Factors Influencing Information Privacy in Abu Dhabi Emirate

By

Omar Al-Dhaheri

A Doctoral Thesis Submitted in partial fulfillment of the requirements for the award of Doctor of Philosophy of Loughborough University

April, 2016

© Omar Al-Dhaheri 2016

Abstract

Individuals in the UAE and Abu Dhabi Emirate, in particular, have become increasingly concerned about their private information. This is mainly due to the use of technology, which makes accessing, transmitting and editing personal information faster and easier. Besides the use of technology, and the awareness and understanding of the privacy of expatriates, working in Abu Dhabi Emirate has had an impact on UAE citizens in terms of their rights to privacy. There is a need for organisations to comply with international bodies in protecting individuals' rights to privacy and to increase the exploration of culturally sensitive information in the media. These issues have all led to the importance of and need to explore and identify Abu Dhabi Emirate employees' perceptions, and the factors influencing their behaviour, towards privacy.

The aim of this research was to investigate and analyse factors influencing employees information privacy behaviour and employees' perceptions, awareness and behaviour on the handling of private information in the Abu Dhabi Emirate public sector, ADEC, as well as to provide practical recommendations to improve the privacy.

The research methods used in this project are based on a mixed-method approach comprising both quantitative and qualitative strategies. Qualitative data collection in this research included face-to-face interviews and focus groups with Abu Dhabi Education Council. Quantitative surveys for all the Abu Dhabi Education Council were also utilised.

The research identified the types of information that were considered private and defined privacy in the context of UAE culture. The main factors influencing privacy in Abu Dhabi Emirate employees were identified and analysed such as national culture, organisation culture and perceived benefits as examples. Following this, practical recommendations for changes to promote and enhance privacy in Abu Dhabi Emirate were offered. A model has been developed and designed based on the factors influencing individual information behaviour regarding private information handling, interrelated and influenced. This is essential to provide a practical model capable of acting as a guideline to help organisations, decision makers, and strategic planners in the Abu Dhabi Emirate public sector decide how best to approach privacy policy.

Acknowledgements

Getting to the end of this journey has made me remember all of the steps and events I have been through. It's made me appreciate everyone who supported and guided me through this journey. It's time to show my gratitude.

I would like to start with thanks and praise to Allah for giving me the strength and motivation I needed to complete this thesis.

My sincere gratitude to my supervisor Professor Mark Hepworth for his guidance, advice and encouragement I received, starting from the initial to the final stages of this research.

The Abu Dhabi Education Council, who sponsored me for this research, they deserve a deep gratitude because without their support this research would not be impossible. I would like also to thank the Research Office of Abu Dhabi Education Council for their cooperation and support.

Thanks to all of my colleagues and the staff in the Information Science Department at Loughborough University.

Dedications

I dedicate this work to my father for the endless encouragement and motivation he has given me to achieve my goals, and to my mother for her constant prayers. To my brothers and sisters, and especially to my brother Dr. Abdulla who has been with me through my studies. To my lovely wife for handling the home while I have been away and her continuous encouragement and to my adorable children Saeed and Fatima.

Table of Contents

Abstract	I
Acknowledgements	II
Dedications	III
Table of Contents	IV
List of Tables	XI
List of Figures	XII
Glossary of Abbreviation	XV
Chapter One: Introduction	1
1.0 Introduction	1
1.1 Background	1
1.2 Motivation for this Research	2
1.3 Scope of the Research	3
1.4 Research Questions	3
1.5 Research Aim and Objectives	4
1.5.1 Research Aim	4
1.5.2 Research Objectives	4
1.6 Significance of the Research	5
1.7 Structure of the Thesis	5
Chapter Two: Background	8
2.0 Introduction	8
2.1 United Arab Emirates:	8
2.1.1 UAE Political Map	10
2.2 Abu Dhabi Emirate	13
2.2.1 Abu Dhabi Emirate Economy	13
2.2.2 Abu Dhabi Emirate Population	13
2.2.3 Citizen versus Non-Citizen Population in Abu Dhabi Emirate	14

2.2.4 Work Force Population in Abu Dhabi	15
2.2.5 Abu Dhabi Education Council (ADEC)	17
2.2.6 Cultural Background: Abu Dhabi Emirate Culture	17
2.3 Summary	19
Chapter Three: Literature Review	20
3.0 Introduction	20
3.1 Definitions of Privacy	21
3.2 Privacy and Security	24
3.3 Privacy and Confidentiality	25
3.4 Privacy and Legislation	25
3.4.1 Privacy Legislation in the UK	27
3.4.2 Privacy Legislation in the UAE	31
3.5 Information Privacy Culture	32
3.5.1 Organisation Culture	33
3.6 Cultural Barriers to Implementing Privacy in Organisations	38
3.7 Behaviour towards Privacy	41
3.7.1 Human Behavior Theory	42
3.7.2 Theory of Reasoned Action (TRA)	42
3.7.3 Theory of Planned Behaviour (TPB)	43
3.7.4 Technology Acceptance Model (TAM)	44
3.7.5 Protection Motivation Theory (PMT)	45
3.7.6 General Deterrence Theory (GDT)	45
3.7.7 Theory of Privacy Calculus	46
3.8 Summary	47
Chapter Four: Methodology	48
4.0 Introduction	48
4.1 Research Paradigm and Philosophy	50
4.2 Research Strategy	51

4.3 Data Collection	52
4.3.1 Quantitative Data: Questionnaire	53
4.3.2 Qualitative Data: Interviews	57
4.3.3 Qualitative Data: Focus Groups	59
4.4 Research Population and Sample	60
4.5 Reliability and validity	63
4.6 Pilot Study	64
4.7 Data Analysis	65
4.8 Summary	66
Chapter Five: Qualitative Data Analysis: Opinions, Perceptions and Attitude	des towards
Privacy in the UAE	67
5.0 Introduction	67
5.1 Participants Background	67
5.2 Definitions and the Understanding of Privacy from the UAE Perspective	68
5.2.1 Definition of Privacy	68
5.3 Main Issues and Problems of Privacy in the UAE	71
5.4 Employees' Perception towards Importance of Privacy	83
5.4.1 Importance of Privacy	86
5.4.2 Employee's Privacy Rights: Individual Human Rights	88
5.4.3 Information Ownership: Organisation vs. Individual Employees	90
5.5 Private Information from UAE Perspective	91
5.6 Role of culture on organisations	94
5.6.1 Role of Organisation Culture on Privacy	94
5.6.2 Role of the UAE National Culture on Privacy	97
5.7 Employees' Attitudes towards Privacy	100
5.7.1 Main Factors that Construct Individuals' Attitude	100
5.8 Summary	106
Chapter Six: Quantitative Data Analysis:	107

Opinions, Perceptions and Attitudes towards Privacy in the UAE	107
6.0 Introduction	107
6.1 Survey Respondents Background	107
6.1.1 Surveyed Regional Offices	107
6.1.3 Respondents Nationality	108
6.1.4 Respondents Age	109
6.1.5 Respondents Working Experience	110
6.1.6 Respondents Job role in the Organisation	111
6.1.2 Respondents Gender	112
6.2 Issues and Problems in Privacy	112
6.2.1 Information Owner Consent	112
6.2.2 Employees' Sharing Information Culture	113
6.2.4 Recording and Storing Private Information	115
6.2.5 Transmitting/Sending Personal Information	116
6.2.6 Employees Working Culture	117
6. 3 Employees Perception of Privacy	118
6.3.1 Employee's Human Rights towards Protecting their Personal Information	118
6.3.2 Privacy and the Organisation Image in Society	119
6.3.3 Individual Employees' Rights to control his/her Personal Information	120
6.3.4 Personal Electronic Records Ownership	121
6.4 Types of Private Information	122
6.4.1 Personal Wage	123
6.4.2 Spouse Names	124
6.4.3 Family Females' Personal Information	125
6.4.4 Performance Appraisal	126
6.4.5 Personal Mobile Number	127
6.4.6 Family Picture	128
6.5 Role of the Organisation's Culture on Privacy	129
6.5.1 Share Information Culture among Employees	129

6.5.2 Printing Information Culture	130
6.5.3 Organisation Privacy Policy	131
6.5.4 Organisation Value Personal Information	132
6.5.5 Value of the Organisation Document	133
6.6 Role of the UAE National Culture on Privacy	134
6.6.1 Society Sharing Culture	135
6.6.2 UAE Culture Passing Personal Information	136
6.7 Perceived Benefits of Disclosing Private Information	137
6.7.1 Financial Benefit	137
6.7.2 Moral Benefit	138
6.7.3 Future Benefit	139
6.7.4 Promotion Benefit	140
6.7.5 Publicity in Public Media	141
6.8 Role of Subjective Norms	142
6.8.1 Sharing Employees Personal Information with Family	142
6.8.2 Sharing Employees' Personal Information with Colleagues	143
6.8.3 Sharing Employees' Personal Information with the Line Manager	144
6.8.4 Sharing Employees Personal Information with my Tribe/National Member	145
6.9 Employees' Attitude and Privacy Behaviour	146
6.9.1 Employees' Value of Privacy	146
6.9.2 Employees' Understanding of Privacy	147
6.9.3 Awareness of the Importance of Private Information on the Organisation's Image	148
6.10 Sharing Expectation: Behavioural Intention	149
6.10.1 Intention to Share Personal Information with Family	149
6.10.2 Intention to Share Personal Information with Colleagues	150
6.10.3 Intention to Share Personal Information with their Line Manager	151
6.11 Role of Organisation Culture on Employees' Behavioural Intention	152
6.11.1 Organisation's Working Norms	152
6.11.2 Organisation Communication System	153

