manager needs first to develop his or her leadership (i.e. directing, inspiring, supporting, building mutual trust, and analysing context), then his or her management (i.e. planning, organising, controlling, and honing managerial skills), and finally his or her emotional intelligence (i.e. self-awareness, self-regulation, social-awareness, and social-regulation).

However, these findings have not been indicated by researchers and seem fresh in the project management field.

In the following subsections, these research findings are discussed further.

8.3.1 Leadership of an effective project manager

It was discovered that leadership can greatly enhance the effectiveness of project managers within project-oriented organisations. Similarly, most researchers emphasise that leadership is a significant requirement for project managers in order for them to be effective (Anderson, 1992; Thamhain, 2004b; Brill et al., 2006; Fortune and White, 2006; Chen and Lee, 2007; Bedingfield and Thal, 2008; Müller and Turner, 2010; Stevenson and Starkweather, 2010; Yang et al., 2011).

It was also discovered that in order to be effective, project managers need to evolve into project leaders by developing their leadership. Similarly, Smith (1999) and Pinto (2007) emphasise that project managers should attempt to develop themselves into project leaders. In addition, leadership of effective project managers was classified into five groups: directing, inspiring, supporting, building mutual trust, and analysing context.

This study demonstrated that in general, leadership of effective project managers could influence their management and emotional intelligence; and in particular their directing, inspiring, supporting, building mutual trust, and analysing context could influence their planning, organising, controlling, and honing managerial skills as well as their self-awareness, self-regulation, social-awareness, and social-regulation.

It also demonstrated that in general, leadership of effective project managers could be influenced by their emotional intelligence; and in particular, their directing, inspiring, supporting, building mutual trust, and analysing context could be influenced by their self-awareness, self-regulation, social-awareness, and social-regulation.

However, in the project management field, the relationships between leadership and management or emotional intelligence have been relatively underexplored.

8.3.1.1 Directing

It was found that directing as one of the aspects of leadership can enhance the effectiveness of project managers. Similarly, different studies indicate that directing as one of the leadership functions (Hernon, 2009; Northouse, 2010) is essential for effective project managers (Anderson, 1992; Kent et al., 2001; Thamhain, 2004b; Kent, 2005; Brill et al., 2006; Burke et al., 2007). Directing was also categorised into four elements: create a shared project vision, define project goals and objectives, establish project policies and strategies, and guide project stakeholders.

This study demonstrated that the four elements of directing can enhance the effectiveness of project managers. Likewise, the extant literature shows vision as one of the main factors of leadership (Kent et al., 2001; Kent, 2005; Northouse, 2010) is vital for project managers in order for them to be effective (Posner, 1987; Pettersen, 1991b; Dulewicz and Higgs, 2003; Christenson and Walker, 2004; Thamhain, 2004a; Milosevic and Patanakul, 2005; Brill et al., 2006; Pinto, 2007; Bedingfield and Thal, 2008; Aronson et al., 2010).

The extant literature shows that goals and objectives should be clarified by effective project managers (Stuckenbruck, 1976; Posner, 1987; Thamhain, 2004a; Brill et al., 2006; Bedingfield and Thal, 2008). It shows that strategy is necessary for a project and effective project managers should think strategically (Pettersen, 1991b; Dulewicz and Higgs, 2003; Norrie and Walker, 2004; Kent, 2005; Bedingfield and Thal, 2008; Patanakul and Milosevic, 2008; Shao and Müller, 2011). It also shows that guiding people (Kent et al., 2001; Northouse, 2010) as a function of leadership should be considered by effective project managers (Brill et al., 2006).

8.3.1.2 Inspiring

It was found that inspiring as one of the aspects of leadership can increase the effectiveness of project managers. Similarly, several studies indicate that inspiring as one of the leadership functions (Kent, 2005; Northouse, 2010) is vital for project managers in order for them to be effective (Bennis and Nanus, 1985; Thamhain, 2004a). Inspiring was also categorised into four elements: influence and motivate project stakeholders, elicit the best out of project team members by developing their creativity, lead by example, and exude charisma.

This study demonstrated that the four elements of inspiring can enhance the effectiveness of project managers. Likewise, the extant literature shows that motivating people (Dulewicz and Higgs, 2003; Herson, 2009; Northouse, 2010) and influencing people (Rost, 1991; Dulewicz and Higgs, 2003; Kent, 2005) as leadership functions are required for project managers in order for them to be effective (Stuckenbruck, 1976; Sharad, 1979; Stickney and Johnston, 1980; Peters and Waterman, 1982; Thornberry and Weintraub, 1983; Posner, 1987; Anderson, 1992; Jiang et al., 1999; Thamhain, 2004a; Barkley, 2006; Brill et al., 2006; Pinto, 2007; Bedingfield and Thal, 2008; Fisher, 2011).

‘Elicit the best out of project team members by developing their creativity’ has not been implied and this concept seems fresh in this research domain. In addition, a few studies indicate that lead by example can assist project managers in being effective (Posner, 1987; Lewis, 2003; Pinto, 2007). Furthermore, Brill et al. (2006) imply that effective project managers should be charismatic, however, generally, the ‘exude charisma’ concept seems fresh in this research domain.

8.3.1.3 Supporting

It was found that supporting as one of the aspects of leadership can heighten the effectiveness of project managers. Similarly, several studies emphasise that supporting is vital for project managers in order for them to be effective (Kerzner, 1984; Thamhain, 2004b; Pinto, 2007; Toor and Ogunlana, 2009). Supporting was also categorised into four elements: build a unified project team, satisfy project stakeholders by fulfilling their requirements and expectations, foresee project threats and transform them into opportunities, and demonstrate enthusiasm and attentiveness.

This study demonstrated that the four elements of supporting can heighten the effectiveness of project managers. Likewise, the extant literature shows that building a united team as one of the tasks of leadership (Kent, 2005; Northouse, 2010) is crucial for project managers in order to prove themselves as effective project managers (Kerzner, 1984; Posner, 1987; Pettersen, 1991a; Anderson, 1992; Kets de Vries, 2001; Thamhain, 2004a; Bedingfield and Thal, 2008; Patanakul and Milosevic, 2008).

The extant literature shows that fulfilling unmet needs (Northouse, 2010) and expectations (Kent, 2005) as one of the leadership tasks is essential in order for project managers to satisfy stakeholders (Müller and Turner, 2010) and thus prove themselves as effective project managers (Mumford et al., 2000; Brill et al., 2006; Müller and Turner, 2010). It also shows that it is necessary for project managers to anticipate problems (Martin, 1976; Barber, 2005), predict performance (Lewis et al., 2002) or changes (Bennis and Nanus, 1985), and forecast issues (Brill et al., 2006). However, this study emphasised that foreseen threats must be transformed into opportunities, otherwise the foresight would be useless.

Moreover, enthusiasm is indicated as one of the key factors of leadership (Kent, 2005) which is necessary in order for project managers to be effective (Bedingfield and Thal, 2008); however, generally, 'demonstrate enthusiasm and attentiveness' has not been implied and thus this concept seems new in this research area.

8.3.1.4 Building mutual trust

This study demonstrated that 'building mutual trust' can significantly improve leadership and thus project managers need to build mutual trust in their project teams in order to be effective. Similarly, the existing literature indicates that building trust is one of the inevitable aspects of leadership and is required for project managers in order to be

effective (Likert and Hayes, 1957; Blake and Mouton, 1964; McGregor, 1967; Martin, 1976; Bowenkamp and Kleiner, 1987; Kadefors, 2004; Barkley, 2006; Brill et al., 2006; Bedingfield and Thal, 2008; Gray and Larson, 2008).

8.3.1.5 Analysing context

It was found that ‘analysing context’ as one of the aspects of leadership can raise the effectiveness of project managers. ‘Analysing context’ was also categorised into three elements: investigate the context and capacity of the project, assess the impact of current social and cultural constraints on the project, and evaluate the impact of current political and economic conditions on the project.

Generally, analysing context and its concepts seem fresh in this research area; however, some researchers imply part of these concepts. For instance, Fisher (2011) states that cultural awareness is necessary in order for project managers to be effective; Brill et al. (2006) assert that effective project managers should understand the politics or culture within and outside organisations; and Bedingfield and Thal (2008) and Gray and Larson (2008) express that political sensitivity is needed in order for project managers to be effective.

8.3.2 Management of an effective project manager

It was discovered that management can enhance the effectiveness of project managers within project-oriented organisations. Similarly, several researchers emphasise that management is an important requirement for project managers in order for them to be effective (Martin, 1976; Stuckenbruck, 1976; Thornberry and Weintraub, 1983; Kerzner, 1984; Pettersen, 1991b; Anderson, 1992; Fabi and Pettersen, 1992; Hyväri, 2006b; Gray and Larson, 2008). Management of effective project managers was also categorised into four groups: planning, organising, controlling, and honing managerial skills.

This study demonstrated that in general, management of effective project managers could not influence their leadership and emotional intelligence; and in particular, their planning, organising, controlling, and honing managerial skills could not influence their directing, inspiring, supporting, building mutual trust, and analysing context as well as their self-awareness, self-regulation, social-awareness and social-regulation.

It also demonstrated that in general, management of effective project managers could be influenced by their leadership and emotional intelligence; and in particular, their

planning, organising, controlling, and honing managerial skills could be influenced by their directing, inspiring, supporting, building mutual trust, and analysing context as well as their self-awareness, self-regulation, social-awareness and social-regulation.

However, in the project management field, the relationships between management and leadership or emotional intelligence have been relatively underexplored.

8.3.2.1 Planning

It was found that planning as one of the aspects of management can increase the effectiveness of project managers. Similarly, various studies show that planning as one of the management functions (Kent, 2005; Northouse, 2010) is needed in order for project managers to be effective (Adams and Barndt, 1978; Thornberry and Weintraub, 1983; Kerzner, 1984; Bowenkamp and Kleiner, 1987; Posner, 1987; Pettersen, 1991b; Anderson, 1992; Fabi and Pettersen, 1992; Brill et al., 2006; Hyväri, 2006b; Bedingfield and Thal, 2008; Patanakul and Milosevic, 2008). Planning was also categorised into three elements: set project plans and schedules, budget and allocate project resources, and define project tasks and assign them to the right project team members.

This research project demonstrated that the three elements of planning can increase the effectiveness of project managers. Likewise, creating a timetable as one of the management functions (Northouse, 2010) is stressed by Brill et al. (2006) and Martin (1976). They assert that project schedules and plans are basic requirements for those project managers who would like to become effective (Martin, 1976; Brill et al., 2006). In addition, different researchers indicate that budgeting and allocating resources as management functions (Kent, 2005; Hernon, 2009; Northouse, 2010) play an important role in any type of project and thus project managers need to consider them carefully in order to improve their effectiveness (Stuckenbruck, 1976; Adams and Barndt, 1978; Kerzner, 1984; Dulewicz and Higgs, 2003; Brill et al., 2006; Patanakul and Milosevic, 2008). However, generally, 'define project tasks and assign them to the right project team members' has not been implied and therefore this concept seems fresh in this research field.

8.3.2.2 Organising

It was found that organising as one of the aspects of management can enhance the effectiveness of project managers. Similarly, different studies demonstrate that organising as one of the management functions (Kent, 2005; Northouse, 2010) can

positively affect the effectiveness of project managers and thus they require to pay more attention to this function throughout their projects in order to be effective (Thornberry and Weintraub, 1983; Pettersen, 1991a, 1991b; Anderson, 1992; Fabi and Pettersen, 1992; Hyväri, 2006b; Bedingfield and Thal, 2008). Organising was also categorised into three elements: establish appropriate project incentive schemes, use appropriate project management tools and techniques, and recruit and train competent individuals.

This research project demonstrated that the three elements of organising can enhance the effectiveness of project managers. Likewise, developing an incentive system as one of the management functions (Kent, 2005; Northouse, 2010) is implied by Thamhain (2004a), Wysocki (2007), and Pinto (2007). They indicate that project managers need appropriate incentives in order to be able to effectively encourage their project team members (Thamhain, 2004a; Pinto, 2007; Wysocki, 2007). In addition, the significance of using suitable tools and techniques by project managers is implied by a few studies (Stuckenbruck, 1976; Anderson, 1992; Brill et al., 2006; Patanakul and Milosevic, 2008). However, generally, ‘recruit and train competent individuals’ has not been implied and thus this concept seems fresh in this research field.

8.3.2.3 Controlling

It was found that controlling as one of the aspects of management can raise the effectiveness of project managers. Similarly, different studies emphasise that controlling as one of the management functions (Kent, 2005; Northouse, 2010) plays an important role in carrying out a project effectively; and thus it is very important for project managers to attempt to develop themselves into effective project managers through accurate controlling (Pettersen, 1991a, 1991b; Anderson, 1992; Fabi and Pettersen, 1992; Brill et al., 2006; Patanakul and Milosevic, 2008). Controlling was also categorised into three elements: monitor and troubleshoot project tasks proactively, develop a self-managed project team, and meet project performance and purpose.

This research project demonstrated that the three elements of controlling can raise the effectiveness of project managers. Likewise, various studies show that monitoring and proactive problem solving as one of the management tasks (Kent, 2005; Northouse, 2010) can assist project managers to enhance their effectiveness (Wärneryd, 1985; Bowenkamp and Kleiner, 1987; Barber, 2005; Brill et al., 2006; Crowley, 2006; Gray and Larson, 2008; Patanakul and Milosevic, 2008). Furthermore, meeting project

performance and purpose has been implied differently by different studies (Anderson, 1992; Norrie and Walker, 2004; Thamhain, 2004a; Brill et al., 2006; Gray and Larson, 2008; Hernon, 2009). However, 'develop a self-managed project team' has not been implied and seems to be a new concept in this field.

8.3.2.4 Honing managerial skills

It was found that 'honing managerial skills' as one of the aspects of management can improve the effectiveness of project managers; since experience, knowledge, communications, and so on do not have any specific endpoint. Similarly, the extant literature highlights the essential managerial skills, however, it implies that effective project managers are those who possess these managerial skills rather than hone them (Bowenkamp and Kleiner, 1987; Posner, 1987; Anderson, 1992; Chen and Lee, 2007; Patanakul and Milosevic, 2008). 'Honing managerial skills' was also categorised into three elements: enhance project knowledge and experience, improve interpersonal communication skills, and strengthen decision making abilities.

This research project demonstrated that these three elements can improve the effectiveness of project managers. Likewise, the extant literature shows that experience (Katz, 1974; Anderson and Woodhead, 1981; Posner, 1987; Anderson and Tucker, 1990; Anderson, 1992; Cleland and King, 1998; Patanakul and Milosevic, 2008); project knowledge (Archibald, 1975; Anderson, 1992; Brill et al., 2006; Chen and Lee, 2007; Grosse, 2007; Patanakul and Milosevic, 2008); communication skills (Peters and Waterman, 1982; Roberts and Fوسفeld, 1982; Spitz, 1982; Thornberry and Weintraub, 1983; Bowenkamp and Kleiner, 1987; Posner, 1987; Pettersen, 1991b; Anderson, 1992; Fabi and Pettersen, 1992; Pinto, 1998; Rosenau, 1998; Barkley, 2006; Brill et al., 2006; Bedingfield and Thal, 2008); and decision making skills (Declerk et al., 1980; Spitz, 1982; Thornberry and Weintraub, 1983; Pettersen, 1991a; Anderson, 1992; Fabi and Pettersen, 1992; Pinto, 1998; Brill et al., 2006; Chen and Lee, 2007; Bedingfield and Thal, 2008) are essential in order for project managers to be effective.

8.3.3 Emotional intelligence of an effective project manager

It was discovered that emotional intelligence can enhance the effectiveness of project managers within project-oriented organisations. Similarly, some researchers imply that emotional intelligence could assist project managers in being effective throughout their projects (Mikkelsen and Folmann, 1983; Dulewicz and Higgs, 2003; Druskat and

Druskat, 2006; Mersino, 2007; Müller and Turner, 2007; Gray and Larson, 2008; Clarke, 2010b). Emotional intelligence of effective project managers was also classified into four groups: self-awareness, self-regulation, social-awareness, and social-regulation.

This study demonstrated that in general, emotional intelligence of effective project managers could influence their leadership and management; and in particular, their self-awareness, self-regulation, social-awareness and social-regulation could influence their directing, inspiring, supporting, building mutual trust, and analysing context as well as their planning, organising, controlling, and honing managerial skills.

It also demonstrated that in general, emotional intelligence of effective project managers could be influenced by their leadership; and in particular, their self-awareness, self-regulation, social-awareness, and social-regulation could be influenced by their directing, inspiring, supporting, building mutual trust, and analysing context.

Likewise, the extant literature implies that emotional intelligence can influence leadership and management (Kellett et al., 2002; Sunindijo et al., 2007; Clarke, 2010a; Hur et al., 2011; Cavazotte et al., 2012). However, generally, in the project management field, the relationships between emotional intelligence and leadership or management have been relatively underexplored.

8.3.3.1 Self-awareness

It was found that self-awareness as one of the aspects of emotional intelligence can raise the effectiveness of project managers. Similarly, several studies indicate that self-awareness as one of the emotional intelligence functions (Goleman et al., 2002a; Cavallo, 2006) can assist project managers to develop themselves into effective project managers (Dulewicz and Higgs, 2003; Brill et al., 2006; Clarke, 2010b). Self-awareness was also categorised into two elements: perform self-assessment, and build self-confidence.

This research project demonstrated that these elements can raise the effectiveness of project managers. Likewise, Brill et al. (2006) highlight self-understanding and self-confidence as the essential requirements for any project manager who desires to be effective.

8.3.3.2 Self-regulation

It was found that self-regulation as one of the aspects of emotional intelligence can improve the effectiveness of project managers. Similarly, several studies mention that self-regulation as one of the emotional intelligence functions (Goleman et al., 2002a; Cavallo, 2006) can assist project managers in proving themselves as effective project managers (Posner, 1987; Dulewicz and Higgs, 2003; Brill et al., 2006; Bedingfield and Thal, 2008; Patanakul and Milosevic, 2008; Turner et al., 2009). Self-regulation was also categorised into six elements: maintain self-control, evoke conscientiousness, demonstrate high adaptability, exhibit high innovation, keep self-motivated, and exude optimism.

This research project demonstrated that these elements can improve the effectiveness of project managers. Likewise, Brill et al. (2006) and Patanakul and Milosevic (2008) emphasise that effective project managers should exhibit self-control. Conscientiousness is also implied by different researchers as an essential requirement in order for project managers to be effective (Costa and McCrae, 1991; Tupes and Christal, 1992; Dulewicz and Higgs, 2003; Bedingfield and Thal, 2008; Turner et al., 2009). Additionally, adaptability is suggested by different researchers as a significant factor in being an effective project manager (Martin, 1976; Stuckenbruck, 1976; Declerk et al., 1980; Pettersen, 1991b; Rosenau, 1998). Furthermore, innovation is suggested by different researchers as a fundamental requirement for project managers in order to enhance their effectiveness (Bennis and Nanus, 1985; Payne, 1995; Tullett, 1996; Rubinstein et al., 2001; Brill et al., 2006). Moreover, Posner (1987), Brill et al. (2006), and Gray and Larson (2008) indicate that effective project managers should be optimistic. However, 'keep self-motivated' has not been implied and seems new in this research area.

8.3.3.3 Social-awareness

It was found that social-awareness as one of the aspects of emotional intelligence can increase the effectiveness of project managers. Similarly, the extant literature shows that social-awareness as one of the emotional intelligence functions (Goleman et al., 2002a; Cavallo, 2006) can assist project managers in proving themselves as effective project managers (Peters and Waterman, 1982; Posner, 1987; Salovey and Mayer, 1990; Kliem and Ludin, 1992; Jiang et al., 1999; Thamhain, 2004a; Brill et al., 2006). Social-

awareness was also categorised into only one element: promote intuition and empathy towards project stakeholders.

This research project demonstrated that this element can increase the effectiveness of project managers. Likewise, the extant literature shows that empathy (Peters and Waterman, 1982; Posner, 1987; Kliem and Ludin, 1992; Jiang et al., 1999; Thamhain, 2004a; Brill et al., 2006) and intuition (Stuckenbruck, 1976; Dulewicz and Higgs, 2003; Shao and Müller, 2011) play an important role in making project managers more effective.

8.3.3.4 Social-regulation

It was found that social-regulation as one of the aspects of emotional intelligence can enhance the effectiveness of project managers. Similarly, the extant literature shows that social-regulation as one of the emotional intelligence functions (Goleman et al., 2002a; Cavallo, 2006) can make project managers more effective (Fryer, 1979; Rosenau, 1998; Jiang et al., 1999; Fisher, 2006; Bedingfield and Thal, 2008). Social-regulation was also categorised into two elements: build cooperation and teamwork among project team members, and resolve project conflicts and disputes.

This research project demonstrated that these elements can enhance the effectiveness of project managers. Likewise, the extant literature shows that building cooperation and teamwork among project team members plays a significant role in developing project managers' effectiveness (Podsakoff et al., 1990; Yammarino et al., 1998; Shamir et al., 2000; Dionne et al., 2004; Wang et al., 2005). It also shows that conflict and dispute resolution can assist project managers in developing their effectiveness throughout their projects (Pettersen, 1991a; Anderson, 1992; Payne, 1995; Tullett, 1996; Verma, 1996; Jiang et al., 1999; Rubinstein et al., 2001; Brill et al., 2006; Wysocki, 2007; Patanakul and Milosevic, 2008; Fisher, 2011).

8.4 Conceptual model

The conceptual model of this research project (*Leadership: Being an effective project manager*) was comprised of the following different constructs: the three core categories, thirteen categories, and thirty-eight concepts.

The leadership core category consisted of five categories (directing, inspiring, supporting, building mutual trust, and analysing context) and fifteen concepts (create a

shared project vision, define project goals and objectives, establish project policies and strategies, and guide project stakeholders; influence and motivate project stakeholders, elicit the best out of project team members by developing their creativity, lead by example, and exude charisma; build a unified project team, satisfy project stakeholders by fulfilling their requirements and expectations, foresee project threats and transform them into opportunities, and demonstrate enthusiasm and attentiveness; and investigate the context and capacity of the project, assess the impact of current social and cultural constraints on the project, and evaluate the impact of current political and economic conditions on the project).

The management core category consisted of four categories (planning, organising, controlling, and honing managerial skills) and twelve concepts (set project plans and schedules, budget and allocate project resources, and define project tasks and assign them to the right project team members; establish appropriate project incentive schemes, use appropriate project management tools and techniques, and recruit and train competent individuals; monitor and troubleshoot project tasks proactively, develop a self-managed project team, and meet project performance and purpose; and enhance project knowledge and experience, improve interpersonal communication skills, and strengthen decision making abilities).

The emotional intelligence core category consisted of four categories (self-awareness, self-regulation, social-awareness, and social-regulation) and eleven concepts (perform self-assessment, and build self-confidence; maintain self-control, evoke conscientiousness, demonstrate high adaptability, exhibit high innovation, keep self-motivated, and exude optimism; promote intuition and empathy towards project stakeholders; and build cooperation and teamwork among project team members, and resolve project conflicts and disputes).

Likewise, several studies focus on competencies that are required in order for project managers to be effective (Spitz, 1982; Posner, 1987; Pettersen, 1991b; Anderson, 1992; Brill et al., 2006; Pinto, 2007; Patanakul and Milosevic, 2008; Fisher, 2011). However, they are not concerned with the context of project-oriented organisation.

Briefly, the conceptual model of this research project as the criteria could assist project managers to become effective in project-oriented organisations. Hence, it provided a fresh insight into leading and managing projects.

8.5 Practical model

The practical model of this research project was created based on the conceptual model in order to approximately evaluate the effectiveness of project managers within project-oriented organisations.

This model could assist project-oriented organisations in identifying their project managers' strengths and weaknesses in order to enhance their project managers' effectiveness. It could enable them to enhance the level of their popularity and credibility by improving their project managers' effectiveness, and hence by providing high-quality products and services. It could also be used as a self-assessment tool by project managers to recognise their own strengths and weaknesses in order to develop themselves into effective project managers.

There have been many different tools for assessing leadership, such as the Multifactor Leadership Questionnaire (MLQ) (Schriesheim et al., 2009); for assessing management, such as the Customer Relationship Management Model (Fayerman, 2002); for assessing emotional intelligence, such as the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) (Fan et al., 2010); and for assessing project management, such as the Project Management Maturity Assessment Model (Bin Mohd Fauzi and Ramli, 2007; Lianying et al., 2012). However, there has been no standard tool for evaluating project managers' effectiveness, particularly in project-oriented organisations.

Briefly, the practical model of this research project as the evaluation tool could assist project managers in developing themselves into effective project managers within project-oriented organisations. Hence, it provided a fresh insight into the evaluation of leading and managing projects.

8.6 Comparative works

In this research project, the comparative works based on the types and leadership styles of the participating companies were carried out in order to enhance understanding of the subject under investigation. These comparisons are discussed in the following subsections.

8.6.1 Comparative works based on the types of company

The twelve types of participating company were compared based on the research findings through three separate clusters (leadership, management, and emotional

intelligence) in order to show which construct of the conceptual model is significant for which type of company.

The comparisons showed that leadership is more important than management and much more important than emotional intelligence; and management is more important than emotional intelligence. Accordingly, in order to be effective within project-oriented organisations, project managers need first to enhance their leadership (i.e. directing, inspiring, supporting, building mutual trust, and analysing context), then their management (i.e. planning, organising, controlling, and honing managerial skills), and finally their emotional intelligence (i.e. self-awareness, self-regulation, social-awareness, and social-regulation). The comparisons also showed that the demand for effectiveness of project managers may vary from one project-oriented organisation to another.

Moreover, the twelve types of company were grouped into two major categories as cases based on their industry and nature (product-based industry and service-based industry); and were compared based on the research findings in order to show which construct of the conceptual model would be more critical for project managers of the product-based companies (printing technologies, paper manufacturing, automotive, computer, green energy technologies, and construction) or the service-based companies (telecommunications, trading, advertising and marketing, business and enterprise, management consulting, and banking and insurance).

The comparisons indicated that in order to be effective, project managers of service-based companies require more leadership, less management, and more emotional intelligence than project managers of product-based companies.

However, in accordance with the extant literature, these comparisons have not been carried out so far and these findings seem new in the project management field.

8.6.2 Comparative works based on the leadership styles

The leadership styles (transformational, transactional, and laissez-faire) of the participating companies were compared. The comparisons indicated that in order to be effective, project managers need to evolve into transformational project leaders by developing their transformational leadership style.

Similarly, Bass (1985) states that project performance beyond ordinary expectations is delivered by the transformational leadership style. Keller (1992) also emphasises that the transformational leadership style can function as a predictor of project performance. In addition, Bass and Avolio (1995) declare that the transformation leadership style has greater influence on projects than the transactional leadership style. Moreover, Keegan and Den Hartog (2004) assert that the transformational leadership style is more proper than the transactional leadership style for project managers. Hence, a project leader who adopts the transformational leadership style seems more effective from others' viewpoints (Lowe et al., 1996; Fiol et al., 1999).

8.7 Theoretical contributions

A review of the literature in the field of project management studies showed that the effectiveness of project managers in project-oriented organisations has been relatively underexplored. Accordingly, this study intended to fill this research gap by bringing the practical perspective of the effectiveness of project managers, from the different informants in the various fields, into the theoretical perspective in the form of the conceptual model (i.e. the combination of the different constructs: the three core categories, thirteen categories, and thirty-eight concepts) through the in-depth interviews and the grounded theory method. Indeed, this research project contributed to project management studies by providing an in-depth understanding of the effectiveness of project managers within project-oriented organisations. Hence, the major theoretical contribution of this research project is reflected in the conceptual model (*Leadership: Being an effective project manager*).

The research project provided a fresh insight into the notion of leadership, management, and emotional intelligence in the project management field. It ascertained their roles in the effectiveness of project managers within project-oriented organisations. It also provided the conceptual model as the criteria for project managers to become effective within project-oriented organisations. In addition, it determined the relationships between different constructs of the conceptual model. Accordingly, it showed that leadership could be influenced only by emotional intelligence; management could be influenced by both emotional intelligence and leadership; and emotional intelligence could be influenced only by leadership.

Furthermore, the research project demonstrated that in order to be effective within project-oriented organisations, project managers need first to enhance their leadership (i.e. directing, inspiring, supporting, building mutual trust, and analysing context), then their management (i.e. planning, organising, controlling, and honing managerial skills), and finally their emotional intelligence (i.e. self-awareness, self-regulation, social-awareness, and social-regulation). It also demonstrated that the demand for effectiveness of project managers may vary from one project-oriented organisation to another.

Moreover, the research project showed that in order to be effective, project managers of service-based companies require more leadership, less management, and more emotional intelligence than project managers of product-based companies. It also showed that in order to be effective, project managers need to evolve into transformational project leaders by developing their transformational leadership style.

Briefly, this research project provided an exhaustive review on the development of leading and managing projects along with the existing theoretical perspective of an effective project manager. It also investigated the conceptual differences between the notion of leadership and management in project-oriented organisations. In addition, it discovered the key concepts that contribute to the effectiveness of project managers within project-oriented organisations; in order to develop the constructs and generate the relevant comprehensive conceptual and practical models for being an effective project manager within project-oriented organisations. Furthermore, it explored how constructs and their interactions can enhance the effectiveness of project managers within project-oriented organisations. Moreover, it evaluated the significance of the constructs across the various types of project-oriented organisation. Finally, it proposed the direction for future research, and laid out the basis for further development of project managers' effectiveness framework.

8.8 Practical contributions

More works are required on the effectiveness of project managers, since project management standards are inadequate for developing and assessing project managers and more empirical-based research is needed to create models of project managers' effectiveness (Crawford, 2005).

Accordingly, this study intended to provide a practical model to approximately evaluate the effectiveness of project managers within project-oriented organisations.

The practical model of this research project was created based on the conceptual model. It could assist project-oriented organisations in identifying their project managers' strengths and weaknesses in order to enhance their project managers' effectiveness. It could enable them to enhance the level of their popularity and credibility by improving their project managers' effectiveness, and hence by providing high-quality products and services. It could also be used as a self-assessment tool by project managers to recognise their own strengths and weaknesses in order to develop themselves into effective project managers.

Indeed, this research project contributed to project management practice by providing the tool to evaluate the effectiveness of project managers within project-oriented organisations. Hence, the major practical contribution of this research project is reflected in the practical model.

Briefly, this research project provided the valuable practical model to enable project managers to practically enhance their effectiveness within project-oriented organisations.

8.9 Conclusions

In this chapter, the findings of the research project have been discussed, compared with the extant literature, and explained in terms of their theoretical and practical contributions.

Accordingly, the key points of the research have been explained in order to provide a quick review of the study under investigation.

The discussions of the matter of an effective project manager have also been demonstrated along with its comparison with the extant literature in order to determine the position of the research project within the literature. Accordingly, leadership, management, and emotional intelligence of an effective project manager have been discussed and compared with the extant literature. The comparisons showed that most of the constructs or findings have been indicated by different researchers from various domains as the essential requirements in order for project managers to be effective;

however, some of the constructs have not been identified and seemed fresh in this research area.

In addition, the conceptual and practical models of this research project have been discussed and compared with the existing theoretical and practical models. The comparisons showed that both conceptual and practical models of this research project provided a fresh insight into leading and managing projects.

Furthermore, the comparative works based on the types and leadership styles of the participating companies have been discussed and compared with the existing literature. The comparisons showed that the findings regarding comparative works based on the types of company have not been mentioned so far; however, the findings regarding the comparative works based on the leadership styles have been indicated by different researchers.

The comparative works based on the types of company showed that in order to be effective within project-oriented organisations, project managers need first to enhance their leadership (i.e. directing, inspiring, supporting, building mutual trust, and analysing context), then their management (i.e. planning, organising, controlling, and honing managerial skills), and finally their emotional intelligence (i.e. self-awareness, self-regulation, social-awareness, and social-regulation). They also showed that the demand for effectiveness of project managers may vary from one project-oriented organisation to another. Furthermore, they showed that in order to be effective, project managers of service-based companies require more leadership, less management, and more emotional intelligence than project managers of product-based companies. However, the comparative works based on the leadership styles showed that in order to be effective, project managers need to evolve into transformational project leaders by developing their transformational leadership style.