6.11.3 Trust between Employees' and the Management	154
6.11.4 Trust between the Employees	155
6.12 Summary	156
Chapter Seven: Discussion	157
7.0 Introduction	157
7.1 Main Drivers for Privacy in the UAE	157
7.2 Perception and Awareness of Privacy in the UAE Organisations	160
7.3 Definition, Understanding and Challenges of Privacy in the UAE	163
7.3.1 Definition of Privacy	163
7.4 Information Concerns: Types of Privacy Information	165
7.5 Issues and Problems of Privacy in the UAE	167
7.6 The Role of Information Culture in the Individual's and Organisation's Behaviour	171
7.6.1 Information Cultural Dimensions of the UAE Organisations	171
7.6.2 Cultural Challenges in Implementing Privacy Policy	173
7.6.3 Employee Culture vs. Technology Challenges	175
7.7 Privacy Behaviour Model	176
7.7.1 Constructs influencing Employees Intention to Behave towards Privacy	176
7.7.2 Constructs influencing Employee's Attitudes	177
7.7.3 Role of National Culture	178
7.7.3 Developing Privacy Models	180
7.8 Reflection on the Main Findings: Means and Response	182
7.8.1 Individual Level	182
7.8.1.1 Response to the Main Findings: Recommendations for Change at Individual I	Level
	183
7.8.2 Organisation Level	184
7.8.2.1 Response to the Main Findings: Recommendations for Change at Organis	ation
Level	185
7.8.3 National Level	185

7.8.3.1 Response to the Main Findings: Recommendations for Change at National L	evel
	.186
7.8.4 Privacy Development Theory	.188
7.9 Summary	.188
Chapter Eight: Conclusions, Recommendations and Suggestions to Further Research	.189
8.0 Introduction	.189
8.1 Conclusions	.189
8.1.1 Critical Review of the Literature	. 189
8.1.2 Privacy Issues and Problems	. 190
8.1.3 Employees Perception and Awareness Towards privacy and the Types of Information	. 190
8.1.4 Definition of Privacy and the Understanding of Privacy	. 191
8.1.5 Factors Influencing Employee's Behaviour	. 191
8.1.6 Factors Influencing Individual's Private Information Behaviours	. 192
8.1.7 Comment on Research Questions	. 192
8.1.8 Recommendations for Change	. 194
8.2 Researches Main Contribution and Novelty	. 195
8.3 Research Limitations	.196
8.4 Suggestions for Further Research	. 196
References	. 198
Appendixes	.208
Appendix A: Letter of introduction	.208
Appendix B: Ethical Check Form	.209
Appendix C: Poster	.215
Appendix D: Questionnaire Design	.216
Appendix E: Interview Design	.229
Appendix F. Focus Group Design	.238

List of Tables

Table 2-1: Population by Nationality (National Bureau of Statistics 2010)10
Table 2-2 : Employed Population in Abu Dhabi Emirate by Nationality (Scad 2010)16
Table 3-1: The GLOBE dimensions of culture. (Cockcroft and Rekker 2015, House, et al.
2004)
Table 3-2 Survey research in information privacy (Cockcroft and Rekker 2015)40
Table 4-1: Questionnaire research sample
Table 4-2: Face-to-face interview research sample
Table 4-3: Focus group research sample and justifications
Table 4-4: Pilot study participants
Table 5-1: Interviews and focus groups participants' background
Table 5-2: Types of private information list
Table 5-3 List of organisation culture practice considered have negative impact on the
employees' privacy behaviour
Table 5-4: List of organisation culture practices considered to have positive impact on the
employees' privacy behaviour
Table 5-5: List of national culture that considered influencing employees' privacy behaviour.
98
Table 6-1 Survey participants and respondents

List of Figures

Figure 2-1 United Arab Emirates Regional Map (Dubai).	9
Figure 2-2 UAE Seven Emirates Map (U.A.E Interact 2016)	11
Figure 2-3: Population Estimates, Abu Dhabi Emirate, mid-years 1995 to 2012 (Scad	
Figure 2-4 : Population by Region, Abu Dhabi Emirate, mid-year 2012 (Scad 2014)	
Figure 2-5: Population Estimates by Citizenship, Gender Abu Dhabi Emirate, mi	id-years
1995 to 2012 (Scad 2014)	14
Figure 2-6: Population Estimates by Citizenship, Abu Dhabi Emirate, mid-years	1995 to
2012 (Scad 2014)	15
Figure 3-1: Theory of Reasoned Action (Ajzen and Fishbein 1980, Fishbein and Ajzen	
Figure 3-2: TPB Model	
Figure 3-3: Combined TPB and privacy calculus model (Li and Chen 2010)	46
Figure 4-1: Research philosophy	49
Figure 5-1: Employees privacy issues: NVIVO coding	77
Figure 5-2: Role of human factor in personal information disclosure: NVIVO coding	79
Figure 5-3: Main factors for personal information disclosed: NVIVO coding	82
Figure 5-4: Organisation culture: NVIVO coding analysis	96
Figure 5-5: UAE culture: NVIVO coding analysis	99
Figure 5-6: Role of individual employees' loyalty on dealing with information:	NVIVO
coding analysis	100
Figure 5-7: Main factors for employees' attitude towards privacy: NVIVO coding a	analysis
Figure 6-1: Respondents age	
Figure 6-2: Respondents working experience	
Figure 6-3 Respondents job role in the organisation	
Figure 6-4: Information Owner Consent	112
Figure 6-5: Employees sharing information culture	113
Figure 6-6: Printing private information	114
Figure 6-7: Recording and storing private information	115
Figure 6-8: Transmitting and sending personal information	116
Figure 6-9: Organisation's working culture.	117

Figure 6-10: Employee's' Human Rights towards Protecting their Personal Information	118
Figure 6-11: Privacy is important to the organisation's image in the society	119
Figure 6-12: Employees' right to control his/her personal information	120
Figure 6-13: Organisation ownership of the employees' electronic records	121
Figure 6-14: Employees' ownership	122
Figure 6-15: Personal wage is private information	123
Figure 6-16: Spouse name is private information	124
Figure 6-17: Family's females' details are private information	125
Figure 6-18: Annual performance appraisal is private information	126
Figure 6-19: Personal mobile number is private information	127
Figure 6-20: Family pictures are private information	128
Figure 6-21: Normal to share private information among the organisation employees	129
Figure 6-22: Normal to print personal information in an open area.	130
Figure 6-23: No privacy policy in the organisation.	131
Figure 6-24: The organisation values personal information.	132
Figure 6-25: Documents in the organisation are private information.	133
Figure 6-26: National culture has influence on employee's privacy practices	134
Figure 6-27: UAE society encourages sharing personal information	135
Figure 6-28: Passing personal information is a norm in the UAE culture	136
Figure 6-29: Passing employees personal information for financial benefits	137
Figure 6-30: Passing employees' personal information for moral benefit	138
Figure 6-31: Passing employees' personal information for future benefit	139
Figure 6-32: Passing employees' personal information for promotion benefit	140
Figure 6-33: Passing employees' personal information to the public media	141
Figure 6-34: Sharing employees' personal information with family.	142
Figure 6-35: Sharing employees' personal information with colleagues.	143
Figure 6-36: Sharing employees' personal information with the line manager	144
Figure 6-37: Sharing employees' personal information with tribe/national member	145
Figure 6-38: Employees' value of privacy has influenced their behaviour towards privacy	7.146
Figure 6-39: Employees' understanding of privacy influences their behaviour	147
Figure 6-40: Employees' awareness that privacy influences the organisations' image	148
Figure 6-41: Employees' intention to share personal information with their family	149
Figure 6-42: Employees' intention to share personal information with their colleagues	150
Figure 6-43: Employees' intention to share personal information with their line manager.	.151

Figure 6-44: Organisation's working norms influence employees' privacy behav	iour
intentions towards private information.	.152
Figure 6-45: Organisation's communication systems influence employees' privacy behav	iour
intention towards private information.	.153
Figure 6-46: Trust between the employees and management has influenced employ	ees'
privacy behaviour intentions towards private information.	.154
Figure 6-47: Trust between the employees has influenced employees' privacy behav	iour
intention towards private information.	.155
Figure 7-1: Main factors for lack awareness among the employees	.168
Figure 7-2: Main factors for lack transparent policy in the organisation.	.171
Figure 7-3: UAE cultural dimension.	.172
Figure 7-4: The Developed Privacy Network Model, objective 6	.181

Glossary of Abbreviation

ADEC Abu Dhabi Education Council

BI Behavioural Intention

CPD Career Professional Development

CFIP Concern For Information Privacy

DPA Data Protection Act

DHCC Dubai Healthcare City

DIFC Dubai International Financial Centre

EU European Union

FOIA Freedom of Information Act

GDT General Deterrence Theory

HR Human Resources

HRA Human Rights Act

MF Masculinity versus Femininity

OCAI Organisational Culture Assessment Instrument

PEOU Perceived Ease Of Use

PU Perceived Usefulness

PD Power Distance

PMT Protection Motivation Theory

RIPA Regulation Of Investigatory Powers Act

TAM Technology Acceptance Model

TPB Theory Of Planned Behaviour

TRA Theory Of Reasoned Action

UA Uncertainty Avoidance

UAE United Arab Emirates

UN United Nations

Chapter One: Introduction

1.0 Introduction

The Abu Dhabi Emirate Public Sector is one of the largest sectors in the United Arab Emirates (UAE). It has seen significant expansion and development in previous decades due to investments by Emirate authorities in technology and human resources. One of the main challenges the Abu Dhabi Emirate public sector faces in the era of information is ensuring privacy when handling, transmitting and recording employee information. This research focuses on the UAE's organisations and the employees' perception, awareness and behaviour, the human part of privacy control and management handling private information in the Abu Dhabi Emirate public sector. The chapter starts by giving a brief background of the research followed by presenting motivations and scopes of the research. The chapter then presents the research questions, research aims and objectives. The chapter closes with the significance of the research followed by the structure of the thesis.

1.1 Background

Privacy in the last few decades has attracted the attention of academic researchers, organisation managements and national decision makers. The literature indicated a rise in privacy concerns (Mcrobb and Rogerson 2004). This may be due to the increase in people and the organisations awareness toward their privacy rights and the use of technology that may abuse their privacy rights. The main concern of the privacy issue is the privacy of personal information due to the ease of transmission and storing personal information (Zureik, *et al.* 2010).

One of the main challenges to policy makers and researchers have is to identify privacy. This is needed from a legal point of view and the view of the individual's rights and needs for understanding and awareness towards his/her privacy rights. Allmer (2011) argued that there was no definite answer towards a definition of privacy and what indeed the peril is. The research tried to clarify the definition of privacy in the academic literature. The research argued there is, in fact, a lack of

research in privacy in existing literature, and therefore a critical contribution to privacy studies is needed. Solove (2002) determined six conceptions of privacy. The concepts are the right of the individual to be left alone; control of the individual's personal information; secrecy; intimacy; limited access to the individual's information; the individual's dignity and individuality.