Moreover, the theoretical and practical contributions of the research project have been presented in order to show the usefulness of this research project. Accordingly, this research project contributed to project management studies by providing an in-depth understanding of the effectiveness of project managers within project-oriented organisations. It also contributed to project management practice by providing the tool to evaluate the effectiveness of project managers within project-oriented organisations. Hence, the major theoretical and practical contributions of this research project have

been reflected in the conceptual model (*Leadership: Being an effective project manager*) and the practical model respectively.

This chapter has provided a discussion and comparison of the research findings with the extant literature in order to illuminate their theoretical and practical contributions to the field of project management.

In chapter 9, the review and conclusions of the research project will be provided before presenting the theoretical and practical contributions, the limitations, and the recommendations for further research.

Chapter 9: Conclusions

9.1 Introduction

This chapter aims to provide an explanation of the steps taken in undertaking this research project and show how it has provided an in-depth understanding of the effectiveness of project managers within project-oriented organisations. The final chapter reflects on the overall study. It provides a review of the research project, presents the conclusions of the study, and describes the theoretical and practical contributions of the research project. After that, the limitations of the research project are explained. Finally, the recommendations for further research are presented.

9.2 Review of the research project

A review of the literature in the field of project management studies has shown that the effectiveness of project managers in project-oriented organisations has been relatively underexplored. Hence, this study intended to fill this research gap by bringing the practical perspective of the effectiveness of project managers, from the different informants in the various fields, into the theoretical perspective in the form of the conceptual model (i.e. the combination of the constructs: core categories, categories, and concepts) through the in-depth interviews and the grounded theory method. It attempted to provide a fresh insight into the leading and managing projects, and hence into the effectiveness of project managers in project-oriented organisations. Indeed, this research project aimed to provide an in-depth understanding of the effectiveness of project managers within project-oriented organisations.

Accordingly, chapter 1 provided an overview of the background and motivation for this research project as well as the research aim and objectives, scope of the research, and structure of the thesis.

Chapter 2 provided a detailed description and critical overview of the theoretical background of this research project. It also provided a discussion of the available literature relating to project management studies, particularly the concept of an effective project manager. Gaps in the field of study relating to the scope of this research were also described in this chapter.

In chapter 3, a research methodology was proposed to provide an in-depth understanding of the effectiveness of project managers within project-oriented organisations. Also, in this chapter, a discussion and justification of the research philosophy, research approach, research method and design, research strategy, and theoretical perspective selected for this study was provided. Grounded theory's background and challenges as well as the evaluation of the qualitative research project were also explained.

Chapter 4 described the data collection process of the research project. In this chapter, the initial data and the initial findings drawn from the pilot study along with its limitations were explained in detail. The methods and procedures of the main data collection were also described. Moreover, the research interviews, the research informants' profiles, and the research data were demonstrated in this chapter.

Chapter 5 presented an overview of the coding procedure of the data analysis to describe how the research findings were generated. In this chapter, the coding process, the development of the concepts and categories as the constructs, and the formation of the conceptual model were explained and the core categories and categorises of the conceptual model along with their relationships were demonstrated. In addition, the significance of the role of leadership in the effectiveness of project managers within project-oriented organisations was explained. Moreover, the practical model of this research project was demonstrated.

Chapter 6 demonstrated the analysis of the collected data. In this chapter, the concepts of the conceptual model based on the leadership, management, and emotional intelligence core categories and their categories were explained. The relationships between the concepts were also explained.

Chapter 7 presented the comparative data analysis of the research project. In this chapter, the twelve types of participating company were compared based on the research findings through three separate clusters (leadership, management, and emotional intelligence). In addition, two cases were created based on the industry of the participating companies (product-based industry and service-based industry) and were compared based on the research findings. Moreover, the leadership styles of the participating companies were compared.

In chapter 8, a discussion about the research findings was provided. In this chapter, the research findings were evaluated against the extant literature and explained in terms of their theoretical and practical contributions in order to determine the position of this research project within the literature. Accordingly, the matter of an effective project manager, the conceptual and practical models, and the comparative works were discussed and compared with the extant literature. Moreover, the theoretical and practical contributions of the research project were explained in order to show the value of this study.

Chapter 9 provided the review and conclusions of the research project as well as the theoretical and practical contributions. It also provided the limitations of the research project as well as the recommendations for further research in order to assist other researchers in this domain.

9.3 Conclusions

Project management as the set of knowledge, skills, and techniques is used to fulfil requirements and expectations, establish measurable scopes, make realistic timetables, and define roles and responsibilities (Tinnirello, 2000; Schwalbe, 2006). Project-oriented business organisations use it as the central managerial strategy for major parts of their business (Gareis, 1991); since it can greatly affect project performance or success (Munns and Bjeirmi, 1996; Belout and Gauvreau, 2004; Qureshi et al., 2009). However, as more organisations apply project management to deliver products and services, the demand for project managers grows, and thus more research is required on the effectiveness of project managers (Crawford, 2005). Indeed, project management standards are inadequate for developing and assessing project managers and more empirical-based research is needed in order to create models of project managers' effectiveness (Crawford, 2005).

Effective project managers are those who have productive, committed, and satisfied team members with high project performance, those who communicate with project stakeholders, manage conflict, and train, develop, and motivate team members (Luthans, 1988). They can manage changes, possess high quality managerial skills, and inspire their team members to show a high level of contributions and recognitions (Bennis and Nanus, 1985; Anderson, 1992; Thamhain, 2004a). Indeed, they can employ any of the leading and managing functions (Kent, 2005) as well as those related to

emotional intelligence (Druskat and Druskat, 2006; Clarke, 2010b) situationally and in a timely manner.

The literature has shown that there are some empirical studies that investigate the effectiveness of project managers. However, there is a dearth of project management literature regarding the concept of an effective project manager, particularly within project-oriented organisations. Therefore, this concept could be a timely topic for research.

The review thus conducted has assisted in identifying the gaps in the literature that this research project is aiming to bridge. The gaps can be summarised as follows:

- There is a need for more in-depth empirical research into the perception and appreciation of the effectiveness of project managers in project-oriented organisations.
- There is a severe shortage of studies exploring the role of leadership in the effectiveness of project managers in project-oriented organisations.
- There is a serious need for the creation of a comprehensive model to act as the criteria for project managers to become effective in project-oriented organisations.

Hence, this research aims to provide an in-depth understanding of the effectiveness of project managers within project-oriented organisations, while the outcomes of the literature review have assisted in outlining the key concepts that contribute to the effectiveness of project managers.

In this study, the philosophical assumptions, paradigms, and positions have been evaluated to understand the underlying knowledge required in choosing the approach, method, and strategy to facilitate the research process. Accordingly, pragmatism was selected as the research philosophy of this study since it provides a better fit.

Deductive and inductive as the major research approaches have also been examined in order to determine their suitability for this study. Accordingly, the inductive approach was selected for this study since it is more flexible, highly associated with qualitative research design, and more useful in providing a feel of the research context and informants.

In addition, quantitative and qualitative as the main research methods have been evaluated in order to determine their appropriateness for this study. Accordingly, the qualitative method was selected for this study since it enables deeper exploration of phenomena, allows more flexible data analysis, and generates insightful findings more comprehensively.

Furthermore, grounded theory among all the research strategies was selected as the method of enquiry, data collection, and data analysis of this study. This strategy has a high potential for conducting qualitative research, and insists upon an engagement with the participants as actors and their environments. This assists researchers in getting a feel for the actors involved and thus attaining a more intelligent understanding of the research context. Among the different versions of this strategy, the postpositivist was chosen for this study since it is highly associated with pragmatism, symbolic interactionism, and the nature and context of this research.

Moreover, symbolic interactionism, as a widely accepted theoretical perspective to explain the formation of human behaviour through interactive activities, was selected for this research project. This research perspective is particularly useful when a researcher would like to understand a person's experience in a specific social setting such as the workplace.

In this study, four unstructured interviews were conducted as the pilot study in order to better understand the research area. These interviews allowed me to sharpen my research questions for the main data collection process. I asked the pilot study informants to express themselves freely on the research topic. The aim was to encourage the informants to share their knowledge and thoughts. In this process, some notes were made that assisted me in deriving fresh meaning from the data. As Glaser (1978) emphasises, through fieldwork the researcher can observe the basic social and psychological processes involved in the research domain and realise from whose view the phenomena is important or unimportant. Hence, the pilot study assisted me in gaining a more general understanding of the phenomenon under study.

In fact, the pilot study could represent a small-scale piece of fieldwork that assisted me in investigating the experiences of the four informants from different companies, identifying more focused research questions, and building relationships with the collaborating companies to collect more data for the main research project.

Moreover, in accordance with the chosen research methodology, the unstructured form of interview was selected as the main data collection method of this study in order to gather in-depth data to understand the research subject and fulfil the research aim and objectives (Strauss and Corbin, 1997; Corbin and Strauss, 2008).

The main reason for this selection was that the list of themes was varied in terms of the flow of conversation and the area of interest under investigation, as the informants would be given the opportunity to speak freely about their thoughts in relation to the topic. In this respect, the unstructured interviews allowed me to explore the research issues and make newer insights into the research subject. They helped me develop an understanding of the informants' ideas.

The initial part of the interviews dealt with general organisational issues to encourage the flow of the conversation, while later, the issues based on the informants' experiences would be explored. In this way, I was able to obtain an understanding of their lived experiences and how they interacted with others to carry out their projects (Corbin and Strauss, 2008).

The main data were collected by using 39 unstructured interviews through face-to-face and 20 unstructured interviews by means of Skype software via the internet. Overall, interviews were conducted with 59 informants with dissimilar organisational levels from twelve different types of company.

In this study, an overview of the coding procedure of the data analysis has been demonstrated. Accordingly, the process of coding has been explained and a justification of the development of the concepts and categories has been provided. How the different levels of concepts are grounded in the research data has been explained and a demonstration of the conceptual model and its constructs has also been given.

Herein, the core categories (leadership, management, and emotional intelligence) and the categories (directing, inspiring, supporting, building mutual trust, and analysing context; planning, organising, controlling, and honing managerial skills; and self-awareness, self-regulation, social-awareness, and social-regulation) have been explained based on analysis of the research data. Some of the research informants' statements have also been used in order to provide robust rationales for the research findings as well as to enhance understanding of the research findings.

In addition, in order to enhance understanding of the conceptual model, the relationships between the core categories and the categories have been demonstrated. The relationships indicated that leadership could be influenced only by emotional intelligence; management could be influenced by both emotional intelligence and leadership; and emotional intelligence could be influenced only by leadership. All the categories of each core category could also influence each other.

Furthermore, the significance of the role of leadership in the effectiveness of project managers within project-oriented organisations has been explained in order to justify the significance of leadership core category within the conceptual model. Herein, it was found that a project manager without leadership would certainly not be able to prove himself or herself as an effective project manager within project-oriented organisations.

Moreover, the practical model, which was created based on the conceptual model, has been demonstrated. This model could assist project-oriented organisations in identifying their project managers' strengths and weaknesses in order to enhance their project managers' effectiveness. It could enable them to enhance the level of their popularity and credibility by improving their project managers' effectiveness, and hence by providing high-quality products and services. It could also be used as a self-assessment tool by project managers to recognise their own strengths and weaknesses in order to develop themselves into effective project managers.

In this study, the analysis of the research data has been carried out comprehensively. Accordingly, the concepts of the conceptual model have been explained based on the core categories and the categories. Some of the research informants' statements have also been used in order to provide robust rationales for the research findings as well as to enhance understanding of the research findings.

Herein, first, the concepts of the leadership core category (create a shared project vision, define project goals and objectives, establish project policies and strategies, and guide project stakeholders; influence and motivate project stakeholders, elicit the best out of project team members by developing their creativity, lead by example, and exude charisma; build a unified project team, satisfy project stakeholders by fulfilling their requirements and expectations, foresee project threats and transform them into opportunities, and demonstrate enthusiasm and attentiveness; and investigate the context and capacity of the project, assess the impact of current social and cultural

constraints on the project, and evaluate the impact of current political and economic conditions on the project) have been explained.

After that, the concepts of the management core category (set project plans and schedules, budget and allocate project resources, and define project tasks and assign them to the right project team members; establish appropriate project incentive schemes, use appropriate project management tools and techniques, and recruit and train competent individuals; monitor and troubleshoot project tasks proactively, develop a self-managed project team, and meet project performance and purpose; and enhance project knowledge and experience, improve interpersonal communication skills, and strengthen decision making abilities) have been explained.

Finally, the concepts of the emotional intelligence core category (perform self-assessment, and build self-confidence; maintain self-control, evoke conscientiousness, demonstrate high adaptability, exhibit high innovation, keep self-motivated, and exude optimism; promote intuition and empathy towards project stakeholders; and build cooperation and teamwork among project team members, and resolve project conflicts and disputes) have been explained.

Moreover, in order to enhance understanding of the conceptual model, the relationships between the concepts have been explained. The relationships indicated that all the concepts of leadership could influence all the concepts of management and emotional intelligence; all the concepts of emotional intelligence could influence all the concepts of leadership and management; however, the concepts of management could not influence the concepts of leadership and emotional intelligence. Furthermore, all the concepts of each core category could influence each other.

In this study, the comparative data analysis has been carried out. Accordingly, the twelve types of participating company have been compared based on the research findings through three separate clusters (leadership, management, and emotional intelligence) in order to show which construct of the conceptual model is significant for which type of company.

The comparisons showed that leadership is more important than management and much more important than emotional intelligence; and management is more important than emotional intelligence. Accordingly, in order to be effective within project-oriented organisations, project managers need first to enhance their leadership (i.e. directing,

inspiring, supporting, building mutual trust, and analysing context), then their management (i.e. planning, organising, controlling, and honing managerial skills), and finally their emotional intelligence (i.e. self-awareness, self-regulation, social-awareness, and social-regulation). The comparisons also showed that the demand for effectiveness of project managers may vary from one project-oriented organisation to another.

Two cases have also been created based on the industry and nature of the participating companies: product-based industry and service-based industry. These have been compared based on the research findings in order to show which construct of the conceptual model would be more critical for project managers of the product-based companies (printing technologies, paper manufacturing, automotive, computer, green energy technologies, and construction) or the service-based companies (telecommunications, trading, advertising and marketing, business and enterprise, management consulting, and banking and insurance).

The comparisons indicated that in order to be effective, project managers of service-based companies require more leadership, less management, and more emotional intelligence than project managers of product-based companies.

Moreover, the leadership styles (transformational, transactional, and laissez-faire) of the participating companies have been compared. The comparisons indicated that in order to be effective, project managers need to evolve into transformational project leaders by developing their transformational leadership style.

In this study, the findings of the research project have been discussed, compared with the extant literature, and explained in terms of their theoretical and practical contributions.

Accordingly, the key points of the research have been explained in order to provide a quick review of the study under investigation. The discussions of the matter of an effective project manager have also been demonstrated along with its comparison with the extant literature in order to determine the position of the research project within the literature. Accordingly, leadership, management, and emotional intelligence of an effective project manager have been discussed and compared with the extant literature. The comparisons showed that most of the constructs or findings have been indicated by different researchers from various domains as the essential requirements in order for

project managers to be effective; however, some of the constructs have not been identified and seemed fresh in this research area.

In addition, the conceptual and practical models of this research project have been discussed and compared with the existing theoretical and practical models. The comparisons showed that both conceptual and practical models of this research project provided a fresh insight into leading and managing projects.

Furthermore, the comparative works based on the types and leadership styles of the participating companies have been discussed and compared with the existing literature. The comparisons showed that the findings regarding comparative works based on the types of company have not been mentioned so far; however, the findings regarding the comparative works based on the leadership styles have been indicated by different researchers.

Moreover, the theoretical and practical contributions of the research project have been presented in order to show the usefulness of this research project. Accordingly, this research project contributed to project management studies by providing an in-depth understanding of the effectiveness of project managers within project-oriented organisations. It also contributed to project management practice by providing the tool to evaluate the effectiveness of project managers within project-oriented organisations. Hence, the major theoretical and practical contributions of this research project have been reflected in the conceptual model (*Leadership: Being an effective project manager*) and the practical model respectively.

Briefly, this research project has shown that in order to be effective within project-oriented organisations, project managers need first to enhance their leadership, then their management, and finally their emotional intelligence; and also need to evolve into transformational project leaders by developing their transformational leadership style. However, in order to be effective, project managers of service-based companies require more leadership, less management, and more emotional intelligence than project managers of product-based companies. Indeed, the demand for effectiveness of project managers may vary from one project-oriented organisation to another.

Accordingly, the development of leading and managing projects together with the existing theoretical perspective of an effective project manager has been reviewed in chapter 2. The conceptual differences between the notion of leadership and management have been demonstrated in chapters 5 and 6. The key concepts that contribute to the effectiveness of project managers have been shown in chapter 5. The constructs (concepts, categories, and core categories) have been explained in chapters 5 and 6. The conceptual model (Table 5.1) and practical model (Table 5.2) have been illustrated in chapter 5. The roles and interactions between the constructs of the conceptual model have been demonstrated in chapters 5 and 6. The significance of each construct of the conceptual model across the different types of project-oriented organisation has been evaluated in chapter 7. The limitations of the research project and the recommendations for further research have been given as the direction for future research in chapter 9. The conceptual and practical models have also been proposed as the basis for further development of project managers' effectiveness framework in chapter 9. Therefore, an in-depth understanding of the effectiveness of project managers within project-oriented organisations has been provided by this research project.

Hence, the research aim and the following research objectives, which were established to achieve the aim, have been met by this research project.

- To provide an exhaustive review on the development of leading and managing projects along with the existing theoretical perspective of an effective project manager.
- To investigate the conceptual differences between the notion of leadership and management within project-oriented organisations in the form of a conceptual model.
- To discover the key concepts that contribute to the effectiveness of project managers within project-oriented organisations in the form of a conceptual model.
- To develop the constructs (concepts, categories, and core categories) and generate the relevant comprehensive conceptual and practical models as the criteria for project managers to become effective within project-oriented organisations.
- To explore the roles and interactions of the constructs of the conceptual model.

- To evaluate the significance of each construct of the conceptual model across the different types of project-oriented organisation.
- To propose the direction for future research, and to lay out the conceptual and practical models as the basis for further development of project managers' effectiveness framework.

9.4 Contributions of the research project

This research project provided valuable theoretical and practical contributions to the field of project management studies. The theoretical and practical contributions of this research project are explained in the following subsections.

9.4.1 Theoretical contributions of the research project

This research project provided valuable theoretical contributions to the existing project management studies, specifically on the effectiveness of project managers.

The impacts and contributions of the findings of this research project were magnified by the adopted methodological approach. This study used an inductive approach, qualitative method, and grounded theory strategy to enhance understanding of the effectiveness of project managers in project-oriented organisations.

This study is one of the very rare studies investigating the matter of an effective project manager, particularly within project-oriented organisations. It is also one of the very few studies investigating the role of leadership in the effectiveness of project managers, particularly within project-oriented organisations. Furthermore, it is one of the very rare studies providing the conceptual model as the criteria for project managers to become effective within project-oriented organisations.

Moreover, the study highlighted the value of qualitative inquiry for exploring individuals' perceptions and lived experiences, as well as investigating phenomena which have been relatively under-investigated to date. In particular, the study highlighted the usefulness of grounded theory, which builds concepts grounded in empirical data. This is reflected in the given research findings, where the informants' own words were used to support the presentation of the conceptual constructs (concepts, categories, and core categories).

This study filled the research gap by bringing the practical view of the effectiveness of project managers, from the different informants in the various fields, into the theoretical

perspective in the form of the conceptual model (i.e. the combination of the different constructs: the three core categories, thirteen categories, and thirty-eight concepts) through the in-depth interviews and the grounded theory method. Indeed, this research project contributed to project management studies by providing an in-depth understanding of the effectiveness of project managers within project-oriented organisations. Hence, the major theoretical contribution of this research project is reflected in the conceptual model (*Leadership: Being an effective project manager*).

The research project provided a fresh insight into the notion of leadership, management, and emotional intelligence in the project management field. It ascertained their roles in the effectiveness of project managers within project-oriented organisations. It also provided the conceptual model as the criteria for project managers to become effective within project-oriented organisations. In addition, it determined the relationships between different constructs of the conceptual model. Accordingly, it showed that leadership could be influenced only by emotional intelligence; management could be influenced by both emotional intelligence and leadership; and emotional intelligence could be influenced only by leadership.

Furthermore, the research project demonstrated that in order to be effective within project-oriented organisations, project managers need first to enhance their leadership (i.e. directing, inspiring, supporting, building mutual trust, and analysing context), then their management (i.e. planning, organising, controlling, and honing managerial skills), and finally their emotional intelligence (i.e. self-awareness, self-regulation, social-awareness, and social-regulation). It also demonstrated that the demand for effectiveness of project managers may vary from one project-oriented organisation to another.

Moreover, the research project showed that in order to be effective, project managers of service-based companies require more leadership, less management, and more emotional intelligence than project managers of product-based companies. It also showed that in order to be effective, project managers need to evolve into transformational project leaders by developing their transformational leadership style.

Briefly, this research project provided an exhaustive review on the development of leading and managing projects along with the existing theoretical perspective of an effective project manager. It also investigated the conceptual differences between the

notion of leadership and management in project-oriented organisations. In addition, it discovered the key concepts that contribute to the effectiveness of project managers within project-oriented organisations; in order to develop the constructs and generate the relevant comprehensive conceptual and practical models for being an effective project manager within project-oriented organisations. Furthermore, it explored how constructs and their interactions can enhance the effectiveness of project managers within project-oriented organisations. Moreover, it evaluated the significance of the constructs across the various types of project-oriented organisation. Finally, it proposed the direction for future research, and laid out the basis for further development of project managers' effectiveness framework.

In summary, the contributions of this research project are as follows;

- It is one of the very rare studies investigating the matter of an effective project manager, particularly within project-oriented organisations.
- It is one of the very few studies investigating the role of leadership in the effectiveness of project managers, particularly within project-oriented organisations.
- It is one of the very rare studies providing the conceptual model as the criteria for project managers to become effective within project-oriented organisations.
- It is one of the very rare studies providing the practical model as the tool to evaluate the effectiveness of project managers within project-oriented organisations.
- It provided a fresh insight into the leading and managing projects, and hence into the effectiveness of project managers in project-oriented organisations.
- It filled the research gap by bringing the practical perspective of the effectiveness of project managers, from the different informants in the various fields, into the theoretical perspective in the form of the conceptual model.
- It provided an insightful understanding of the notion of leadership, management, and emotional intelligence, and uncovered their roles in the effectiveness of project managers within project-oriented organisations.
- It highlighted the value of qualitative inquiry for exploring individuals' perceptions and lived experiences, as well as investigating phenomena which have been relatively under-investigated to date.

- It highlighted the usefulness of grounded theory, which builds concepts grounded in empirical data.

9.4.2 Practical contributions of the research project

This research project provided valuable practical contributions to the project management domain. It is one of the very rare studies providing the practical model as the tool to evaluate the effectiveness of project managers within project-oriented organisations.

This study provided the practical model, based on the conceptual model, in order to approximately evaluate the effectiveness of project managers within project-oriented organisations. This model could assist project-oriented organisations in identifying their project managers' strengths and weaknesses in order to enhance their project managers' effectiveness. It could enable them to enhance the level of their popularity and credibility by improving their project managers' effectiveness, and hence by providing high-quality products and services. It could also be used as a self-assessment tool by project managers to recognise their own strengths and weaknesses in order to develop themselves into effective project managers.

Indeed, this research project contributed to project management practice by providing the tool to evaluate the effectiveness of project managers within project-oriented organisations. Hence, the major practical contribution of this research project is reflected in the practical model.

Briefly, this research project provided the valuable practical model to enable project managers to practically enhance their effectiveness within project-oriented organisations.

9.5 Limitations of the research project

The first and foremost limitation was the time constraint, related to both me as the researcher and the informants. For the latter, apart from the willingness to participate, these were indicated to some extent by availability for the interviews, and for me by a specific time in which I had to finish this research project due to academic regulations and financial reasons.

This qualitative study was designed to investigate the experience and viewpoints of the people working in project-oriented organisations regarding the effectiveness of project

managers. The purpose of this study was to develop conceptual and practical models which would explain these experiences and viewpoints in this particular context. Accordingly, the developed models are specific to the sample of the current research project and the project-oriented organisation context. However, the models can be explored in other contexts for further development, refinement and enhancement.

The areas that were not addressed in this study and require further investigation to enhance the findings of the research project are presented below:

- The findings of this research project were generated based on grounded theory analysis carried out in the project-oriented organisation context. Thus, further research needs to be done in other contexts to enhance the findings of this research project.
- The findings of this research project were produced based on the opinions of informants who have been project managers or have had experience of project management. However, other stakeholders such as clients and customers were not interviewed in this study. Therefore, further research needs to be carried out to encompass all stakeholders' opinions.
- The findings of this research project were generated based on the opinions of informants from twelve types of company (six product-based companies and six service-based companies). However, individuals from other types of project-oriented organisation were not interviewed in this study. Hence, further research needs to be undertaken to encompass other individuals' ideas from other types of project-oriented organisation.
- The practical model of this study was comprehensive and could be used in all types of project-oriented organisation. However, further investigation is required to develop the practical model for each type of project-oriented organisation separately in order to improve its applicability.
- The practical model of this study could only evaluate the effectiveness of project managers approximately. Hence, further research, particularly quantitative research, is required to enhance the quality of its evaluation.
- The practical model of this research project was created based on the conceptual model and was used and verified only by the research informants of this study. Hence, further exploration is required to develop this model into a robust and standard tool.

9.6 Recommendations for further research

I proposed the direction for future research, and laid out the basis for further development of project managers' effectiveness framework. The direction and the basis of this research project could assist other researchers in the project management domain.

Accordingly, it is recommended that further research be carried out to satisfy the limitations of this research project in order to enhance the research findings, particularly the conceptual and practical models.

The recommendations for further research are as follows;

- The findings of this research project were generated based on the context of project-oriented organisation. Thus, it is recommended that further research be carried out in other contexts to develop the research findings.
- The research findings were produced based on some kinds of project stakeholders' opinions. Thus, it is recommended that further research be carried out to encompass opinions of all kinds of project stakeholders (e.g. customers, clients, investors, etc.).
- The research findings were generated within some types of project-oriented organisation (e.g. computer, construction, telecommunications, trading, etc.). Thus, it is recommended that further research be carried out within other types of project-oriented organisation in different industries (e.g. oil and gas, agricultural, food, farming, clothing, hair and beauty, etc) in order to enhance the research findings.
- The conceptual model of this research project was generated based on the leadership, management, and emotional intelligence aspects of project management field. Thus, it is recommended that further research be done in order to develop the conceptual model through expanding and enhancing its constructs (concepts, categories, and core categories) along with uncovering new aspects in the project management domain concerning the effectiveness of project managers. In this regard, the relevant frameworks of other researchers in different domains, particularly leadership, management, and emotional intelligence, could also be useful.

- The conceptual model of this research project is comprehensive; however, it is recommended that further research be done in order to enhance its value through focusing on specialist areas of each type of project-oriented organisation in any kind of industry.
- The practical model of this research project is comprehensive; however, it is recommended that further research be carried out in order to enhance its applicability through focusing on specialist areas of each type of project-oriented organisation in any kind of industry.
- The practical model of this research project could evaluate the effectiveness of project managers approximately. Thus, it is recommended that further research, particularly quantitative research, be carried out in order to enhance the quality of its evaluation. This should focus more on highlighting the scales of concepts of leadership, management, and emotional intelligence; so that better evaluation can be done. In this regard, degree of significance of each concept could be determined statistically in order to increase the precision of the tool through transforming its evaluation mode (i.e. qualitative) to the examination mode (i.e. quantitative).
- The practical model was verified only by certain informants from some types of project-oriented organisation. Thus, it is recommended that further research be carried out to develop this model into a robust and standard tool through examining its value and effectiveness within various types of project-oriented organisations around the world.
- The practical model was created based only on the conceptual model of this research project. Thus, it is recommended that further research be carried out in order to develop the practical model through refining and enhancing its items. In this regard, the relevant tools of other researchers in different domains, particularly leadership, management, and emotional intelligence, could also be useful.
- The conceptual and practical models are universal; however, it is recommended that further research be carried out in order to adjust and localise both conceptual and practical models based on the code of conduct of each type of project-oriented organisation in any kind of industry for each country or state around the world.

- As the demand for effectiveness of project managers may vary from one project-oriented organisation to another; it is recommended that further research be carried out in order to improve the usefulness of the conceptual and practical models through determining the demand of each type of project-oriented organisation in any kind of industry for the effectiveness of project managers separately.
- As production-based companies and service-based companies require different level of leadership, management, and emotional intelligence; it is recommended that further research be carried out in order to increase the effectiveness of the practical model through creating different tools for each of them separately.

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Appendix

The Appendix includes the raw data from all the research informants (i.e. 4 pilot study informants and 59 main study informants) in a digital format (CD). Each of the pilot study interviews' transcripts (i.e. P (1), P (2), P (3), and P (4)) is demonstrated in a separate PDF file in the CD based on the Table 4.2 (the profiles of the pilot study informants). In addition, each of the main study interviews' transcripts (i.e. 1, 2, 3, 4, 5, ..., and 59) is demonstrated in a separate PDF file in the CD based on the Table 4.5 (the profiles of the main study informants).

The Appendix also includes four typed examples of the transcripts together with the coding. These are the numbers 7, 10, 20, and 39 of the interviews based on the Table 4.5. All the codes are highlighted in each of the four transcripts. Some of these codes are in-vivo codes (i.e. use the informant's exact words to name codes); while other codes are shown in the parentheses in *Italic* font for the specific words (i.e. the underlined sentences).

- **What is your opinion about an effective project manager within project-oriented organisations? What factors are required for a project manager as a leader to be effective?**

The most important factor is having a **vision**; he should have an **image** of where he wants to go (**vision**) and what **goal** he wants to achieve, having this vision makes a difference between the leader and his subsidiaries. The second factor is the **relationship** between the managers and his subsidiaries, which in fact is the **human resources** topic. His **behaviour** with the subsidiaries specifies, where the company is going (**vision**) and if it's progressing or going backwards. So in the human resource management topic the first thing discussed is the **organisational chart**. The **less pyramid-like** an organisation is, the more the company can grow. Examples of these are in the progressive universal companies like Apple Company and MSI Company (though MSI is out of the working market now), when a company is **pyramid-like**, it means that there are several layers in the company to reach the top and therefore there is a lot of distance between the lower levels and the management to get connected with each other and exchange ideas (**relationship**). So the information doesn't reach the top easily. Thus 2 subjects are important here; the **organisational chart** and **training the subsidiaries**. Another important subject is **attracting talented people**. One of the issues that high-tech companies care for nowadays is **attracting the best and the most talented people** and money matters are not important for them, meaning they pay them the highest salaries (**satisfying**). Companies like Google and Facebook are trying to attract each other's talented employees by offering them more money, because what brings the real result in the end is the **talent**. So, a good project manager is someone, who gathers the most talented people (**recruiting competent individuals**), helps them progress (**training**) and at the same time provides them with the necessary **training** and **brainstorming classes** to become more **knowledgeable**, and rewards them financially (**satisfying**), so that they will do anything to reach the general main goal that the company has set for itself (**contribution**). So what an organisation needs is the **human recourse** topic. **Being customer or client centric** is very important for an organisation. In a university, the customers would be the students. If it's a producing company, the customers are those who pay to buy these products. One of the basic things is to provide a safe, comfortable, and convenient work

place for people (*satisfying*). Being customer centric shouldn't be discussed just as a theory, it should be used practically, meaning project managers should know exactly what stakeholders, particularly customers, want and should satisfy them and connect with them well (*relationships*). For example Steve Jobs talks to his customers, he talks to the market and he talks to the developers, who do the programming job for him. There's the same thing for airline directing managers and so on. I think these 3 items are very important for becoming successful.