1.2 Motivation for this Research

One of the main drivers of introducing and implementing information privacy regulations and policies is the individual's privacy concerns. Malhotra et al. (2004) defined *individual privacy concern* as the "individual's subjective views of fairness within the context of information privacy."

The other important driver is to protect privacy coming from social and political reasons. It can be argued that privacy was important and critical in a liberal democratic society. This is mainly due to two main reasons. The first reason is that privacy helps to maintain social relationships and enhance the diversity in society. The second reason is privacy helps to protect political rights such as freedom of religion and freedom of expression. It is in the public's interest to develop and enforce a privacy policy (Solove 2008). It is therefore in the public's interest for a democratic society to protect privacy in addition to whatever value privacy may have for the individual (Solove 2008).

From the UAE point of view, UAE authorities need transparency and effective privacy policies to comply with international law regulations such as human rights. The following are the discussions of the main drivers for privacy in the UAE. This section discusses the main drivers for taking appropriate measures to protect privacy. The other important motivational factor is for the sharp expansion in information and data in the UAE organisations and the need to manage and control the privacy of the information and data. Avoiding legal disputes between the individual(s) and the organisations is required by adopting clear and efficient implementation of privacy policies and regulations. Last and not least the lack of legislation. Research and studies on privacy in the UAE is another motivational factor in carrying out this research.

1.3 Scope of the Research

Privacy is a broad research topic and needs to be covered from various research interests to have a full picture of privacy. These interests can come from law, policy, legislation, social interactions, human individualism, the use of technology, human rights, organisational, societal, and personal points of view. Due to the diversity of the interest in research on privacy, the scope of the research focuses on only the role of the human on private information handling. It is also important to stress that the outcome of this research is based on United Arab Emirates employees' point of view and this may not apply to other societies due to differences in culture and its perception towards privacy. The United Arab Emirates has a large number of public and private sectors. However, this research is focused on one major public organisation, namely the Abu Dhabi Education Council (ADEC). Last but not least the participants of the research sample are employees of Abu Dhabi Emirate Education Council. There are no participants in the research from the authorities or senior management of Ministry of Education.

1.4 Research Questions

The outcome of this research is to answer the following questions.

Q1: What are the UAE employees' perception and awareness towards privacy?

- a) What are the main issues of the employees' behavioural practises in handling private information?
- Q2: What is the definition and understanding of privacy from the UAE perspective?
- Q3: What are the main factors influencing employees' behaviour in handling private information?
 - a) What is the role of culture on individual's attitudes towards privacy?
 - b) What is the role of organisational working culture on attitudes towards privacy?
 - c) What is the impact of the Arabian tribe values and norms on the individual's attitude towards privacy?

- d) What is the role of subjective norms on the individual's attitude towards privacy?
- e) What is the role of awareness on the individual's attitude towards privacy?

Q4: What are the main practical recommendations for change to enhance and promote employee's perception, awareness and behaviour towards privacy in the Abu Dhabi Emirate public sector?

Q5: What is the role of trust among employees on the organisation's privacy practices?

1.5 Research Aim and Objectives

The aims and objectives of the research are presented in this section.

1.5.1 Research Aim

The aim of this research is to investigate and analyse factors influencing employees information privacy behaviour and employees' perceptions, awareness and behaviour on the handling of private information in the Abu Dhabi Emirate public sector, ADEC, as well as to provide practical recommendations to improve the privacy.

1.5.2 Research Objectives

The research aim is achieved by pursuing the following objectives:

- 1. Review the current literature related to employees' perceptions, awareness, attitudes and behaviour towards privacy.
- 2. To explore and identify the current main issues and problems of privacy in the UAE.
- 3. Investigate and analyse employees' perception and awareness towards privacy and different types of information.
- 4. Define and understand privacy from the UAE perspective.
- 5. Identify the main factors influencing employees' attitudes and behaviours towards privacy.
- 6. Develop and design a model of how factors are influencing individual's information and behaviour, regarding private information handling, are interrelated and have an influence on each other.

7. Provide practical recommendations to enhance privacy in the UAE organisations.

It is important to stress this research has used one of the Abu Dhabi Emirate public sector, namely ADEC. ADEC as organisation has been identified as organisation for the study for following main reasons

- a. The project is sponsored by ADEC and expected practical recommendations to help the organisation to explore privacy issues in the organisation and develop and implement privacy policy.
- b. ADEC is one of the largest public sector in Abu Dhabi Emirate public sector.
- c. The research on ADEC can be generalised to other public sector in the organisation due to similarity in working culture and management structure.

1.6 Significance of the Research

The literature review on privacy highlighted there is a lack of research on the UAE perception, awareness of privacy, and on the factors organisations have on influencing employees' behaviour towards handling privacy. This reaffirms the need for a more in-depth research to investigate and analyse privacy in the UAE and fill in the gaps where there is a lack of literature.

The main outcomes of this research provide data, information and a model on the UAE's employee's perception, awareness and behaviour in handling private information to the UAE authorities, government and senior managers in organisations that can be used for strategic planning. The main outcomes of the research can also be used to countries similar to the UAE from a cultural point of view, such as in the Arabian Gulf States.

1.7 Structure of the Thesis

This thesis structure is based on eight chapters, these chapters are:

Chapter 1-Introduction: The purpose of this chapter is to present the research background, research questions, aims and objectives, main motivations and drivers to carry out the research, scope of the research and significance of the research.

Chapter 2- Research Background: The chapter provides brief research background. This includes population and workforce in UAE and Abu Dhabi Emirate and brief introductory to the seven Emirates in UAE.

Chapter 3-Literature Review of Privacy: The purpose of this chapter is to review the literature critically on privacy and the related areas to build understanding, knowledge and awareness. The main findings of the literature are also needed to support the argument throughout the thesis.

Chapter 4-Research Methodology: This chapter presents the research methodology adopted to achieve the research aims and objectives. The chapter discusses the data collection methods used in this research and provides justification for each method used. The chapter also provides the samples selected with justifications and explains the pilot study adopted in this research.

Chapter 5-Qualitative Data Analysis: Opinions, Perceptions and Attitudes Towards Privacy in the UAE: This chapter presents the qualitative data, face-to-face interviews and focus groups and analysis collected from the Abu Dhabi Education Council. This will provide in-depth information on employees' perception, awareness and the main factors influencing the employee's behaviours on handling private information along with the main issues and challenges of privacy within organisations. The NVIVO software package has been used as a tool to analyse the qualitative data.

Chapter 6-Quantitative Data Analysis: Opinions, Perceptions and Attitudes Towards Privacy in the UAE: This chapter presents the data analysis collected from the questionnaire given to the Abu Dhabi Education Council employee to identify their perception, awareness and the main factors influencing the employee's behaviours on handling private information. The SPSS software package has been used as a tool to analyse the quantitative data.

Chapter 7-Discussions: This chapter discusses the main elements of the research based on the qualitative and quantitative data. The literature's main findings are used in support of the arguments. The main elements of this chapter were drawn from the research objectives and answering the research questions.

Chapter 8- Conclusions, Recommendations and Suggestions for Further Work:

The main findings of the research presented in this chapter is based on the researches main objectives. The chapter also states the contribution and novelty of the research, its main limitations and proposed practical recommendation to enhance and improve the employee's perception, awareness and behaviour towards handling private information. The chapter closes with suggestions for further research.

Chapter Two: Background

Research Background

2.0 Introduction

This chapter presents a brief background of the research. The chapter focuses on the Abu Dhabi Emirate as the research is based on the Emirate. The chapter presents UAE backgrounds which include the economic and political population of the UAE. Then the presentation is followed by a section on the Abu Dhabi Emirate. The chapter closes with a summary.

2.1 United Arab Emirates:

The United Arab Emirates is one of the fastest developing countries in the Middle East due to fast changes in infrastructure and moderation in its insinuation. It has become one of the most attractive destinations for tourists in the Middle East due to its attractive entertainment and tourist areas. The country is a member of the Arabian Gulf Council which includes Saudi Arabia, Oman, Bahrain, Qatar, and Kuwait. The UAE State is situated on the Eastern coast part of the Arabian Peninsula in the Arabian Gulf region. The state has very close boundaries with Sultanate of Oman, Kingdom of Saudi Arabia and the State of Qatar. It is located on the northern approach of the Strait of Hormuz, a pivotal point for world crude oil. The total area of the UAE is approximately 77,700 square kilometres, Abu Dhabi Emirate being the largest emirate and Ajman being the smallest (Alluae 2015b).



Figure 2-1 United Arab Emirates Regional Map (Dubai).

The UAE is a federation of seven Emirates. Each Emirate has its own rules and regulations with one common Federation law. The seven emirates are Abu Dhabi, Dubai, Sharjah, Ajman, Ras al-Khaimah, Fujairah, and Umm al-Quwain. Abu Dhabi is the largest emirate, area wise, and the Emirates political capital. Al-Ain in the map is one of the main cities of Abu Dhabi Emirate. The Emirate is also the state's centre of commercial and cultural activities.

Petroleum and natural gas represent the main natural resources in the UAE, which has helped in attracting investments and trade. The other important revenue generated in the UAE is the contribution of the aviation industry. The industry provides effective transport links with airports located in three of the Emirates, Abu Dhabi, Dubai and Sharjah. The Dubai airport is the major and the biggest international hub in the Middle East. The contribution of the airport to the economy has helped by employing over 250,000 employees, 19% of total employment in Dubai, and contributing over US\$22 billion, and 28% of Dubai's GDP". (Alluae 2015b)

The aviation industry continues to grow, with expected figures in 2020 showing a significant increase (Alluae 2015b).

The UAE population is estimated at 8,264,070 in 2010 (mid-year estimation). Table 1 below shows the UAE population based on gender and nationality of Emirate citizens. The table clearly indicates that the number of non-nationals is significantly higher

than nationals. The number of the UAE national population is 947,997 compared with 7,316,073 non-nationals. This shows that the UAE national represents 11.5% of the total population of the Emirates compare to 88.5% non-national. (National Bureau of Statistics 2010). This is the latest formal publication by UAE National Bureau of Statistics.

Table 2-1: Population by Nationality (National Bureau of Statistics 2010)

Nationality	Male	Female	Total
National	479,109	468,888	947,997
Non - National	5,682,711	1,633,362	7,316,073
Total	6,161,820	2,102,250	8,264,070

Source: National Bureau of Statistics.

2.1.1 UAE Political Map

The UAE is comprised of seven emirates and each emirate has its own ruler, Sheikh, head of the Emirate. Each Emirate has its own rules and local government. The seven Emirates have a Federation government and one ruler, Sheikh Khalifa Bin Zayed Al Nahyan. Each Emirate is unique and rich in tradition and values. Each Emirate contributes and complements the rich heritage of culture in the UAE (Alluae 2015b), Figure 2-2 shows the seven Emirate locations in a UAE map.



Figure 2-2 UAE Seven Emirates Map (U.A.E Interact 2016)

The following is a brief introductory for the seven Emirates.

Abu Dhabi

Abu Dhabi is the largest Emirate in the UAE and ruled by the Al Nahyan family. The City Abu Dhabi is the capital of the Emirate and the political capital of the UAE. The Emirate represents 86.7% of the total area of the UAE with 67,340 square kilometres. The vast majority of the area is a desert with about a dozen islands in the coastal area of the Arabian Gulf. The Abu Dhabi city is located on the coastal water of the Arabian Gulf. The Emirate has three main areas, namely the capital city, Abu Dhabi; Al Ain, an attractive oasis city located close to the Hajar Mountains; and the Liwa oases (Alluae 2015a).

<u>Dubai</u>

Dubai is the centre of tourism in the UAE and has the largest flight network in the Middle East. Dubai airport is one of the largest international hubs worldwide and the largest in the region. Dubai is the second largest Emirate in the UAE and ruled by the Al-Maktoum family. Dubai has an area of 3,900 square kilometres. Dubai's city is the capital of the Dubai emirate. Dubai is focused on trade, industry and tourism. It has a leading trading port along the southern Arabian Gulf. The Emirate is ruled by His Highness Sheikh Mohammed bin Rashid Al Maktoum (Alluae 2015a).

Sharjah

Sharjah has a unique location by having a coastline on the Arabian Gulf and the Gulf of Oman. It has an area of 2,600 square kilometres and shares its southern border with Dubai. The Al-Qasimi family rules the Emirate. The current ruler of the Emirate is Sheikh Sultan bin Mohammed Al Qasimi (Alluae 2015a).

<u>Ajman</u>

Ajman is the smallest Emirate in the UAE with an area approximately 260 square kilometres and ruled by the Al Nuami family. The current ruler of the Emirate is Sheikh Humaid bin Rashid Al Nuami. The Emirate consists of small enclaves of Manama and Musfut in the Hjar Mountain. The main trade of the Emirate includes date-trees and fishing (Alluae 2015a).

Umm Al Qaiwain

This Emirate is the second smallest emirate in UAE and ruled by the Al-Mualla family. The current ruler of the Emirate is Sheikh Rashid bin Ahmed Al Mualla. With an area of around 770 square kilometres, it is located between the emirates of Sharjah and Ajman to the south and Ras Al Khaimah to the north. Fishing and date farming are the Emirates main revenue (Alluae 2015a).

Ras Al Khaimah

This Emirate has an area of about 1700 square kilometres and ruled by a branch of the Al Qasimi family. The main activity of this Emirate is agriculture due to run-off waters from the Hajar Mountains. The Emirate is also benefiting from its stone quarries, fishing, and exquisite pearls. The ruler of the Emirate is Sheikh Saud bin Saqer Al Qasimi (Alluae 2015a).

<u>Fujairah</u>

Fujairah is the only emirate in the UAE without access to the Arabian Gulf and has an area of about 1300 square kilometres. The Al Sharqi family rules the Emirate and the current ruler is Sheikh Hamad bin Mohammed Al Sharqi. The main economic activity of the emirate includes fishing and agriculture (Alluae 2015a).

2.2 Abu Dhabi Emirate

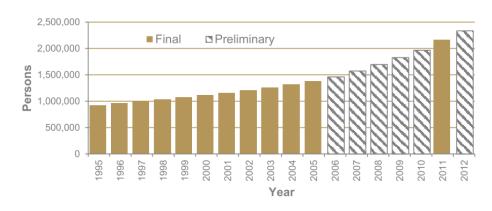
This section presents the Abu Dhabi Emirate background which includes population, workforce, education system and culture.

2.2.1 Abu Dhabi Emirate Economy

The main focus of this research is the Abu Dhabi Emirate because the Emirate is the largest Emirate and capital of the UAE, the Emirate Federation political centre and the centre of the Emirates business. Abu Dhabi Emirate is ruled by Sheikh Khalifa bin Zayed Al Nahyan, who also is the president of the UAE.

2.2.2 Abu Dhabi Emirate Population

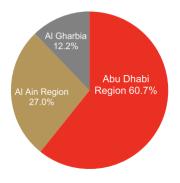
Abu Dhabi Emirate population has increased regularly since 1995 due to the attractive work opportunity, growth economy and attractive tourist destinations. Figure 2-3 below shows the Abu Dhabi Emirates population from 1995 to 2012. The figure indicates a regular increase in population (Scad 2014).



Source: Statistics Centre - Abu Dhabi

Figure 2-3: Population Estimates, Abu Dhabi Emirate, mid-years 1995 to 2012 (Scad 2014).

Abu Dhabi Emirate has three main regions namely the Abu Dhabi Region, Al-Ain Region and the Al-Gharbia Region. From a population point of view, the Abu Dhabi Region is the largest region with 60.7% of the Abu Dhabi Emirate population, while Al-Ain Region has a population of 27%. Al-Gharbia Region represents only 12.2% of the Abu Dhabi Emirate population (Scad 2014).

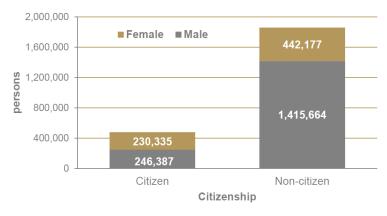


Source: Statistics Centre - Abu Dhabi

Figure 2-4: Population by Region, Abu Dhabi Emirate, mid-year 2012 (Scad 2014)

2.2.3 Citizen versus Non-Citizen Population in Abu Dhabi Emirate

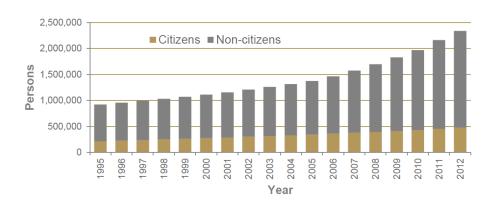
Abu Dhabi Emirates is a multi-cultural society with large numbers of non-citizens that live and work in Abu Dhabi Emirates. The UAE citizens represent a quarter of the total population of the Emirate, 25.7%, with non-citizen at 74.3% based on a population survey carried out in 2012 and published in 2014. Figure 2-5 below shows that the number of male non-citizens was 1,415,664 compared with 246,387 who were citizens, i.e. male citizens represent 15% while non-citizen 85%. Similar numbers of female non-citizens are higher than the citizens. The citizen female population was 230.335 compared with 442177 (34%) non-citizen females of 442177 (66%) (Scad 2014).



Source: Statistics Centre - Abu Dhabi

Figure 2-5 : Population Estimates by Citizenship, Gender Abu Dhabi Emirate, mid-years 1995 to 2012 (Scad 2014)

Figure 2-6 below indicates that the population of the UAE has increased yearly since 1995 and clearly the rate of the number of non-citizens is higher than the citizens. This is due to attractive job opportunities and growth in the economy.



Source: Statistics Centre - Abu Dhabi

Figure 2-6: Population Estimates by Citizenship, Abu Dhabi Emirate, mid-years 1995 to 2012 (Scad 2014)

2.2.4 Work Force Population in Abu Dhabi

Table 2-2 below shows the workforce population in the Abu Dhabi Emirate. The Table shows the workforce for nationals and non-nationals within the periods of 1975 to 2008. The table clearly indicates that the number of the workforce is increasing sharply due to job opportunities and lifestyle in Abu Dhabi Emirate. The table indicated that the number of Emirates working in Abu Dhabi Emirate in 2008 was 86272 (10%), and non-nationals estimated at 803145 (90%) (Scad 2010).

Table 2-2: Employed Population in Abu Dhabi Emirate by Nationality (Scad 2010)

المشتغلون* حسب الجنسية والجنس، إمارة أبوظبي (1975–2008) Employed* Population in the Emirate of Abu Dhabi by nationality and Gender (1975-2008)

السن ear		1975	1980	1985	1995	2001	2005	2008
	جملة Total	11946	16595	21579	40981	60753	75518	86272
مواطنون Nationals	نکور Males	11685	16166	20674	36679	51018	60911	68074
	إناث Females	261	429	905	4302	9735	14607	18198
غیر مواطنین Non-Nationals	جملة Total	109467	254500	272945	484476	588589	711220	803145
	نکور Males	106099	243315	249147	441149	524825	617039	683558
	إناث Females	3368	11185	23798	43327	63764	94181	119587
الجملة Total	جملة Total	121413	271095	294524	525457	649342	786738	889417
	نکور Males	117784	259481	269821	477828	575843	677950	751632
	إناث Females	3629	11614	24703	47629	73499	108788	137785

Source: Statistics Center - Abu Dhabi

المصدر: مركز الإحصاء - أبوظبي

^{*}نتائج تعدادات السكان للأعوام 1975، 1980، 1985، 1985، 2001، 2006، 2005 وتقديرات منتصف 2008. *The results of population consuses 1975,1980,1985,1995,2001,2005 and estimates of mid 2008.

2.2.5 Abu Dhabi Education Council (ADEC)

There are several public sectors in Abu Dhabi Emirate alongside the private sector that provides services to the UAE society and contribute to the Abu Dhabi Emirate economy and growth. The public sector is public funding organisations and centrally managed by the government. The main section of the public sector is education. The education sector in Abu Dhabi Emirate increased fast in the last few decades due to the increase in some schools and nurseries and the number of the employees in education. Due to this expansion, they have been able to improve the performance of education through effective management structures. Abu Dhabi Education Council (ADEC) was established by law No. 24 of 2005, issued by His Highness Sheikh Khalifa Bin Zayed Al-Nahyan, the UAE President, the Supreme Commander of the Armed Forces and the Ruler of Abu Dhabi Emirate (Adec 2016). ADEC's main task in the Emirate is to develop and support education and educational institutions in Abu Dhabi Emirate. It is also responsible for implementing innovative educational policies, procedures, plans, guidelines and programmes that aim to enhance and improve educational systems, and provides support to the educational institutions and their staff to achieve the main objectives of national education development by the highest international education standards. ADEC is also responsible for developing appropriate and effective educational strategies and initiatives in the Abu Dhabi Emirate. It is also reasonable for managing, guiding, adopting and implementing various educational projects (Adec 2016).