- **Do you think that these are linked to one another and could affect the result of the job?**

Yes, that absolutely affects the result of the job. These should be together all like a package. And if they aren't, that will also affect the result, they should be human centric. Both the business and the leadership should be human oriented; meaning all the goals and visions should benefit humans (*satisfying*). Therefore you have some employees, the human resource topic, and some customers, so for them you need a goal. This is what the whole community is, nothing more. You are giving services and a kind of product and these should all be from humans and for humans (*satisfying*). Understanding this, you should support them, because if you don't, your organisation won't beat the competitors. If you don't support your project team members, they won't do their best professional work for you or won't give you the best advice (*elicit the best out of team members*) and if you don't support your customers, they will buy less from you or use your services less often. Therefore these are all linked to each other and are all together a model for progression.

- **How effective is the Emotional Intelligence (EI)? Managing the emotional and psychological issues and the relations between people (with the inferiors, not the customers)!**

Having a human centric vision is the key to this issue. You should understand that all services are provided by humans for other humans (*satisfying*).

- **Could you explain it a bit? Giving an example?**

This means that in all the moves an organisation is going to take, people's advantages should be noticed. These people could be your employees, your customers, your distributors or those, who provide you the raw material (*supporting and satisfying stakeholders*). Your situation should always be a **win-win** one, meaning that all these people on both parts should **feel happy and comfortable**. The more comfortable the people will be, the more successful your organisation will be (*supporting and satisfying*). Having a content organisation is a field itself. This means you get connected with these people (*relationships*), instead of having each employee work in a separate room, letting them be in contact with each other freely (*cooperation and teamwork*). You shouldn't be strict on supervising the employees and let them monitor themselves (*develop a self-managed project team*).

- **How could we motivate people to compete positively with each other?**

This competition is mentioned within its ambition. It's of the organisational principles to do fingerprinting, while entering or going out of the company or to flash a smart card on entrance and exit, in order to record your working hours; there are exceptions for organisations like the banks; or for the organisations that are project-oriented it doesn't matter when the employee comes to work or leaves work (*develop a self-managed project team*). What matters to them is handing out the project **on-time**. Many large American companies establish a system which has no entrance and exit time for their employees. This provides full freedom and does not limit them (*develop a self-managed project team*). all the efforts are to bring out the **creativity** to enhance the results of projects (*quality*). A project manager should give team members freedom by not limiting them, not dictating to them what to do and what not to do (*develop a self-managed project team*); he should set them a goal and reach an understanding about it with them.

- **You mean creating the trust to increase the quality of work?**

Exactly! This way you have increased the **quality** instead of the quantity. You don't pay for them to come to work and stay for 8 hours there (*quality*).

- **Does it work?**

No, these organisations have been tested abroad. When you have a project and a Gantt chart, it wouldn't matter if you start working at 8 am or not (*on-time*). What matters is finishing the job *on-time*, although some organisations like the power organisation that has visitors are different, because there should always be someone there to answer. As an example you could let your employees know that if they couldn't finish the job on-time they will have to answer for that (*develop a self-managed project team*), but not for coming later than 8 am for example. In high-tech companies like; eBay, Google, yahoo, Amazon and Apple that started to work from the 80's, no one ever is monitored for being at work on time or leaving on time (*develop a self-managed project team*). There is no need for that, because their work is project-oriented. So there you have the full *freedom*, they wouldn't box or limit you to sit in one place and work like a low level worker, all the effort is to bring out the creativity (*elicit the best out of team embers*). Even for a low level worker, when the *creativity* is brought out, there would be fewer errors in his work and this will affect the result (*quality*).

- **How could we encourage the inferiors to become creative?**

Give them freedom (*develop a self-managed project team*) and make them happy (*satisfying*). How could we make them happy? By not limiting them (*develop a self-managed project team*). For example if we want to increase our sales we check if they have the *tools* they need, if not, we provide the tools for them (*supporting*) and then leave them until the deadline (*develop a self-managed project team*). When an employee realises that he is not limited by the organisation (*develop a self-managed project team*), he understands that the organisation needs his *creativity* and values it. Naturally he sees his work and his future career as a part of this organisation and puts more effort into it (*contribution*) in fact he sees himself as a part of that community and not just an employee.

- **Is the leader involved in this as well?**

It's not just *charisma* that is effective on the leader's *policies*. For example if the leader gathers the employees after work on a Thursday for lunch, it might create some expenditure apparently (*satisfying*), but would increase their solidarity (*building a unified team*). They will all work there and would like their job, because they know that

their employer likes them and wants them to be happy (satisfying). It's not just a theory and I've experienced it myself, I used to work in a company that had someone that would give massages to the employees every 15 minutes if they were tired (influencing, supporting, and satisfying). In addition to the charisma, humanity is also important. Human resources assist employees and provide for their needs and also foster the creativity and the happiness in them. In addition are the customers, who should be considered, caring for their needs (supporting), listening to their complaints (satisfying), letting them know (directing) that there are procedures that in case they have complaints you will look into them and training all the employees how to behave with the customers (organising). This topic is very important and if this comes true, the company would progress further.

- **How different have the leadership methods in the 21st century become compared to the 20th century?**

The difference is becoming human centric in the 21st century. In the past the companies were deeply pyramid-like, meaning there were 10 levels from the bottom to reach the managing director (relationships), but now with only 3 levels you will reach the managing director quicker. It means that it's you, then your manager, then the assistant director and after that is the managing director, that's all.

- **Is this suitable for the 21st century? I mean shouldn't there be any changes?**

The changes made could be creating happiness in that organisation, in order to improve it. The human factor nowadays has become so important that it makes the difference between the organisations in their creativity. For example, you see that a company has produced a new item that has become successful and then you realise that behind it there is lots of innovation and hidden thoughts. These thoughts belong to the project manager of the company and this innovation has been brought out because he feels happy (self-motivated), it's that simple.

- **There are two theories in leadership; one belongs to Greenfield that says the only way for impacting the community is with servicing them. And another theory says that to impact people we should care for their needs**

and motives to reach the goals of that organisation. Which one do you agree with?

I think there should be a mixture of these two, a part from this one and a part from the other one. The visions are different. The **goal** is very important in my opinion. What are the **human relations** about? We are here in a relationship, we add to each other's knowledge or wealth, I teach you something or pay you for something you have done for me, whether to add to your knowledge, or to help you earn more money or to give you some emotions. There's always an exchange happening between people. In business as well we want to add something to each other, whether we want to give a production or services or we want to give money to each other. We are exchanging a value here. We're exchanging a value with money. For example you educate my child, or give a specific product or sell medications. The point is that we are both conducting an exchange and we both **want to win**. The whole story is that in a project, a project manager should provide a **specific financial system** where all members feel like the winner and achieve something. Like if I'm buying medications from you, it shouldn't be spoilt or has side effects or if I'm buying a car from you, I should feel that it is worth it, it shouldn't be damaged, if it is you should fix it, because of the promise we had made. This is the role of services that both sides feel like the winner (**win-win**), here you and I are a part of this relation and **adapting** ourselves is a part of this issue. The **goal** here is exchanging. What do you think the **goal** of all companies is? Whether they are giving services or selling and buying products, they are exchanging something and this exchanging should be done right in a way that the seller and the customer wouldn't feel like they were played with (**win-win**). You even might have to change your organisational structure for this, if for example a customer in a specific village couldn't buy your products you should adapt your organisation with that, make a distribution network to provide them with your products and make them happy (**supporting and satisfying**).

- **Do you think it's possible to make a universal model or style for leadership based upon the variety of cultures, religions, ideologies, geography and...?**

People's and the society's **background and history** are the factors that define the needs of **leadership** eventually. **Leadership** as the centre of all societies is an idea, like human

rights, therefore there exists a universal model for all humans. **Leadership** is a phenomenon that could create a **two-way relationship**.

- **So you believe in this as a base?**

They all are common in a base.

- **In the details?**

We should **adapt** them. **Leadership** is not a new topic; it has existed from old times, from when the civilisation was generated and the villages and etc. were generated, there were always a leader, who led the communities. In my opinion, the main factor for good leadership is having a **two-way relationship** between a project leader and team members. There should be **empathy**, **good feeling**, and **sensitivity** between them; this means that the team members should like their project leader; and he/she should like them as well.

- **They should have mutual trust?**

Both **mutual trust** and mutual emotions, meaning the leader should show his affection to his inferiors and this could be by paying attention to them and financial support (**supporting**). The inferiors should also show their attention to their leader, they should express their feelings, showing that they like their leader, they work for him and they are creative. This should be a **mutual relationship**, if not, the formula wouldn't work and the employees wouldn't like the leader. If the leader doesn't care for his community that as well would cause problems. We could define this as the central point of leadership (**building mutual trust**) If these dynamic issues happen between the leader and his inferiors, this conversation, **transferring the information**, mutual feelings and etc; then what matters are the various cultural definitions and policies in different societies. Then a leader, who has these characteristics, should localise the situation there (**flexibility**). For localising he should learn about the people's habits there (**analysing context**); I've experienced this myself that in a place that people are not used to much freedom, you couldn't give them much freedom as well, because that will ruin your system.

- **Do you adjust your style according to the situation?**

Exactly!

- **Do you think that as an effective project leader in Iran, you could become effective somewhere else like in Africa for example as well?**

That depends. You should get recognition of the cultural definitions there for that. You should spend acquainting period (*analysing cultural constraints*). If for example you will move a successful leader from USA to Iran, he will for surely fail soon.

- **Well, he's not successful at all then!**

He's successful in his own country, but coming to Iran, he should learn the differences between the cultural contacting methods of his inferiors and the people of this society, and his own society (*analysing social and cultural constraints*). As an example in America you tell someone that these are your tasks to do and he will do them, but here you should first talk to that person for some minutes, connecting with him emotionally, asking how he is doing, how his family doing and etc. these sentences are creating a cultural goal that are different from America (*analysing context*). There you will simply say "Hi, How is it going?" and start your work.

- **Do they involve themselves with the personal issues at all there?**

Exactly! Here you should spend 5 minutes for greeting, they might mostly be unnatural, but are used as a protocol, as a habit for starting a connection with someone (*analysing context*). A great leader without these factors coming here would have problems becoming successful.

- **But if we give them a long time period, they will all succeed to do this, right?**

It's not about time; it's about the need for *training*. Those moving from one country to another should know the customs and traditions there (*analysing context*). No matter how standard and great the leader will be, as far as he doesn't know these traditions, he will be misunderstood. As it has been this way elsewhere as well, for example if Americans go to Japan, that wouldn't work or if Iranian go to China and couldn't speak Chinese well, they wouldn't succeed, because they have different ways of saying no or having eye contacts. For example, Americans say "No, we couldn't do this job" and they wouldn't, but Iranians never say "No", they say "Let's see what happens!"

(*analysing context*), they are actually saying “No”, but it’s not a strong “No”, Chinese wouldn’t say any of these, they will say we’ll study the possibilities, that is totally different with Americans and Iranians.

- **I conclude from your words that an effective project leader should be able to analyse all these in the less time possible!**

Yes, he should both survey and *get trained*, then *analyse* and *adapt* himself to the situation (*adaptability*).

- **Do you believe in dividing the leadership styles based upon cultures? Like for example it would be more probable for a leader from Ukraine to become effective in Poland, or for an Iranian leader in Iraq or an American one in Canada!**

It’s right up to a great level. Because the countries you named have had common *backgrounds, religions, ideologies and social structures*, so naturally that could be right!

- **If I would want you to give a percent for the effectiveness of EI and formula like managing issues, what would that percent be?**

A lot, like 75%-80%!

- **How effective is the operation of a leader on the whole community?**

That depends on the organisation. There are various parameters. You might have a highly charismatic leader, but not high funds. Or you might have a *professional human recourse* and high funds, but ordinary leadership. So this varies according to these options, like pepper in your food. In my opinion dynamic leadership could play a role in the community between 30%-50%, meaning the most effectiveness a leader could have is 50%.

- **What is the main difference between management and leadership?**

Leadership should have a *vision*, but *management* could have a vision or not have it (*Directing vs. planning and organising*)

- **But it has a mission, right?**

Management performs the work and the leadership defines the way and shows the direction (*performing vs. directing*).

- **He defines the strategies based upon his aim?**

Management is like the driver of the car, but the direction of the car and where it must go is specified by the leader (*controlling vs. directing and inspiring*)

- **If the leader involves himself with managing, will he lose the direction?**

That's another skill and tool, and performing and managing are another issue.

- **How about if he involves himself with the details? Will he lose his direction that way?**

He shouldn't get involved with the details (*directing, vision*). These are two different stories. One is that big picture of the leader as Americans say and the other one is not to lose the direction (*vision*).

- **What is the role of a managing director in Iran?**

In Iran due to the lack of professional human forces, not being familiar with defined issues like; business plan and concepts that define your direction clearly (*vision and strategy*), a marketing plan, a sales plan and all the other plans that could be used in a community and might be made by others for you, our managing directors really don't know the way and where they should go, so they don't play their role right. Each person has his own duties and tasks (*assigning*), for example in a hotel that has several different sections, as a leader you couldn't do all the tasks yourself, like supervising the kitchen. This is why the human recourses are discussed. You should hire the best chefs with the most talents (*recruiting competent individuals*) and define the fact that you are going to build a hotel (*vision, goal, and objectives*) and have someone to write the business plan for you; you couldn't even make this business plan yourself, because that's a different topic.

- **So you mean the managing director should evolve from being a manager to being a leader?**

Definitely, but that depends on the acquaintance with these topics and definitions. Just because you are given the **leadership** position, doesn't mean that you are eligible for this position, to be eligible for that you should be familiar with the business plan or the market (*knowledge and experience*) as the managing director, you should have recognition of the market and understand the business plan and would be able to analyse and even find its errors (*analysing context*).

- **You mean the strategy based upon the vision as you defined? Which kind of strategy is better?**

If you pass this level, you will get yourself a **vision** (*leadership*) then you **plan** that in the crowded market (*management*) that we've got in the world now, what kind of product should you provide, what services you should give and in what shape these should be (*analysing context*). Then you could perform the business plan in your work, in fact you will supervise your managers to perform the business plan or your vision right (*controlling*).

- **What is your opinion about an effective project manager within project-oriented organisations? What factors are required for a project manager as a leader to be effective?**

This could be studied in 2-3 aspects. In my opinion first of all a leader should be **motivated** for what he's aiming to do, he should really need to reach that **goal**, after that we could pursue the means. He's got two different means in my opinion; the first one is theories, means knowing the **updated science** and **knowledge**, and the second one is having **experience**, means he should have done these tasks before and felt them. There are people who have got their PhDs in **business**, but couldn't work as well as workers of **bazaar**. This exists vice versa as well, because workers of bazaar don't know the theories, this could be a barrier in their working progress. So the leader first should be **motivated** and then use these means to become successful.

- **Are the means to his success only these 2 means you named or could it be explained more?**

If we explain it more, we'll get involved with the details.

- **If you would want to name the characteristics of the project leader as a list, what would those characteristics be?**

There are theories to be replaced with those two means, but **self-motivation** is very important and usually no one pays attention to that. There are project managers that are eligible theoretically and experientially, but are not interested in their works and don't like to progress (**self-motivation**). Terms of success are definite. **Motivation** is connected with the leader's character as well. The leader shouldn't be too emotional or too logical characteristically (**adaptability**). Characters have complex psychological issues, there are people, who work from 7 am to 10 pm, and their motivation comes from a negative reason (**self-awareness**). They work for parading. The healthier the character would be, the more successful that person becomes. Leader should be able to control his emotions and he should know himself (**self-awareness**). Ultimately we get into a **self-scrutiny** that matters in many subjects like **religion**, **psychology** and.... In my opinion the leader should have this **self-scrutiny** as much as possible to know why he's doing this job (**self-**

awareness). A good leader is a *moderate* person, means he should be working in all life aspects (*adaptability*). For example I have an uncle, who's a well-known professor, but his body's health is not ok at the age of 63, which means he hasn't work on all aspects of his life and has only studied. A successful leader should be balanced in all various aspects of life (*adaptability*). This affects many issues.

- **Do the two factors you named, motivation and reaching the goal, related to one another?**

I think we should first be *motivated* and then through those means, we could progress. With *motivation* we could provide the means easier. Like someone who wants to cut off the trunk of a tree and looks for his needed tools. I think with *motivation* those two would be provided by themselves. But the *healthy character* is needed for that (*perform self-assessment*), meaning that a balanced person has a good life (*adaptability*).

- **You mean, you see the roots of all these in the healthy character of a project leader?**

Yes, these come following that *healthy character*.

- **You mentioned the emotional issues, and that they should be balanced, how about the psychological issues? How do they affect work?**

That's pretty effective. In fact it's all the *psychological issues*. Meaning when you have a *healthy psyche*, you should first know yourself (*self-awareness*) and then you should realise the others' characters (*social-awareness*). This is a higher progression related with the *experience* again. From the self-scrutiny we could learn how to affect on the work (*self-awareness*). A project manager should have self-scrutiny as much as possible to know why he's doing his job (*perform self-assessment*). He should first assess himself accurately (*self-awareness*) and then assess others (*social-awareness*). From *self-assessment* we can learn how to affect the work. A project manager should know himself (*self-awareness*) and be able to control his emotions (*self-control and self-regulation*). He should know his own characters, emotions, motivations and why he is working (*self-awareness*), and then the next step would be knowing others and their relationships (*social-awareness*). Knowing others (*social-awareness*) needs lots of *experience*. For example we understand that whatever demands an employee has,

there's an **emotional reason** behind it. Like asking for the mortgage loan that when an employee asks for this, means that he has a wife who puts him under pressure to buy a house and now he's asking for this money to get her a house and show himself. If these problems that are 90% emotional would be solved, other issues would be solved as well (**emotional intelligence**), though that might be difficult. The leader should realise these issues (**emotional intelligence**), and learns about the employees backgrounds (**social-awareness**).

- **How do you create trust in your community considering these issues?**

We try to behave right and don't pay much attention to the issues backgrounds. This is not our job to correct people's character or emotions. I had made some mistakes in this subject and gotten myself involved in the past. So now if I see an employee is upset, I will try to calm him down up to some level (**supporting and satisfying**), but changing his character is not my job. That's the psychiatrist or the consultant's job; it is a very complicated issue and is not possible easily.

- **If you would want to give a percentage to emotional and psychological issues and the relationship between the employees and the management academically, which one is more effective in your opinion?**

Saying such a thing academically is not of use in my opinion, what matters here again are the **theories** (**knowledge**) and the personal **experiences**. You should have a general **knowledge** of the theories, like for example when you read a book to learn about tennis and its theories, that will take you only 2 hours, but to become a real tennis player, that will take you 4-5 years (**experience**). Theory is useless; we have lots of graduates in management, commercial business that can't work. **Efficiency** is important; the person should have efficiency, the **experience** and the emotions to be able to do the job right (**emotional intelligence**).

- **If that person wouldn't be experienced, how do you explain efficiency?**

If he wouldn't be **experience**, he would have an inside **talent** that is connected with his **character**, meaning he has a **healthy character** and could gain the experience fast (**wise**).

- **So you believe in the management being an innate?**

No, it's **acquisitive** all. But that depends on the **family**, the **environment** and the **society** he has gained this ability in; the same difference between learning tennis theories in 2 hours and becoming a real player in 5 years.

- **Do you think it's possible to give a model for an effective project leader of a project?**

That's looking for the theory, which in my opinion is negligible comparing to the **character**, because the characters can't be known even by the psychiatrists. You go to a psychiatrist for 2-3 years, until he will know you. Now imagine how could we make a model for this subject and assume it the same for all people. If he answered one question right, he's a good leader, if not, he isn't! I think these theories don't work here. But someone with a **healthy and balanced character** and **motivation** could be useful for this work, but we couldn't give a model for that. We try to make things easier for us looking into theories, but this is not a simple issue.

- **I'm not talking of theory; I want to know if you call someone an effective project leader, what have you seen in him that you call him effective?**

To have a **healthy character**, being able to control his emotions (*self-control, self-regulation*) for example being logical in making decision (*strengthen decision making abilities*), like if they see one of the employees shout at him, he wouldn't feel the humiliation and instead, he looks for the reason of his anger (*demonstrate enthusiasm and attentiveness*). All my successful managers are those who know their emotions (*self-awareness*) and have great control over them (*self-regulation*). They manage themselves well (*self-regulation*); because they feel relaxed inside (*self-control*) and have enough **self-confidence**. Therefore, they could make right decisions.

- **Do you know any difference between management and leadership?**

I'm not into words and their differences.

- **What is the difference between you and your sub-manager? I mean from the operational aspect and not your position.**

I see no difference to say the leader has a higher position and the manager has a lower position, I think anybody in any position should be having these characteristics, even if a simple employee would have a healthy and balanced character, he will be more successful in his position (*emotional intelligence*). The more he works and the more experience he gains, the more successful he becomes as well. So everyone should have the healthy character and those two means (*experience and knowledge*) I named, but the leader should have these more than that simple employee. We could consider everyone as a leader or a manager, so if even the simple employees would have these characteristics, they will be more successful. He should have a healthy character to do his job right.

- **How could we submit this in the community to make them understand that their work is valued and they have a share of the work's success? How could we give them that character?**

We couldn't give them this character. I always made this mistake to talk with the employees in order to change them, but this is very difficult to change their character, this is not our job at all. Here we choose the people, meaning those with a healthy character (*recruit competent individuals*), then specify their position (*assign tasks*), locate them there and support them, this is 70% of the job, if the system itself would be healthy and motivated (*emotional intelligence*).

- **Considering the competitors in the market, how could we increase this motivation to increase the output?**

Well, that community should be a healthy community, it should be balanced and shouldn't be working only for its advantage and profit (*satisfying*), and it should consider the ethics issues and the welfare of its employees (*supporting*). For example here, we provide our employees sport courses; we care for their sport and education (*supporting*). We care for the working environment and pay off their debts (*supporting*), because these affect our work (*quality and performance*). Even if someone was under 20 million debts, we take it easy, because that's what the feelings say, not everything could be done logically (*emotional intelligence*); we are humans and if we would want to act logically and strictly, we couldn't get our work done (*supporting*). We should use the feelings and the logic right (*emotional intelligence*) and in their right place

(*adaptability*). System is like a person as well, it should also be *balanced*. I've been in places, where they only cared about their profit. None of the employees were *happy*, they all lied to the *sellers and the customers* (*stakeholders*) and in result the *quality* of the work decreased, they had more income there, but all of the employees were unhappy and what they come into at the end is a deadlock. But here our progress is adequate with our *expectations*. Meaning the employees should have all the needed factors of a human at work as well (*supporting*), they should be balanced. If we will work from 8 am to 10 pm, no one will be *motivated* to work anymore, everything should *be balanced* and as needed, working hours, sport, life and...(*adaptability*). This is called *efficient intelligent* and is important to have (*emotional intelligence*). Effective project managers are not those of higher grades or higher IQ, effective ones are those with higher emotional intelligence (*emotional intelligence*). Emotional intelligence is the balance in emotions, logic and...the system should have it, too (*emotional intelligence*).

- **Do you think that if as an effective project leader in Iran, you will move to Africa, you will still be effective there?**

100%, there's no difference. I used to provide my productions for 12 different markets with different *cultures*. You should get some information and plan based upon them (*analysing context*).

- **Why do you say then that it's impossible to define a universal model for leadership?**

That's different. You want to put a character in theories, saying he should have this much of intelligence and...we can't specify the factors. It's not theoretical.

- **Like being strict, flexible and....**

What number are you going to give for being strict? Is there any device for measuring that? There are some ways in psychiatry, but that's just theory, that wouldn't work out. A leader should be considered with all his community together (*build a unified team*) You couldn't mark his characteristics one by one and then add them up to decide if he's a good leader or not. It's nonsense.

- **You don't use any assessment tool for choosing your employees?**

We do, we have application forms (*recruiting competent individuals*).

- **Do they have psychological questions?**

No, they are *intuitive*. Some issues in management are related to *intuitiveness*. When someone enters my room, I understand what kind of a person he is (*social-awareness and intuitiveness*). Or even with regard to customers, I can realise their character even through talking with them on the phone (*social-awareness*); these are all connected to the *intuitiveness*. There are of course some theories, like how many years of working *experience* he has got, where has he worked in or what agencies or prosperities he has had, but the *sense* is important as well, we couldn't restrict ourselves to the theories only (*emotional intelligence*). It's even said to work with them 6 months and after this period you will just learn what kind of a person he is, after filling in that form.

- **What leadership method is appropriate for the 21st century in your opinion?**

That depends on our needs. What do you want the leader for? In my opinion the leader that is going to do political works differs from the one, who is going to work in the agricultural field or the one that is going to work in a productive factory differs from a financial leader, these all have got different models and methods. This comes from their *motivation*, for example a political leader should lie in his work, but a leader that is doing cultural or scientific works shouldn't.

- **You see nothing common between them?**

The *healthy character*, the more *human centric* a leader's thoughts will be the more successful he will become (*supporting*), because the human arrow is heading towards a progression. Caring for humans, environmental issues, the relations between people and people's rights are all important (*social-regulation*). Thus, project leaders need to exhibit *conscientiousness* throughout their projects. For example we might like our worker to have a car as well, but that's not possible that everybody has a car, It's part of the limitations, I think we should think of the issues in the limitation area, but shouldn't make it obligatory, because that will get the management into trouble.

- **If we would divide the world into different regions based upon their cultures, a successful leader in Ukraine could be more effective in Poland or in England?**

In Poland he could get the information easier, his success procedure would be faster there. That might take 6 month in Poland, but would take more time in England for him to become successful, (analysing context) but there's not much difference in total.

- **What's your opinion about an effective project manager within project-oriented organisations? What factors can make a project manager effective?**

You mean how a project manager can run a project effectively?

- **You can define it this way, but I mean an effective project manager. Whatever the way you define it.**

Well, actually I have the experience of running various projects, as a project manager first of all before starting my project I try to first formulise myself to **project management scopes**, to **project management elements**... you know we have actually a **standard for project management**, **project management body of knowledge** that first before I start my project, I try to know all the **scopes** and all the elements of the project management like: **risk management**, **time management**, **cost management**, **human resources** especially, and everything. And when I started my project, I tried to apply all these element in the project, therefore I tried to keep a balance between the time, the budget , the satisfaction of the human resource and risk of the project and everything else that might be a key factor in the project (*meet project performance*). I'm not sure if I'm exactly answering to your question or not.

- **Well, I just want to know your opinion about the project manager; I mean what elements in your opinion a project manager should have to be effective?**

I think the most important thing for a project manager is to complete a project under the **schedule** and **under the budget**. I mean if you can manage your project to not to exit from the defined budget and also not pass the time limit, then I can call you a successful manager (*meet project performance*).

- **So how about the qualities and the personality of that person, who is known as an effective project manager?**

Well, when you talk about a manager of a company or a firm, that's kind of different from the project manager. I don't really think that the character of a manager is really of

importance in a project, I mean of course you can be a well-tempered person or in good relations with your human resources (relationships) or being able of managing the different scopes of the project (meet project performance), but well as far as I know it's not really of importance to be charismatic person in a project or something, I mean, because managing a project is pretty different from management of a firm or a company, they have actually different characteristics.

- **Could you please explain this more? The differences?**

Well, I think when you are running a company or a firm; there are much more various situations that you might face and much more various events might happen to you and you might be ready for many things (foresee project threats) and also you don't have a very definite scope or definite border for your work or actually your company, but while you're doing a project you know exactly you want to move from here to here in this specific time and when you finish your project you need something like that, I mean this is your deliverable (meet project performance), so actually in a project you know all the scopes of the work, you know what are your resources, what is your **time**, what is your **budget**, what are the **probable risks** in your way, how you should save the integrity of the project (build a unified team), how you should keep the relations between the **human resource** and well, by knowing all these and if you can manage all these together, I don't think that would be that much of a problem that what character you have or what kind of person you are or what is your characteristics, I don't care that much, at least in my experiences that was not, of course I was in a good relationship with all my human resources and also I was in a very good relation with the employer, I was a contractor (relationships).

- **But the projects own by the organisation or the company or something like this.**

So what?

- **There isn't any relation within the organisation, I mean between the top level and the low level.**

So what's the problem? And by the way it's a project and anyway even if it's in an organisation, there's an employer or owner of the project, there's a general contractor, I

mean the first level of the contractors and if there are sub-contractors, they go under the general contractor, so what's the difference if you do the project outside an organisation or in an organisation? (*analysing context*).

- **There's no difference in your opinion?**

Well, when you are in the organisation somehow some relations could be more *flexible*, because you have your own connections, you know the people in the organisation (*relationships*) and it might be a kind of easier for you to work and at the same time it has some difficulties, because when you are in the organisation the owner of the project or the employer can have a very close supervision on you and your work (*stakeholders*) they can *check* exactly what are you doing, when you are working, how many hours a day even you are working, but when you are out of the organisation, they can't check, they just get the output, and they give their comments on that and that's all. I'm saying that working in the organisation has some benefits and at the same time some difficulties (*analysing context*).

- **What's the problem of checking the project, you said if the project is executing outside the company only the outputs are checked, is there any benefit or advantage in that for the project manager?**

As you might know the governmental organisations are very old and they don't have a *new and innovative* mind about the projects and the ways that a project might work. And what they have in mind of the project is that all the *human resources* should come early in the morning, work until afternoon and go and that was exactly what was not happening in our projects (*develop a self-managed project team*), I mean people were quiet *flexible* in their work, some of them preferred to work at home, some of them preferred to work at night, they could for example come in the afternoon and start working until mid-night (*develop a self-managed project team*). And that was what exactly didn't work very well in a governmental organisation; they couldn't get along with this issue, how come you are getting money from us and we don't see you people around and working very hard, so what are you doing exactly? (*quality*). And it was kind of difficult for me to explain them that first of all if I work in your organisation that doesn't mean that you could have these kinds of supervision on my work, I mean who are you to ask me? Just according to the contract what you can expect from me is

the **deliverable**, is the output of the work (**meet project performance and purpose**), so in between you cannot come here or ask where are my workers or what are they doing, second the style of the work in my project is pretty different from the way that you are working in your organisation, I mean you are the people, who are supposed to come early in the morning and leave in the afternoon and I prefer to have my project in a flexible mood that people work in a way that wish and in a way that they feel more **comfortable** (**develop a self-managed project team**).

- **Is that universal or for just some places in the world? I mean this style!**

I think the general approach in the world is moving towards this style (**develop a self-managed project team**). I mean, giving more freedom to human resources and letting them be more free in the way that they desire, that's my own experience (**develop a self-managed project team**). I mean I work better at nights, so if I work better at nights and I'm not efficient in the morning, why should I come to work in the morning when I'm not efficient (**develop a self-managed project team**). I can talk to my director and say if you allow me I can come at 5 pm and stay at work until 2 am or midnight and that's the time I can work most efficiently (**develop a self-managed project team**); and as far as I know, to be more precise, many companies (for example those in Japan) appreciate this style (**develop a self-managed project team**); and they say as long as one person can work efficiently, we respect the way that he prefers to work and it doesn't matter how many hours exactly he works, what we really need is the output of the work (**develop a self-managed project team**).

- **What's your opinion about the role of leadership in the context of the project management?**

In my opinion there's a difference between manager and leader, I don't know if it's right or wrong. In my opinion the **manager** moves ahead and all **human resources** come after him, so he is the **first person** and everybody in the project come after him, but the **leader, he is the last person**, actually he's the one that is **leading** to go this way and he's the last one. You see the difference? When I was working in my projects, I tried to make a difference between these two roles. At the very beginning of our projects we had some **sessions** between our people working in the project and we had some **brainstorming classes** and sessions and I tried to define the project in the best way to all

the members (*define project goals and objectives*) and tell them where we are and where we want to go (*create a shared project vision*) and then what was on my mind was first of all creating a good relation with my human resource (*supporting*) and second make sure that we have the same definition of our works in mind (*guiding*) and third make sure there were no conflicts between the people of the group (*resolve project conflicts and disputes*). I believe that at that time I was playing the role of a leader rather than a manager (*leadership*). Then we started the project and while we were doing the project I was doing the most needed role of a manager (*management*). Kind of being worried about the **time** of the project, the **cost** of the project, punishing the people, who were not working very well and also saying well done to those, who were doing their jobs very well, in my mind the first role I had before the start of the project was leadership (*directing, inspiring, and supporting*) and the second role while doing the project was management (*planning, organising, and controlling*).