2.2.6 Cultural Background: Abu Dhabi Emirate Culture

This section presents briefly the Abu Dhabi Emirate culture and background to help understand and analyse the employees' behaviour and perception toward privacy. The current status of Abu Dhabi Emirate can be analysed as a modern Emirate with attractive tourist locations and entertainment with modern, sophisticated high-rise buildings, new modern bridges and road networks, beautiful large parks and gardens. The city is also an active business centre for Abu Dhabi Emirate and the UAE with modern industries, particularly the petroleum and natural gas industry. However, beneath this modern Emirate lies a rich traditional Arabian culture. Abu Dhabi Arabian culture is strongly embedded with strong Arabic cultures such as tribal culture, Bedouin culture, and Islamic traditional values and norms. The interactions

and behaviours of the Abu Dhabi Emirate citizens are influenced by their Arabian and tribal culture and the culture of the Islamic values. The Emirate has a large number of mosques for daily prayers and the main gathering is on a Friday, Friday Prayers. The Arabian and Islamic values of the citizens require them to pray five times a day at a fixed time. The praying time may change every day. This cultural and religious value and activity need to be taken into consideration in the workplace when planning breaks for the employees. The praying time needs to be respected by the workplace management. It is also important to stress that from Islamic practice, the Abu Dhabi Emirate citizens' fast for the full month of Ramadan as it is part of the Islamic pillars that most need to fast. During this month, the Muslim cannot drink or eat from early morning to sunset. The organisations operate in Abu Dhabi Emirate need to be aware of this month and take appropriate action to support the employees. In the public sector, the start and end time of the working hours become shorter, to help the employees complete their fast (Abudhabi 2015).

Arabian culture, namely the Bedouin culture has its own values and norms and behaves accordingly. It can be seen that the Bedouin interact and behave accordingly to their values and norms when they interact amongst themselves. Their interactions are based both on Bedouin culture and the values and norms of societies culture. The Bedouin interact and behave based on collectivism rather than individualism. They put the interest of the Bedouin ahead of their personal interest. They are very generous.

The Arabian culture has also influenced women and the way they wear their clothes. The clothes need to cover her body and hair. The traditional women wear a black *abaya* to cover their bodies, a long black robe and a headscarf (*sheyla*). The Arabian Bedouin culture also requires adult females to cover their faces as part of the tribe culture's tradition and values. On the other hand, Abu Dhabi males usually wear local dress which includes a full-length shirt-dress (*dishdasha*) with a white or red checked head dress (*gutra*) (Abudhabi 2015).

As discussed earlier, Abu Dhabi Emirate has a large number of non-citizens living and working in the Emirate. They are coming from different cultural backgrounds and they have created sub-cultures within the Abu Dhabi culture. The sub-cultures include Western culture, Asian culture and the Far East culture. These sub-cultures and the

Abu Dhabi culture creates a multi-cultural society where everybody enjoys practising their culture as far as it does not jeopardise Islamic values.

2.3 Summary

In Summary, the UAE is one of the fastest developing countries in the Middle East with a strong economy, attractive tourism, petroleum and natural gas industry and a hub for international travelling with a high number of non-nationals living and working in the Emirate.

Chapter Three: Literature Review

3.0 Introduction

Individual privacy has become increasingly important in modern society due to people's awareness of it and the legislation for its protection (Deng, et al. 2011). It has become extremely critical that both traditional and digital information need to be protected, and any intruders and unauthorised subjects must be prevented from accessing and using such information. Therefore, stressing privacy concerns amongst individuals and organisations comes as no surprise (Smith, et al. 2011). Individual privacy has become important and critical for all organisations that have control in handling and managing individuals' personal information and data.

Advances in technology have allowed the collection of personal information by employers. Over time organisations may gather an enormous amount of personal information and assume a freedom to do with it as they like (Pincus and Trotter 1995). The spread of computing technology has led to greatly increased alternatives for collecting, processing, sharing and using personal information.

From an organisational point of view, the workplace has seen sharp changes in its operations and daily interactions as well as in the growth of the number of resources and databases that can be used or accessed. Employers now have the appropriate technologies to monitor, control, and track organisational and personal data. Organisations today have information systems and managements handling and controlling the flow of data storage. This makes such a system an easy threat to breach individual privacy with the use of technology (e.g. electronic resources helps transfer, save and access information). The use of technology in information management, such as databases, gives employees access to such information. Therefore, an employee's perception, awareness and attitudes towards the importance of privacy is critical to protecting their privacy.

Following this brief, the chapter reviewed critically the main definitions and understandings of the term privacy, privacy and security, privacy and confidentiality, privacy and legislations, information privacy culture and cultural barriers to implementing privacy in organisations. The chapter closes with a summary of the main findings.

3.1 Definitions of Privacy

Although the term *privacy* has been studied for over 100 years from philosophical, sociological, psychological, and legal perspectives, its exact meaning has not been properly articulated (Smith, *et al.* 2011, Solove 2006). There is no single definition accepted and agreed upon for the term *privacy*. Solove (2008) argued that the concept of privacy be in disarray. Ritchie (2009) argued that turning to philosophical literature from a legal perspective gave little agreement on the definition of *privacy*.

It is critical to define and also understand the term *privacy*. This is needed for two main reasons: the first is to help establish appropriate privacy policies within organisations; the second is for legal requirements in case of any third-party disputes. There are numerous definitions of *privacy* in the literature. One of these definitions focuses on the individual's moral and legal rights. Clarke (1999) defined *privacy* in this respect: "Privacy is often thought of as a moral right or a legal right."

Pavlou (2011) summarised *privacy* in simple terms based on the concept of how individual controls how his/her personal information is acquired and used. This argument is based on the human role on information privacy.

One definition suggests that privacy has two parts: a psychological state and a physical feature of the environment (Sundstrom, *et al.* 1980). The psychological part is concerned with the control of and access to one's private information. It involves issues about passing on information about a person and controlling the input or output by others (Mael 1998, Sundstrom, *et al.* 1980). The environmental part refers to the technical system or the physical and acoustic isolation that gives the feeling of privacy, individual behaviour towards privacy.

Skinner et al. (2006) went further in defining and understanding *privacy* by stressing that individual's privacy is a human right. Clarke (1999) identified the four main dimensions of privacy rights: (1) privacy of a person, (2) individual behaviour privacy, (3) individual communication privacy, and (4) individual data privacy. This research mainly concerns individual data privacy. Clarke (1999) defined *information*

privacy as "the interest an individual has in controlling, or at least significantly influencing, the handling of data about themselves."

American legal literature and existing statutory law have a long history defining the term information privacy. They define information privacy as the right to control one's personal data. Privacy from this point of view is the individual's right to his own data and information (Henry 2015).

It is also important to stress that definition and understanding of privacy may differ from one country to another due to the cultural factors and perceptions towards privacy. Cannataci (2009) argued that there is no clear worldwide definition agreement on the definition of privacy. Newell (1995) argued that several languages do not have a clear definition of the term privacy, such as the Arabic language.

It can be argued strongly that privacy is a human right and that it needs to be respected. International bodies such as the United Nations (UN) have recognised and stressed the importance of human rights and encourage states to respect them through the introduction and implementation of acts and regulations that ensure human rights are not violated. The International Covenant on Civil and Political Rights, of the United Nations human rights, Article 17, clearly defines what is considered unlawful interference with individual privacy. The article states,

"No one shall be subjected to arbitrary or unlawful interference with his privacy, family, home or correspondence, nor to unlawful attacks on his honour and reputation."

This article of the United Nations requires all states to take appropriate measures through establishing policies and laws to protect individual privacy. It stressed that the breach of such a right is unlawful and that an organisation or individual needs to be punished for any violation of such rights.

For the protection of an individual's right to privacy, the article clearly states what this right is: For appropriate measures and to be protected by laws. The article urges to introduce and implement appropriate acts and regulations to protect individual rights.

"Everyone has the right to the protection of the law against such interference or attacks."

The European Convention on Human Rights, Article 8, has stressed that everyone has the right to be given respect for his own personal and family life. Article 8 represents the main framework for protecting privacy and also provides the main principles for developing and introducing privacy policies and laws in the UK (Raab and Goold 2011). Article 8 focuses on four main rights namely, private personal life, individual family life, home and correspondence. The article stresses that nobody has the right to violate individual privacy under any circumstances. "Except, by the law and is deemed necessary in a democratic society in the interests of national security, public safety or the economic wellbeing of the country. Alternatively, for the prevention of disorder or crime, protection of health or morals, or for the protection of the rights and freedoms of others." Individual private life refers to the individual's personal, both physical and psychological, integrity or private space. This includes publication details of personal information, such as personal identity, personal autonomy and sexuality. The article provides a framework for organisations and states to develop for the monitoring and managing of an individual's personal data.

The Oxford English Dictionary defines privacy as "the right to be left alone." The definition reflects the classical liberal ideology of freedom. It also gives the individuals the right to define their own sense of privacy, which may be in conflict with other legal definitions and explanations of privacy.

Meanwhile, Smith et al. (1996) argued and identified four dimensions of information privacy: (1) improper access to information, (2) collection of information, (3) unauthorised secondary use, and (4) errors. Another classification of privacy can also include (1) information processing, (2) information collection, (3) information dissemination, and (4) invasion (Solove 2006).

From the UAE point of view, there is no specific Act or regulation specifically on privacy. However, the term is defined by one of the government bodies on the Emirates Information Security Policy. Abu Dhabi System and Information Centre (2013), defined privacy as:

"The protection of personal data that are being processed and/or stored by the Abu Dhabi government entities."