- **What leadership can contribute to project manager in your opinion? What do you think about the contribution of leadership role in project management context based upon your experience or knowledge? Some people say that the manager should evolve to the project leader or at least use the leadership role to be an effective project manager, do you agree on this?**

Well, I'm just thinking about my experiences, as far as I know at least I didn't evolve in the **course** of the **project leader**, I preferred to stay a **project manager** and actually, I didn't feel I need to do that (*leadership*).

- **So you mean the leadership role in the project management context is not really highlighted?**

Yeah, I didn't feel that. I'm not sure if that's right or not, but I see that the role of leadership was not that highlighted in the project (*management*); moreover just please keep in mind that a number of the **standards** that we have in **project management** could not be fully accomplished, I mean we have many efficiencies in this regard and we have many problems that do not let the project to go in a very standard way (*meet project performance and purpose*). Anyway as I remember, the only time that I played the role of the leader was at the beginning of the project (*leadership*).

- **Because sometimes I saw that if the project manager just use the management approaches and just plays his/her role as a project manager maybe he/she could not be known as an effective project manager, maybe the leadership role is very useful for him or her in the context of the project management . I just want to know your opinion about the leadership role.**

Honestly I didn't find it a problem. I mean maybe I was playing the **leadership role** unconsciously (**leadership**), but at least it wasn't conscious and I didn't face any problem in this regard. The relation between the people of my projects was quiet well and we were getting along very well at the same time I was friend with every member of the project (*build a unified project team*). I had the **management role**, so I could **assign** work to them, I could punish them and I could ask them about the wrong works and I never felt that I have a problem regards this.

- **How about the culture and the affects of culture in this regard?**

It is very important, that we sometimes have very **specific and strange approaches** (**establish project policies and strategies**) in our relations it is very important, and it is of a great importance to know how you have kept in mind the **cultural issues** and how you have to apply them in the right way (**analysing context**). Some people really care about these issues and you have to respect what they have in their minds (*supporting*). Also you have to know the way that you talk with your employer and keep you relation with your employer or your people in the project (*demonstrate enthusiasm and attentiveness*), it highly depends on the cultural issues of the place that you are doing your project (analysing context).

- **How about trust? What do you think about the trust in the context of the project management?**

It is again very important. Well, I had my special method in this regard and when I started the project I told myself that I **trust** everybody in the project, but I had regular checks in different aspects of the project (*controlling*); for example; I assigned the financial issues to one of my team members and I completely trusted her, but just regularly once a month or once in two weeks, I just had accidental checks to be sure that everything was going well, (*controlling*); or I had a guy who was supposed to buy materials for the projects and again I had full trust in him, but just once or twice, in

order to assure myself, when he bought the things for me (controlling); I called the seller and asked about the price to make sure that the price that the guy told me was the right price; this is everyone in my projects that I'm talking about, I rely on them all, but I don't forget to check on them regularly (controlling); because without trust, you can't move forward even one step, I mean if you don't trust your people at all, how can you go ahead (building mutual trust). Also about the people in a project, it is important to trust their work, I mean it is important that the manager...you know there is difference between the manager and the people, who work in a project; you see some people are good workers...

- **What do you mean by that? Manager or the project manager?**

No, no, when I said manager I meant the project manager. If someday you saw that the project manager started to do the work of the members, it means that the project is not going well or the manager is not working well, it means that if some day you saw that the manager sits in the chair of a member and doing some part of their work, it means that he couldn't assign the right work to the right member he couldn't trust enough his people in his project to do what he wants and later he had to do it himself. Well, that was a bad experience that I had in my first project that first of all I had some kind of obsession in my work that I thought people in the project cannot do what I have in mind correctly and I was always about to interfere in their work (monitor and troubleshoot project tasks proactively) to say what are you doing ? Why are you doing it like this and why not like that? Ok, I'll do it myself; you don't need to do that! And later I found out it wasn't the right way, I mean if I want to work with these people I just have to trust them and just look at the outcome of the work (build mutual trust), I mean output of the work and if there was a problem with the output, I ask them to revise it, (develop a self-managed project team), so to be present there to see if they are doing it the right way, I don't think the project goes very well. So trust is very important and also you have to make a very good relationship in terms of trust with the owner of the project (build mutual trust). I mean if the owner of the project trusts you in a way that he is sure that you are going the right way and doing your job well, it is very important (build mutual trust), I mean if you feel that the owner of the project trusts you and doesn't think that you are going to trick him or you are getting money for nothing or something like that, that'll be really helpful for you (build mutual trust).

- **My last question is about the leadership, what's your idea about the major difference of leadership and management?**

As I told you I have a classic definition of that in my mind that the leader might work after all members, I mean behind the all members and just to **guide** them in the right way (**directing**) and not to push them in the right way (**inspiring and influencing**) and the manager is also moving ahead and he is also pulling the members after him, so in my mind the leader's biggest role is to show the way to the people of the project (**directing**) and to say this is the way (**directing**), just try not to lose the way (**vision**) and actually this is the place that we want to go (**vision**) and to define the way (**strategy**) and then to keep the people in this way (**directing**) and to make sure that the people are doing things right or not is the duty of the manager (**controlling**). I think sometimes the manager of the project might play the **role of the father** in the project that people come to him for their own problems (**supporting**) and it is something different from the managerial relation of the management with the people in the project (**supporting**) and to bring their problems that might be tiny in the scope of the project, but at the same time big for that specific person to be OK to bring their problem to him and ask him to help them to solve the problem (**supporting**).

- **Have you heard anything about leading by example or something?**

No, I've never heard about that.

- **Have you seen that some managers do the same thing that his or her members should do? What's your opinion about this style and approach?**

Actually I had no idea about this approach, but when I think, I see a number of times I did that. the substance of our projects were both in the field of **knowledge management** and actually it was documentation of experiences of **petrochemical managers** and what we were supposed to do was to go to these managers, who were all old and about to be retired and interview them in details in order to acquire their **experiences**, in order to document them, so to do this we had to have a number of interviews with these people. My interviewing style was structured interviewing. After a while I found that my members, especially 2 of them, who were supposed to do the interviews, were more **comfortable** with unstructured interviews or semi structured interviews. I mean not to be totally bound to ask these questions, they preferred to start the interview in a more

flexible environment and just have a frame of the interview in mind and then just follow the interviewee, in order to get as much as words from him as they can. I found out that the way they were doing this was more efficient than my way (*adaptability*). I found out that the way they were doing it kept the interviewee in a much better way than the way than I do (*knowledge*). Then I changed my style to their style and that was a very good point in the project, because the people of my project learn that I respect their general wisdom and their way of thinking and if I found a better way that they were doing the projects (*develop a self-managed project team*) I respect it and they felt themselves closer to me and moreover we had a better result in the project and we could understand each other better (*develop a self-managed project team*) I mean because I experienced their way, I understand the difficulties better, if I didn't I had no idea of what problems might be in their way and I couldn't get along with them very well (*experience*).

- **What is your idea about an effective project manager within project-oriented organisations? What factors are required for a project manager as a leader to be effective?**

In my opinion, the most important of all **leadership** factors is having a **vision**. I mean when someone comes to a corporation and decides to manage different projects and help them move forward; he should have a **vision**, a clear **image**, a specific programme to know what he's going to do in that corporation in 5 years' time (**vision**). Unfortunately it's not always like this and a leader coming to a corporation usually loses this image after the first 2 or 3 months and then interior conflicts begin. One wants to do something, the other one starts fawning, another one wants to strengthen his position and all these together help that image to fade away. Another factor is to specify how to get from today to tomorrow day by day (**strategy**).

- **You mean how to come from leadership to management? And from vision to day to day?**

Well Done! Exactly! As an example: Steve Jobs of Apple Company. He's a **visionary** leader; he's got an **image** in his mind and knows what he wants to do (**aim**). One aspect of leadership is to know how to get to the vision point from the first step (**strategy**), and **directing** the project accurately to the **goal**; this is more difficult than having a **vision** (**directing**). Though this vision should be a wise one, it should be due to market acquaintance of the product-service that it's giving, its potentiality for reaching that point, the possibility of its influence on the market, the chance of growth, the strength of the competition and to learn if you could materially match your price level in order to make it come true. Some have this in their blood. Is it from their **experience** or **intelligence**?! Whatever it is, they could **foresee** the future of this image, they could realise what prospects the product-service they've got in mind would have (**foresee**) what details it should have to attract the market and how **proactive** it should be. Next step after having this **vision** is finding a **professional team** who could make the vision become reality (**building a unified team**). The leader should have **trust** in them and the team also should be experts in all different extents of the job (**recruit competent individuals**). The leader should lead them all in a **pyramid structure**, the leader through

his inferiors and his inferiors through their own inferiors. A project manager should lead the projects by means of **inspiring**, **influencing**, and giving material or moral **motivations** to stakeholders. In total, he should walk towards that goal day by day and there shouldn't be even one day that he thinks he hasn't taken any steps towards his **goal**.

- **To lost his way?**

Right!

- **What should be done in order for him to: not to lose this vision, to not shift to the ordinary ineffective management and to not shift from a leader to a manager? What characteristics should a leader have to avoid this? What should a project leader do to be known as an effective one and to reach his early vision? What are the characteristics of an effective project leader?**

Most importantly, the first characteristic of a leader is his **optimism**. And it's not just me saying this. Before setting up my own company, I used to work in a counselling corporation, my manager there was a man who had written a book named "Rain makers", in business this infers that the **Rain makers** are those successful ones who make a lot of money. He had written 1-2 other books on this subject as well but unfortunately I don't remember the man's name. However I could find out and let you know later. This man and four other directors of that corporation started training us. This man, who had psychological working background, explained to us that usually when, he ,as a new employee enters the company and talks to its manager or main directors, he gives them some **psychological tests** and in that test he tries to find out if people have some specific characteristics and to which level do they have it (**recruit competent individuals**). He gave us that test as well and told us that we could measure human characteristics such as: **optimism**, **pessimism**, **aggressiveness**, **passiveness**, **friendliness** and **introversion**. However, out of all of these 7-8 characteristics that we could name for a human being. Most importantly, the first characteristic of a project manager is his **optimism**. The optimistic project manager has a better chance of becoming successful but at the same time he must have the vision to know what that success is. He is **positive** and says; I see this **image** and I persistently try to reach it (**optimism**). A project leader should be a **perseverant** and **challenging person**, and at the

same time he should be a little bit of a **perfectionist** so that he will never accept failure easily. As long as he has that image in mind (**vision**) and he is certain that he is sure to reach it, he will try every possible way to make it come true. He would think about it day and night and in some ways, it will become an **obsession** for him. Being obsessive in business is not a bad trait as he could direct this obsession in pursuit of the goal (**self-regulation**).

- **Ranking all these characteristics, you say that the most important of them all is optimism. Now if we were to rank the other 8 characteristics, what would be the first ones coming into your mind? Firstly, optimism, then perfectionism, next one should be aggressiveness and to never accept failure easily and finally, to set himself a goal and keep this in mind. No matter what circumstances he finds himself in, he should make every effort to reach this goal. But knowing how to communicate with others is a very important characteristic as well, right?**

Yes, a leader's job is not only to order his inferiors, he should also get along with them and advise them on what to do step by step (**directing**). People might not all be the same, but the leader should know how to get along with all of them (**relationships**). On the other hand, each corporation has its investor and board of directors (**stakeholders**) that as a leader you should **convince** them that the way that you've chosen is the right one, because you are not always the one who decides. Business is not the absolute determinant and even the leader of the business should respond to the investor and the board of directors, you should first get along with them and then **satisfy** the **customers** and the **suppliers'** needs. It is extremely important to have **charisma**, which means to have a **lovely character** and **being nice** is an important characteristic of leadership for every effective project manager.

- **Do you think having more charisma is connected with the person's communicational skills or being more optimistic? Or these are only characteristics? Are these related or they are all dependant on the person and have no effect on one another?**

I think it could be possible that someone with a lot of **charisma** would not necessarily have sufficient quantities of the other characteristics. Although these are all connected

into some level, there might be a person who has 2 of these 4-5 characteristics or a person who has one more of them. As a result there are not many leaders because these characteristics are not particularly related; their existence does not depend on the existence of another one so this makes it rare for someone to have them all together.

- **Are they supplementary?**

Yes, definitely!

- **You mentioned something regarding communicational abilities; I suppose that is related with psychological and emotional traits. Have you had experienced it yourself? One leader might be an expert skilfully and technically, but another one might not be an expert in these fields, however he might be a good communicator, he knows how to communicate with people and learns their needs. Also, he might even have less knowledge in management but as a leader he has the ability to connect with people and his inferiors have more belief in him and work better. In fact, he should know his own behaviour and the behaviour of others well so that if supposedly he or even the inferiors got mad, he will be able to control it or in case of emotional tensions in the company, he would be able to manage or lead the situation psychologically. These are not in relation to technical issues, these are all related with the vision, and these are also not daily routines but actual complex issues. This means that if the leader doesn't know how to manage, how to deal with these issues, how to balance them, when to get serious and so on...How would these impact on the effectiveness of the leader's performance? I'd be grateful, if you could tell me your personal experience.**

Well, a part of the human brain is dedicated to the person's feelings towards others (*social-awareness*) when he first meets with another. Let's put business aside and think about a *friendship* between two human beings. When two people talk, unconsciously, all of their characteristics are having an effect on the other. That is why people care how the other person felt or thought when he or she was listening to that specific subject they were talking about; this results in sensitivity towards other people (*social-awareness*). You think; now that I am talking, I am making him happy or I'm bringing him comfort

or vice versa! A leader should find a balance between all of these things. He thinks that maybe it is needed for him to be serious in a specific situation, but at the same time he knows that just being serious is not enough and that alone, it would get him nowhere (*adaptability*). Those working with him should know that he understands their problems and their needs (*satisfying*); he should let them know that he wants them to be successful as well (*supporting*). They should know that he does not see it in such a way that they should work for him day and night for the next five years so that he could reach the goal (*build mutual trust*). He should tell them that he understands they have got families and they want to enjoy their lives and that the money they are earning should be for their comfort. This way he is in contact with his inferiors, he wouldn't be an "I". Just like them, he's got his *experiences*, his ideas and his own life. His life is not only about working, but he has a goal and in order to reach it there are needs which must be accomplished! (*satisfying*). This would create a relationship that the inferiors would like him and would therefore want to put more energy into working for him (*build mutual trust*). Not everyone has this personality; we can't say that a good person could realise others needs and a bad person could now! Some people understand other people's desires and this could help them not only in relation with his inferiors but also with his customers, suppliers and investors (*social-awareness*).