3.2 Privacy and Security

One of the important questions that need to be understood and acknowledged is how privacy and security issues are related to real life practice. This is needed to get actual and realisable understandings of the behaviour and legislation of privacy information security. On the other hand, security is linked to the organisations main concerns about the protection of personal information within the organisation. It has three main specific elements: (1) integrity, (2) confidentiality, and (3) authentication (Belanger, et al. 2002, Smith, et al. 2011). An organisation in the industry can achieve these elements by adopting several approaches. This includes introducing and implementing privacy in information security, policy, strategies and training. This helps and enhances promoting the employees' privacy awareness, understanding, and knowledge. In light of privacy complying with the clear privacy policy, the organisation can successfully secure the stored individual's personal data and information but fall short in the subsequent use of personal information. This can lead to privacy issues in the organisation's operations (Culnan and Williams 2009).

Ackerman (2004) suggested that "security is necessary for privacy, but security is not sufficient to safeguard against subsequent use, to minimise the risk of ... disclosure or to reassure users."

It can be argued that information security and privacy be distinct concepts but overlap most of the time. Acquisti et al. (2015b) argued that poor information security can lead to insecurity in protecting individual's private information from leaks to third parties and improper access to such information.

3.3 Privacy and Confidentiality

A distinction can be made between *privacy* and *confidentiality*. *Privacy* can be considered as the person's desire to control the disclosure of personal information. *Confidentiality* corresponds to the controlled release of an individual's personal information to an information custodian under a certain agreement that limits the extent and conditions under which such information may be used or further released (Smith, *et al.* 2011).

From the UAE point of view, Abu Dhabi System and Information Centre (2013), defined *confidentiality as*

"The act of preserving authorised restrictions on information access and disclosure, including means for protecting personal privacy and proprietary information."

3.4 Privacy and Legislation

Privacy legislation can be considered on several layers such as international, national, organisational and individual. At the level of international law, international bodies such as the United Nations introduced and stressed the value of human rights, such as the right to privacy, as will be discussing in some detail in the next section. At the national level, states need to develop their own acts to protect privacy. As an example, the UK achieved this through the Data Protection Act 1998. This is needed to reflect the national need for such an act, taking into consideration the culture of the country. At the organisation level, an organisation needs to introduce and implement policies and regulations to protect privacy. In the UK, an individual's personal data is protected by an Act through defining personal data to help clarify the definition of personal data. The UK's Data Protection Act defined Personal Data as:

"Personal Data" as the "Data that relates to a living individual who can be identified from such data, and/or other information, which is in the possession of, or is likely to come into the possession of, the data controller and includes any expression of opinion about the individual and any indication of the

intentions of the data controller or any other person in respect of the individual"

Some models are devoted solely to an individual's privacy needs in an organisational context, such as the Data Protection Act. Others are built around protecting systems from invasiveness, which affects the employees' dignity, freedom, and self-esteem. Each model must be matched with an organisation's need for information to improve efficiency. This is mainly due to the nature of the information and the protection policies needed to protect privacy. It is also important to stress the role and the possible impact of certain cultures. The underlying idea is that the individual's needs are morally superior to those of the organisation.

Many countries, including members of the European Union (EU), have increased their privacy laws (Pagnattaro and Peirce 2007). However, U.S. employees, especially those working in the private sector, have fewer rights to privacy.

The ethical *theories of rights* hold that decision makers must respect the rights of individuals. Researchers identified four rights connected to information privacy (Taylor and Davis 1989). The first of these rights concerns various pieces of personal information integrated into a single database. This is done because combining information produces an intimate portrait of an individual even though isolated data items may appear harmless. The second is data accuracy and accessibility. The third is the ethical right of access, where an individual may wish to deny access to other people. Denials may vary with the kind of threat posed by other individuals or groups seeking access and the sensitivity of information sought. The fourth right is about individuals having intellectual property rights over information held on them.

One of the arguments regarding ethical rights and privacy is the freedom of information. Although there is a lack of information and research on regulating and relating freedom of information, what is known is that it needs to take in consideration respect for an individual's privacy. Freedom of information should not have any impact on an individual's moral and image.

The political strategy and political changes in a country can play a role in how the authorities view privacy; this has an impact on the adopted privacy policy (Adelola, et

al. 2014). It is argued that the fundamental human right is not the only factor that the country subscribes to in the notion of privacy and accepting the needs of the individual and the protection of his right to privacy. Other factors also need to be taken into account when developing and implementing data protection acts, such as cultural and historical factors.

3.4.1 Privacy Legislation in the UK

This section briefly presents *privacy* in the UK from the legislative point of view. Privacy is protected by statutory and common law protections. Both protections are legal measures to ensure the individual's privacy rights.

Statutory Protections

The following is a brief discussion of the main statutory protection acts enforced in the UK and are to protect individual's rights:

• The Human Rights Act (HRA) 1998

The UK used to refer to the European Court of Human Rights in any personal disputation prior the introduction of the Human Rights Act. The act was introduced and came into force in 2000. The HRA was developed under Article 8 of the European Human Rights Act. It stresses the need to respect an individual's personal and family life.

• The Data Protection Act (DPA) 1998

The act stresses that the controller, such as an organisation, which has an individual's data and information, has no right to pass the individual's information or data to a third party without clear permission or consent from the individual. For example, an organisation should not pass a customer's information to another organisation for marketing reasons without the customer's permission. Higher-education institutions should also not pass information to third parties without permission from the students. These are under the Data Protection Act to protect individual privacy rights.

"A data controller is not obliged to supply any information under subsection (1) unless he has received—(a) a request in writing."

(Data Protection Act, Section 7, 2a)

Also, the Act clearly gives the individual the right to inform the controller, the organisation, anytime in regards to their privacy rights. This right stresses that the individual has the right to inform the controller regarding any decision on his/her data and information privacy and to express their concerns any time they feel as though their rights are on the verge of being breached. This is clearly stated in Section 12 of the Data Protection Act, as seen below:

"An individual is entitled at any time, by notice in writing to any data controller, to require the data controller to ensure that no decision taken by or on behalf of the data controller which significantly affects that individual is based solely on the processing by automatic means of personal data in respect of which that individual is the data subject for the purpose of evaluating matters relating to him such as, for example, his performance at work, his creditworthiness, his reliability or his conduct."

(Section 12)

The Act gives individuals the right of liability in the case of any abuse of the individual's privacy. It can be argued that liability is one of the approaches that can help in protecting individual privacy due to the consequences of any inconvenience and harms that can be related to the infringement of individual privacy. The Data Protection Act states:

"Where an offence under this Act has been committed by a body corporate and is proved to have been committed with the consent or connivance of or to be attributable to any neglect on the part of any director, manager, secretary or similar officer of the body corporate or any person who was purporting to act in any such capacity, he as well as the body corporate shall be guilty of that offence and be liable to be proceeded against and punished accordingly."

(Section 61)

• The Freedom of Information Act (FOIA) 2000

This act provides public access to any information held by the public authorities. This access can be achieved in two ways. The first is public authorities are obliged to publish information and data regarding their activities. The second is by giving the members of the public the right and entitlement to request accurate information from the public authorities.

• The Regulation of Investigatory Powers Act (RIPA) 2000

This act aims to ensure that the investigatory powers are implemented with human rights. These powers include for example the interception of communications, and the acquisition of communications data.

Raab and Goold (2011) argued that despite Britain having a large number of laws and regulations to protect privacy, the current situation still falls short in providing privacy due to significant weaknesses. They stressed that the first weakness is the gap in protecting individual privacy due to the reactive character of the developed laws. It reacts based on the changes in society and technology. For example, the sharp change in the use of technology in managing an individual's personal information and the possibility of unauthorised access to information are some causes for the reactive nature of laws. The review also indicated that Britain's legislation on information privacy is patchy, and in some areas, there is no protection.

The regulators and monitors charged with protecting information privacy are not equipped to deal with the sheer amount of information being processed and shared.

• Information Commissioner's Office, ICO

ICO: Privacy by Design

ICO provides guides and principles to the organisations to promote privacy. One of the guides provides is the needs to ensure that the privacy and data protection of the compliance considered by the organisation is privacy by design. Privacy by design is an early stage planning and concern of the privacy in the organisation such as 'building new IT systems for storing or accessing personal data', ICO. Although the privacy by design is not part of the Data Protection Act requirements but helps the organisation privacy compliance process.

ICO argued that privacy by design at organisation level has several benefits and essential tools to adopt to minimise privacy risks and building trust. ICO stated some of the benefits of adopting privacy by design as:

"Potential problems are identified at an early stage, when addressing them will often be simpler and less costly."

(Ico 2016a)

"Potential problems are identified at an early stage, when addressing them will often be simpler and less costly."

(Ico 2016a)

ICO: Privacy Impact Assessments

The other important guide provided by ICO is the Privacy Impact Assessments. The assessments represent an integral part of taking privacy by design approach, (ICO, 2016). It is a tool that can be used to reduce, identify the organisation projects privacy risks. The tool aims to reduce the privacy risks of harms to individuals through the misuses of their personal information and help in designing more effective and efficient processes for handling personal data at organisational level, ICO, 2016).

ICO: Privacy Notice

This is an approach aims to inform people win the organisation regarding their right and role of the organisation. ICO argued that Privacy Notice helps making the organisation more transparent and building trust between the employees and the organisation. ICO suggests that privacy notice needs to:

"Tell people who you are, what you are going to do with their information and who it will be shared with... provide information about people's rights of access to their data or arrangement for keeping their data secure."

(Ico 2016b)

3.4.2 Privacy Legislation in the UAE

This section presents the subject of privacy briefly in the UAE from the legislative point of view. At this stage of this research, the UAE is falling short in defining privacy from the legislative and policy-making points of view. The research aims to explore the value of privacy from the UAE cultural perspective. The value of privacy can be considered from the UAE's cultural perspective and its people's perceptions and attitudes toward privacy. Understanding the value of privacy helps in identifying what laws and policies should be developed in the UAE. This can be achieved through exploring and identifying the main dimensions of privacy from the UAE's perspective. It is also important to stress the need to explore and analyse the role of the UAE culture in the privacy analysis process. It is also important to discuss the need for a balance between privacy rights and public interest. This is necessary as the UAE is a relatively small and wealthy country with a considerable percentage of expatriates working in the Emirates. This may include the privacy issue and its impact on legislation and policy making regarding privacy protection.

The UAE legislations provide individual privacy rights through the general laws. It is important to stress that currently there is no specific data protection act enforced in the UAE. It has been left to the general law to deal with such issues (Practical Law 2012). However, Dubai International Financial Centre (DIFC) introduced a Data Protection Law in 2007 to protect individuals' rights, align closely with the European Data Protection Directive. The law updated further in 2012 to enhance transparency, efficiency and effectiveness by introducing a system of fines to ensure compliance with the law (Norton Rose Fulbright 2013). The law is not enforced in any other of the UAE emirates. Dubai Healthcare City (DHCC) has also introduced Regulation No 7, 2008, to protect healthcare data. The regulation aims to establish a set of principles regarding collecting, using, disclosing and giving access to patients' health information. (Norton Rose Fulbright 2013).

3.5 Information Privacy Culture

The organisation's culture has become one of the main factors considered significant due to its impact on the entire organisation's performances and processes (Lee and Yu 2004). Its role and impact on the organisation's innovation strategy and processes (Naranjo-Valencia, *et al.* 2011). Its capabilities in creating organisational knowledge (Wang, *et al.* 2011). This section aims to present and discuss the culture of the organisations and its role and impact on organisation privacy.

It can also be argued that privacy may differ in terms of time and location and can be culture-specific, as it represents people's opinions and values. From time's point of view, people's perceptions, attitudes, and behaviours toward certain activities may change. This is mainly due to variations in the individuals' education, awareness, and possibly interactions with the external environment.

Privacy may differ based on location because of the difference in values and norms from one place to another, also the difference in the cultures of organisations and societies.

Each country has its own cultural values and privacy perceptions and they are different from one country to another (Adelola, *et al.* 2014, Sarathy and Robertson 2003). Adelola et al. (2014) argued that varying values have a significant influence on how privacy is treated and expected by individuals and groups based on the country's cultural values. This needs to be considered with data protection approaches and adoptions of effective data protection acts.

This difference in culture may cause a difference in perceptions and attitudes toward privacy. From an organisation's point of view, the attitudes and perceptions toward privacy may differ from one organisation to another. In fact, privacy within organisations may not only reflect prevailing social and cultural issues, trends and factors but may also be dependent on or moderated by the social and cultural factors that are exhibited or adopted by individuals within an organisation. Privacy may also be dependent on or facilitated by the type of organisation in question. For example, in organisations in the UK which have privacy rights protected by statutory and common law, employees may be more aware of privacy rights and may change or moderate their behaviours accordingly. For example, the employees of organisations which regularly deal with personal data, such as call centres, may be more aware of privacy

rights than those employees of organisations which do not regularly deal with personal data, such as garages. In other countries which are less developed and/or have different cultures, privacy may reflect these underlying issues and factors.

3.5.1 Organisation Culture

Crowther and Green (2004: p.1) state that organisations are central to the lives of most individuals since they employ the majority of people, or are in some way involved with their lives.

According to Schein (1970: p.9), an organisation is defined as the "rational coordination of the activities of some people for the achievement of some common explicit purpose or goal, through the division of labour or function, and through a hierarchy of authority and responsibility". Consequently, most activities that are purposively organised by groups of people with defined or implicit hierarchies can be labelled as organisations.

An organisation needs to define and understand its organisation's culture to develop and then implement an effective culture that promotes information privacy. The literature explored several definitions of and explanations for organisation culture. Kanungo (1998) defined organisation culture as a shared set of norms and values.

Organisational culture has been referred to as a shared set of mental assumptions that guide the interpretation and action that occurs within organisations by defining the appropriate behaviours for various situations (Ravasi and Schultz 2006). On the other hand, Schein (2004) analysed it as a pattern of shared assumptions learned by a group as it solves problems concerning internal integration and external adaptation. This pattern has been found to be valid because it has worked well in the past, and it is considered to be the correct way to solve future problems (Schein 2004). Alvesson (2012: p.4) viewed culture as being central to governing the understanding of behaviour, social events, processes and institutions, and stated that it was "the setting in which these phenomena become comprehensible and meaningful". But at the same time, Alvesson also stressed that culture was a constantly changing phenomenon, and therefore "culture is not best understood as a homogenous, cohesive and causal force, but as something that people do. It is emergent, dynamic, situationally adaptive and co-created in dialogue" (Alvesson 2012: p.4).

It can be argued that culture can be one of the factors influencing privacy. An organisation's norms and values toward information privacy can play an important role in the employees' attitudes and behaviours toward privacy.

Schein (2004) further developed his views of organisational culture in a model which detailed this in three layers. (1) artefacts (e.g. tangible or verbally identifiable items in an organisation which exhibit cultures, such as types of furniture or dress codes). (2) espoused values (e.g. organisational values or statements, such as mission statements of codes of conduct). (3) Assumptions (deeply embedded and shared beliefs of behaviours which reflect the internal office dynamic). The model is fairly simplistic in its approach to analysing organisational culture. However, it is helpful in terms of providing a starting point from which to attempt to identify and analyse organisational culture. Indeed, there are more theories of organisational culture that have been proposed by academics. For example, Deal and Kennedy (1982) suggested that organisational culture reflected the type of organisation in question, such as 'Workhard, play-hard' cultures (with low risk but rapid feedback and reward, such as software companies), and 'Tough-guy macho' cultures (with high risk and rapid feedback and reward, such as investment banks).

Needle (2010: p.213) observed the definition proposed by Deal and Kennedy and was frequently used in both academic and managerial practices, but the inherent problem with it was too broad to provide insight or understanding of the concept. Organisational culture should be seen as a unique combination of variables including history, leadership, product type, technology, strategy, types of employees and type of ownership (Needle 2010: p.213). Organisational culture was defined as representing "the collective values, beliefs and practices of organisational members and is a product of such factors as history, product market, technology, strategy, type of employees, management style, national cultures and so on" (Needle 2010: p.214). In practice, identifying and modelling organisational culture can be undertaken by applying some different existing models, combining different existing models or developing a new paradigm for a specific organisation. A modern tool used to assess organisational culture is the 'Organisational Culture Assessment Instrument' (OCAI). It uses four questions to evaluate each of the six key dimensions of organisational culture: (1) dominant characteristics (2) organisational leadership (3) management of

employees (4) organisational glue (5) strategic emphases and (6) criteria of success (Cameron and Quinn 2006).

National culture also has a major role in an individual's behaviour within society and an organisation. Elashmawi and Harris (1998: p.51) stated that principles of religion or faith play a critical role in Arab culture, such as the UAE culture, and have an impact on an individual's decision-making in society and business.

One of the main dimensions of Arabic culture identified in the literature is collectivism rather than individualism, or individual and personal interests and advantages (Feghali 1997). An individual in Arabic culture behaves on the group's values and norms, such as tribe values and norms. Loyalty is recognised as one of the extended family in Arabic culture, and loyalty to the group takes precedence over individual interests and goals (Nydell 1987, Yousef 1974). Another dimension of Arabic culture is faith. It is argued that faith influences an individual's motivation in his/her daily interaction with others, as well as the Arabs' perception of future undertakings.

There is another theory developed by Hofstede's study and analysis of cultural issues within an organisation and society; however, the dimensions have been criticised by several authors, as explained at the end of this section. The established dimensions are based on extensive research on organisational culture in 72 countries. The research identified four cultural dimensions, and a fifth dimension is later added with support from a Chinese national culture survey analysis (Hofstede 1980, Hofstede 2001).

• Power Distance (PD) Dimension

This dimension argued against the unfair distribution of power among people in society or an organisation, which gives advantages to people with power and brings disadvantages to people with lesser or no power. It can be argued that the distribution of power can play a major role in an individual's behaviour and decision making.

• Uncertainty Avoidance (UA) Dimension

This dimension stresses society's or an organisation's capability of facing unknown or unexpected future events. This may include wars in the case of a

society and a sudden recession in the market in the case of an organisation. This requires the ability and willingness to change to cope with uncertainties.

• Individualism versus Collectivism Dimension

Individualism refers to people placing their own interests and goals ahead of those in their societal group or within an organisation. From an organisational point of view, job security may play a critical role in an individual's behaviour within the organisation. On the other hand, in a collectivist society or organisation type, individuals place the group's interests and goals ahead of his/her own.

• Masculinity versus Femininity (MF) Dimension

This cultural dimension recognises the differences between the roles of females and males in society or within an organisation. The differences can be in the form of dominance or emotions.

• Long-Term versus Short-Term Orientation Dimension

This dimension relates the individual to his/her traditions, values, and history. People of this type value their history and they like to behave in this manner.

One of the main critics of the Hofstede implement is national culture dimension misapplied. Brewer and Venaik (2012) argued that the Hofstede dimensions be used and misplaced by using the dimension scores for individual analysis. They argued that the Hofstede dimension's scores were based on the national mean and thus cannot be used as the individual indicator score. Wu (2006) argued that cultural values are not static but dynamic and change with time due to changes in its environment. The authors went further by arguing that Hofstede cultural dimensions were outdated. However, Hofstede's dimensions are still well adopted and recognised in culture research.

Cockcroft and Rekker (2015) explored the relationship between the national culture and the extent of privacy legislation. They suggested four powerful cultural predictors based on their findings for the level of privacy legislation provision. These predictors include group collectivism, uncertainty avoidance, power distance and assertiveness.

National culture has a major role to play in the individual's behaviour within the organisation's working environment and its influence on information privacy laws. Organisations need to comply with such laws. The literature indicated that national

culture has a significant influence on the information policy laws decisions at many levels, especially at a corporate level (Bennett and Raab 2003, Cockcroft and Rekker 2015). The corporate decisions that may have cultural sensitivities include, for example, marketing strategies, firm location, and releasing new software (Cockcroft and Rekker 2015). There are other factors related to Arabian culture such as working on Friday and working break times, as examples.

Effectiveness (GLOBE) developed GLOBE dimensions for culture. Table 3-1 shows the GLOBE dimension, variable name and its definition. Six out of the nine GLOBE model dimensions are based on Hofstede's cultural dimensions, namely: uncertainty avoidance, power distance, institutional collectivism, in-group collectivism, gender egalitarianism and assertiveness, (Cockcroft and Rekker 2015, House, et al. 2004).