- **Do you think that in order for a project leader to have influence on his members, he should just give them services or he should also pay attention to their needs and accomplish them. I want to know that if in the 21st Century, a project leader should have more focus on his members needs in order to reach his goal. Should he care more about the result or should he also give them services? In fact, these have two different approaches: one is based on giving services to customers and the staff without paying attention to the result; the other one is based on paying attention to the experiences and inferiors' motives. They believe that through these they should be able to do the business and become successful, the result is important for this group and they work to achieve the goal. Which one do you think is better for the 21st Century? Is just servicing others enough or we should insist on the result too? If insisting on the result is important then why?**

This would not work, but the truth is though we might now say what is right and what is wrong, afterwards if this does not work, the output will have decreased and the business would not be successful enough. We discussed this theory and different other theories in investment science a lot when I was taking part in CFA. It says that a company should only **aim** for maximising its profit (**capitalism**). This might seem to be cold and for years and centuries they have said that this is **capitalism** and that it results in wealth **inequalities** but experience has shown us that due to different reasons including **psychological** ones, when a company aims as high as it can, maximising the value of its budget and the investors' investments, there are better chances of success (**satisfying stakeholders**). There are other theories that say we should now serve our society, the staff, customers and suppliers (**stakeholders**). This seems to be good and **humanitarian** but practically it cannot be measured and therefore cannot be focused on and evaluated to see if the staff of company A are happier than those in company B. This is a very subjective issue, but the investment performance of company A and B could be measured and compared. In other words we could only see the differences between these two companies through their successes (**meet purpose**). As a matter of fact, there is not any measurement for assessing their services and if their **servicing** has been enough good. Therefore we do not know if the final answer would be yes or no, but if the companies concentrate on only one issue then they could indirectly make all of these happen. Imagine having healthy competition somewhere with open market and with exposition and request specifying the prices, all regulated in a proper system, now imagine two companies, A and B. Company A cares for its staff (**supporting and satisfying**), but company B makes its staff to work too hard and bothers them, which of the two companies' staff would work better? A would work better, and by working better, this enhances the output and profit of company A. This indirectly measures the result of that company. For example, Company A treats its staff well, gives its services to its customers perfectly and in the case of any complaints, responds quickly and efficiently. But, on the other hand, Company B says that after they have sold something it is no longer their responsibility, so they might sell 2-3 products but in long term, Company A would be more successful than company B (**supporting**). The profit of Company A increases but the profit of Company B does not. You see that again we did not measure the **customers' satisfaction** directly but it indirectly results in the raising of the profit. It is the same story with their communities. As an example, Company A

might do charity work, but company B might not. This way, in the long term, Company A gains a very good reputation but company B does not. According to this result we have covered both of them indirectly, because if we don't do one then we could not reach the other.

- **Regarding those behaviours and characteristics of a project leader you ranked before, how many of them, in your opinion, could we change to say, for example, would someone without these characteristics not be successful, but someone who has them is successful? So if you were to transfer that very same leader from Africa to Asia, from Asia to America and from America to Australia, could this influence his level of success or not?**

It could; because a project manager should know the project's context, circumstances, and financial situation, so as to be able to feel the problems of that project (*analysing context*). A project manager should know the social and cultural norms; he should know the culture and the traditions of the project's location; he should learn about the culture to see what the situation is like in that location (*analysing social and cultural constraints*). Someone with a strong vision knows these sorts of issues, as an example he says: "I should know their culture, their traditions, their dos and don'ts. I should learn about their politics and their economy to see how the situation is there" (*analyse political and economic conditions*). This takes time, I don't say that there is no way, but it takes time. Unfortunately, there's a low possibility of this happening because it's not only about getting familiar with the environment (*analysing context*), though he could learn about all these fast if he is a wise person, but he should also learn about their culture and learn their language a bit. There are two ways in total: the first one is that the person would want to do these all by himself and the second way is to use some help through his relations, like his inferiors, co-workers etc. (*build a unified team*). In this case he should explain his vision to them (*directing*) exactly to see how it could be adopted within their society, culture and country and listen to them. He might also have an advisor who tells him that his vision might not work in that environment due to various reasons, so he shouldn't be so hard headed and he should be able to accept this. A good leader should be flexible, that is very important. He should accept his mistakes. This is not against his other characteristics, like being a man of his words and it's not against his aggressiveness (*adaptability*).

- **He should keep the balance.**

Exactly, you're completely right! A person might have a **vision** and a **goal** to move towards for but without **flexibility** he might get into trouble because no one could **foresee** what will happen five years further on. An effective project manager should consider the **economy** as it has ups and downs and the **financial** situation changes and probably many other events will occur that might change the situation. He should not lose his **vision**; he should be **politically and economically visionary**. He should **not be too strict** on its details; he should have a general vision and not to lose it as time goes on but also to be able to **adjust** to it step by step, though it takes time.

- **I asked about transferring the leader because I want to know if it's possible to give a formula, a chart or a statute to indicate the characteristics of a successful leader for now or the future, no matter where he is?**

100%.

- **Why is that possible? You mean culture couldn't influence a leader's performance or the regional performance? Having all those characteristics, could he be 100% successful?**

100 %. You know the characteristics I named would not change in different cultures. Say for example; **optimism**, well you could be optimist in all cultures or aggressiveness. That also could be in all different cultures. But **communications** could differ in different cultures; therefore aggressiveness for example, might be bad in England (**analyse social and cultural constraints**).

- **Aha, what you are saying is that the techniques might differ, but the base is the same?**

Right the base would be the same, but the techniques used should be changed completely (**adaptability**).

- **Like going from America to Japan, It would be harder for him?**

Well done! If for instance I'll come to Iran and want to work there aggressively, I wouldn't succeed. Sometimes I go to my cousin's company and I just listen to him,

trying to realise how he explains his purposes. You know in Iran you should be a bit **well-behaved**, I mean that you should **not be too serious**. The techniques are different, but the result is that you would be aggressive because you claim to know this specific step is important and you would not change your mind for any reason. However, you should learn how to get along with others (**relationships**); it is important but differs in different societies (**analysing context**).

- **Is it possible to divide the world into different cultural groups? Like into 6 groups for example. So if a leader is successful in one country then he would be successful in all of the countries in that group? For example, if he's successful in Iran, he'd be successful in south East Asia as well, if he's successful in America, he'd be successful in Canada in based upon these two countries being in the same group. Is such a thing possible or is it only a theory and practically not possible and therefore being successful is different in different countries? If we take northern Africa as one zooming area and the southern Africa as another zoning area, knowing that their cultures are similar, could we put them in the same group or not? Could we say a successful leader in this zoning area, would be successful in any other country or something like that?**

I get your point but it cannot be answered easily, it needs some careful consideration, but I think that what you have in mind is definitely important. As an example Iran is more similar with Turkey than with America, therefore a successful leader in Iran is more probable to be successful in Turkey than in America or any other country in a different zooming area (**analysing context**). Or if we take Russia, Kirgizstan, Georgia and Dagestan as one zooming area and the East as another zooming area, the leader could be successful in all of the countries because they share similar cultures (**analysing context**). Let me answer your question in another way, a leader with all those characteristics could be successful everywhere, because those characteristics are not related with the culture, language or the location, but what matters here is that how fast that leader could transfer it from zooming area A to zooming area D (**adaptability**). Maybe if we only transfer him from one country to another country in zooming area D then he could be able to **adapt** himself more easily over a month or two and become successful, as this way the banking systems, languages, economy and culture might not

differ much. But if we transfer the leader from zooming area A to C, though the leader is still the same one and he's progressing day by day and earning new experience every day (*enhance knowledge*), it might take him 6 months instead of 4 to adapt himself and succeed.

- **How about the multinational companies? I mean the multinational companies we have in America, Dubai, Russia, Italy and Iran...how could these work?**

There are two ways for them to succeed; the first one is that a successful company would buy a local company or a company that is already well-known and progressing. This is called *localising* and it means using the help of *local people* and companies there to avoid bringing an international company in and facing cultural problems (*analyse cultural constraints*). You acquire a company already set up there and then begin updating its products and services.

- **With the least changes possible?**

Right, with the least changes possible and to *adapt* the local company to make it in line with his *vision*.

- **Due to his culture?**

Yes, as there might be 100 companies which are potentially possible to be bought there, so they'll peruse the situation of 50-100 companies.

- **What if they'd want to set up their own company there?**

It will take a lot of time for them to start from zero.

- **They will need the local's help to train them, right?**

Exactly, the process will be longer and they'll need an advisor and a leader that they could *trust*, who is familiar with the situation and the environment there (*analysing context*). They must *trust* that leader enough to let him make some decisions and this way the level of risk would be more (*building mutual trust*). There have been huge popular companies which decided to start from zero in a foreign country, but they didn't

succeed in doing that because they weren't familiar with the situation there (*analysing context*), but even so, it could still be possible. One of the important characteristics that a good leader must have is *flexibility* and he should have good advisors who he can trust in order to be able to make the right decisions in the market (*building mutual trust*).

- **What cooperation could leadership techniques have with a successful project management? What cooperation could there be between the leadership techniques that a leader uses in an organisation with general project management?**

That's pretty important.

- **Is that important for the success of the project?**

Yes.

- **Which one is more important the characteristics of that leader or his techniques?**

Not the techniques on their own, but what is important is the approach that the leader takes for leading (*policy and strategy*).

- **What could contribute to a project's success? How important could that be for the project being successful?**

It's very important in my opinion, maybe even 40 %, because the person who is managing the project is like *a brain controlling* the different parts of the body or like a *conductor* conducting an orchestra (*guiding*). Maybe when you go to an orchestra concert, the violinist might be the best in the world, or the same thing with an Iranian orchestra. What's important is to orchestrate different players (*directing*) because if one would play Fa at the same time, when another one's playing Si, this would devastate the whole orchestra. *Orchestrating* these all together is a very hard job, because you should listen carefully and you should hear the voice of violin, flute, etc. at the same time and then to realise if they are symphonic or not (*guiding*).

- **Do you know any companies with perfect workers that were wasted or ruined due to a lack of good leadership?**

Yes, a lot! I know companies that have had a **skilled staff** with qualified departments, but when the leader came he hasn't try to know the **market's needs** or if the product they are going to present is in the **market** or not but yet he has just insisted on doing that job without giving any data or directions to any of these departments. Imagine that we have different departments like a: development department, marketing department, web researching department and sales department. In this case you should specify the required work to each department because usually 99% of these people are hardworking people, who should enjoy working (*satisfying*), should feel proud of their success at work and also should earn enough money, so each department would spend time on doing a specific piece of the work. However, if the leader doesn't **organise** them, it's as if no one is working and everyone is just sitting down and having tea for example. This means that each department is doing a job, but they are not organised with each other (*assigning tasks*) and that they aren't working in the same **direction**. Like a group of ants, how they work together, when they find a piece of food? (*build a unified team*). I've paid attention to this many times, sometimes you see that one ant is pulling the food to one direction and the other is pulling it to another direction, but at the end they're pulling it to their hole (*create a shared vision*). It's not like they'll always move in the same direction at the same time. It's the same story about some companies, sometimes the ants are pulling the food in different directions that much that finally it might be moving in one direction, but if, as a leader, you could give enough **motivation to lead** (*inspiring*) the ants in one direction, then things would be done a lot faster. Not all leaders and management have this potency or they are stubborn or they don't have the right leading method, they only say we should do this without giving motivation to the workers. He may threaten, he may motivate, but he doesn't organise the different ants together (*leading and directing*).

- **Could there be a leader who is good and well-known but ultimately unsuccessful? Is such a thing possible at all?**

Yes, there are many people, who were successful before but they aren't anymore. Because we know a successful leader through his leadership methods, there are lots of people, like for example the manager of HP, who have been impressive and them

became **popular**. He has shown himself and how he has progressed, but then, when he finds out that HP can't reach his **vision**, he decides that they should buy the Compaq computer company. There have been a lot of agreements and disagreements on this subject as it wasn't easy to **satisfy** all the investors and the board of directors (**stakeholders**) to accept it and then they couldn't match their products and services with the products and services of Compaq so the leader got fired.

- **What are the main differences between a project leader and a project manager? Why is it believed that the project managers should involve themselves in the methods of leadership to come into leadership from management?**

It's only because of **vision**. A project manager could be good by having a **project plan** and **strategies** based on the **vision**. He should find that vision and direct his strategies towards that vision (**directing**). There are some project managers that could not be more than a project manager, because some companies hire their project manager after specifying their **strategies** and the project manager's job would be doing these strategies step by step (**plan**). Sometimes the leader might not have the time to interfere and manage these strategies step by step so he **trust** the project manager that he has hired. But in fact, as a leader, he should check to see if each main step taken is going towards their vision or not (**controlling**).

- **You talk a lot about trusting, is this that important?**

Very much, I mean if we take it as a characteristic, it would be one of the most important characteristics (**trust**).

- **A two-way trust? If he doesn't have trust in the others would that be obvious?**

Trust is obviously very important, because the work wouldn't proceed without it (build mutual trust). A project leader or manager could decide on salaries (**establish appropriate incentive schemes**) he could discipline etc... but there would come a point when he couldn't do all the things alone so he would have to distribute the tasks between others (**assign tasks**). For example I'm working with the manager of a company for 15 years, so he now has absolute **trust** in me. Sometimes we go out for

lunch together and he tells me what he wants me to do, we might even chat the first 30 minutes, but during these 15 years he has enough trust in me for it not to be necessary to assess my work step by step (*develop a self-managed project team*).

- **You mean we shouldn't assess or supervise the things done?**

He assesses my work but he doesn't go into the details (*develop a self-managed project team*). Because he doesn't have the time, he has his **vision** and he works, talks and travels with 20 different people so if he wants to micro manage every single one of them the work wouldn't proceed at all (*develop a self-managed project team*). Same about political leaders, if we take Shah (Last king of Iran), who was thrown out at the end, as a leader, he said that if he knew that there were core options and economical immorals in charge then he would have stopped them. What I'm trying to say is that what happened to him was due to the lack of **supervising**, you know in fact these two oppose one another, as without trust work would not proceed (*building mutual trust*) and with 100% trust and no supervising there is the possibility taking a good situation for granted. You understand?

- **100 %! Someone might be different from you and do some works behind the scenes without having anyone recognising that, because he's the one who is deciding for that department or group and no one supervises him, though while there is a supervisor they'll think there's a lack of trust between them. What's your opinion according to your experiences?**

Lack of supervision is not trusting (*building mutual trust, controlling*). You trust someone and you suppose that he could process your work but there must be **recognition** at first, he must earn your trust. You must know him (*social-awareness*), you should have worked with like 20-30 people and amongst them you've noticed that this one is an honest and trustworthy man (*assigning tasks to the right members*).

- **You are saying that supervising has not been done on one level, it has started from the very beginning and it has been supervised from the first election, like they've first assessed how much they could trust that person, then they've given him some tasks to do to see how well he could do them etc. This means they've raised this trust level by level and then have given**

him an important responsibility. Is this the appropriate basis for supervising as well?

Exactly! Team members' tasks should be checked step by step by the project manager (monitoring and controlling) I do the same thing when I want to recruit a new team member. Firstly I interview him and try to make sure he is the suitable person that I'm searching for (recruit competent individual). But then again, I'd be nervous for the first 3 months, because you cannot get to know someone through a 2 hour interview and be able to come to a definite conclusion about him. I mean I will supervise him in his 3 first months on a trial period. I will **train** him, and then later I will **check** to see if he has made errors and if so, I will tell him **openly**. I will tell him how I expected him to do that job or if I didn't like a specific behaviour of him such as for example, I expected him to answer me on a task that day and he answered the day after then I will let him know. I try to develop a friendly relationship (building mutual trust) and after a while, the team member would have the same way of thinking as I do and I would also understand his expectations so a synergy would develop between us (build a unified team) Once this **synergy** has happened between us, I would no longer have to call him every two hours or supervise him every now and then; I would trust him. Little by little I will change this to once or twice a day or in case I am busy and not present there to talk to him every day, we could do lots of our work via e-mail. I will never stop supervising but there would be no need for micromanaging as well (develop a self-managed project team). A successful manager doesn't have the time to micromanage everyone (develop a self-managed project team).

- You talked of election, is that important?

Yes, someone might be a good leader, but his managers might not be as good and as a result, he wouldn't get much output (recruit competent individuals).

- Do you think there should be an assessment in electing people or is it just a formality?

Well, there could be different kinds of **assessments** in order to choose a person, at each level, a great deal is related to **psychological issues**. They will try to find specific characteristics in him and his references, working experiences and so on (recruit

competent individuals). I know successful leaders who will gather the people they know and **trust** already when they want to do an important work, it is very common.

- **This is a managing level, right? Higher managing?**

Right, this is a very sensitive and important level because the destiny and success of the whole company depends upon your decision so you couldn't make any mistakes (*strengthen decision making abilities*). I don't say that he knows every single person he gathers in or has worked with them or that they are exclusively his family, friends or relatives. Here, the main decision is doing a **business**. He would search amongst the hundreds of people he has been working with during the past 20 years and he decides that Mr. X or Mr. Y is good for doing this or that specific job, so he calls him, asks him if he's free to join him (*recruit competent individuals*), **convince** him to come because he is sure that amongst thousands of people he has been working with over the years, this person could do that job. He might also not remember or know anyone for other positions so he would have to do interviews and find a new person. But again this would be a **very sensitive decision** because if he chooses the wrong person he wouldn't succeed to reach his vision and the business wouldn't be done (*recruit competent individuals*).