Table 3-1: The GLOBE dimensions of culture. (Cockcroft and Rekker 2015, House, et al. 2004)

GLOBE dimensions	Variable name	Definition	
Power distance	PD	The degree to which members of an organisation or society expect	
		agree that power should be stratified and concentrated at higher levels	
		of an organisation or government.	
Uncertainty avoidance	UA	The extent to which members of an organisation or society strive to	
		avoid uncertainty by reliance on social norms, rituals and bureaucratic	
		practices to alleviate the unpredictability of future events.	
Institutional	IC	The degree to which organisational and societal institutional practices	
collectivism		encourage and reward collective distribution of resources and	
		collective action.	
In-group collectivism	GC	Reflects the degree to which individuals express pride, loyalty and	
		cohesiveness in their organisations or families.	
Humane orientation	НО	The degree to which individuals in organisations or societies	
		encourage and reward individuals for being fair, altruistic, friendly,	
		generous, caring, and kind to others.	
Performance	PO	The extent to which an organisation or society encourages and rewards	
orientation		group members for performance improvement and excellence.	
Future orientation	FO	The degree to which individuals in organisations or societies engage in	
		future-oriented behaviours such as planning, investing in the future	
		and delaying gratification.	
Gender egalitarianism	GE	The extent to which an organisation or a society minimises gender role	
		differences while promoting gender equality.	
Assertiveness	AS	Degree to which individuals in organisations or societies	
		are assertive, confrontational, and aggressive in social	
		relationships	

3.6 Cultural Barriers to Implementing Privacy in Organisations

As has been seen, privacy differs according to the prevailing culture and stage of development of the country in which the privacy is relied upon or exercised.

On the other hand, in countries which exhibit strong levels of development, as well as strong and highly developed legal infrastructures such as the UK or the US, privacy is expressly recognised and enforced. It may be the case that other countries that fall in between these two extremes of privacy may have a mixture of approaches to privacy. Consequently, it can be argued that there be a case to make for recognising cultural factors as influencing the extent of development of information privacy in any particular country, Therefore cultural factors such as national culture and organisation culture are key to this study.

There are several different cultural barriers that might exist within an organisation. First, national cultural frameworks may either emphasise or de-emphasise the importance of privacy. This 'top-down' approach may result in less recognition of privacy at the organisational level. Second, organisational cultures provide clarity regarding privacy rights. For example, some organisations may only generally refer to privacy rights and may not define what they are, or provide examples which are causing workers to have a less precise understanding of how to approach privacy rights within their organisation. Third, some organisations may influence the overall organisational culture through their interpretation and application of privacy rights. For instance, an organisation may have codes and rules concerning privacy, but emphasis may be placed on efficiency, cutting costs and completing work as fast as possible.

The other important issue for implementation of the privacy policy is the employee's awareness of privacy, particularly when sharing information. Acquisti *et al.*(2015a) stated that:

"People are often unaware of the information they are sharing, unaware of how it can be used, and even in the rare situations when they have full knowledge of the consequences of sharing, uncertain about their own preferences. Malleability, in turn, implies that people are easily influenced in what and how much they disclose."

For example, sharing information among the employees, such as sharing passwords for accessing computers at their place of work, without awareness of private information is a severe privacy issue.

Organisation and national culture have influence in sharing information. Individual and group norms and values play a major role in the behaviour towards sharing information. People with Arabian cultural backgrounds like to share information and keeping low profile about their personal background as part of their Bedouin culture and values, 'group orientation and cohesion with the family as the key social unit (Bedawi 2007, Global 2012). Acquisti *et al.* (2015a) argued that if privacy behaviours are influenced by culture, then a dilemma will be raised on what to share with others and what to keep private. Therefore, individual, organisational and group cultures need to be recognised in any information sharing process to ensure the privacy of the individual and the organisation.

As a deduction from the research, organisational culture may be used as one of the dimensions that need to be explored and analysed to evaluate its impact on privacy from the UAE culture's point of view.

The Evolving Privacy Debate

Privacy is a dynamic issue to researchers and authorities. Debate on the issues of privacy will not stop and privacy will carry on evolving. The main reasons for debate and the evolution of it are due to the dynamics of society, individuals and change in technology. The boundary of changes in societies is due to the interaction between societies and sharp changes in technology. They are dynamic. Therefore, it can be argued that the attitude and awareness of privacy are changing. This requires changes in policy and legislations. There is building up of research and debates on privacy to explore and identify factors influencing privacy, such as the role of culture, privacy policy and laws and regulations. Table 3-2 shows a summary of the survey's research in information privacy adopted from Cockcroft and Rekker's 2015 work. The table overleaf shows the research question raised by the author, citation, dependent and independent variable investigation and the key findings of the research.

 $Table \ 3-2 \ Survey \ research \ in \ information \ privacy \ (Cockcroft \ and \ Rekker \ 2015).$

Research question	Citation	Dependent variables	Independent variables	Key finding
Does Legislative	Bellman et	Concern for	Culture, internet	Culture and Internet Experience
approach affect concern	al.(2004,	information privacy	experience,	predict concern
for information privacy?	1999) CFIP	(CFIP)	political desires	
	Milberg et	CFIP	Regulatory approach	The stronger the regulation, the greater the
	al.(2000)		(none, self-help, voluntary,	concern.
			data commissioner	
			registration, licencing)	
	Dinev et	Privacy concern	Misuse, secondary use,	Individuals in Italy had lower
	al.(2006)	·	lack of control,	privacy concerns than
			unauthorised access	individuals in the U.S.
Which elements are of	Rose (2006)	CFIP	Collection, errors, access,	Access and secondary use are of
concern to a countries'	()		secondary use	greater concern
citizens?	Earp et	Privacy dimensions	Content of privacy	Users are concerned in order by transfer,
· · · · · · · · · · · · · · · · · · ·	al.(2005)	Tilvacy difficusions	policies,	notice/awareness/ storage – User privacy
	ui.(2003)		user concerns	values do not align with website privacy
			user concerns	statements
77711 1' '	D 11 . 1	F 1 '	1 1' 1	
What are the dimensions	Ball et al.	Employees privacy	demographic and	Women are showing a greater concern for
of employee privacy:	(2012)		employment characteristics	the privacy of their working environment.
an empirical study?				Finally, the findings indicate that effective
				data protection training are associated with
				increased concern for their own privacy.'
Does National Culture	Milberg et	Regulatory approach	National culture	A country's cultural values are
affect the level of	al. (2000)			associated positively but marginally with its
government				regulatory
involvement?				approach
What is the role of	Cullen	CFIP	culture and cultural	'Attitudes and perceptions made in each
Culture, identity and	(2009)		concepts of	group reflect cultural values and concepts of
information privacy in			identity	personal identity, moreover, illustrate the
the age of digital				importance of being aware of the differences
government?				between individualist and collectivist
				cultures'
Does national culture	Milberg et	CFIP	National culture	A country's cultural values are associated
affect concern for	al.(2000)			strongly with the privacy concerns that are
information privacy?				exhibited by its populace,
Does concern for	Milberg et	Regulatory approach	CFIP	Management of privacy issues
information privacy	al.(2000)			increases as concerns
affect regulatory				heighten
approach?				
-				
D. CEID CC	3.6'11	D 1.	CEID	TDI
Does a CFIP affect	Milberg et	Regulatory	CFIP	There is a marginally positive
regulatory	al.(2000)	preference		association between the level
Preferences?				of governmental involvement
				moreover, respondents preference
				for strong laws

3.7 Behaviour towards Privacy

Individual privacy has become one of the individual's main concerns due to development in technology and the demand for protecting privacy rights. Malhotra et al. (2004) argued that the recent advances in Information Technology and communication systems make collecting, aggregating and analysing information faster and in greater volume than in any time before. The easy tools for accessing and controlling individual data and information requires taking individual behaviour into consideration due to their power in disclosing such information to the party who are willing or unaware of the sensitiveness of the disclosed data and information. Therefore, research in human behaviour has become critical at individual, organisational, and national levels to protect individual private information.

One of the main challenges organisations have with privacy, is the individual's behaviour towards it. Individual and group behaviour and norms in the organisation, private and public, are different based on the cultural background (Shariff and Norenzayan 2007). They argued that the Americans are reputed to be more open about sexual matters as accepted within their culture. In Arab countries the culture, for example, within sexual matters cannot be discussed in private or in public. Chinese society is more open about their financial matters compared with the Americans. They also argued that people are differing substantially on their care about their personal privacy on what type of information they consider private. Individuals at the workplace, private or public places, manage boundaries to their behaviours between their private life and information in the public sphere. They manage the boundaries by separateness, anonymity and reserve. They need to establish the boundary for intimacy and psychological respite and to be protected from the social control and influence (Acquisti, et al. 2015a, Depaulo, et al. 2003, Margulis 2003, Schoeman 1984).

One of the main issues of the individual's behaviour towards privacy is the individual privacy uncertainty related to the individual's preferences. Acquisti *et al.* (2015a) suggested people often are unaware of the information they are sharing with a third party at their workplace or within society. The authors are argued even in the case when they have full knowledge of the consequences of information sharing with a third party; they are uncertain about their own preference. The literature indicated that

people are still likely to be uncertain regarding their own personal privacy preferences. Individual uncertainty preferences play a major role in the individual's decision making when it comes to disclosing information. The uncertainty of privacy preferences is the major factor on the individual's uncertainty and decision-making in disclosing information.

Trust is one of the factors explored in the literature for the individual's interaction with personal data and information, disclosing information to a system or a third party. Trust the individual belief and facilitate the interaction. Once the interaction exists, the individual will be ready to disclose information and share information. Li (2014) stated that there is strong evidence of individual's privacy beliefs influencing the number of psychological and behavioural consequences, for example, customers online buying, such as online trust (Li 2011, Smith, *et al.* 2011). The role of individual perceived privacy may differ from one industrial sector to another or from one a country's culture to another. Chiu *et al.* (2009) found a positive impact of individual consumer's perceived privacy in trusting online vendors. On the other hand, Bansal *et al.* (2010) did not find support for this argument in a healthcare sector.

3.7.1 Human Behavior Theory

Several theories of human behaviour explain the main drivers of people's intentions to behave based on their feelings. An organisation's information privacy entails the control and management of its employees' operational practices and behaviours towards the storage, dissemination and use of personal information, and the extent to which such practices are perceived as legitimate (Alge, *et al.* 2006). This section discusses the application of human behavioural theories that are based on the individual's intention to behave, rather than the actual behaviour. This is mainly due to the difficulties in observing the actual behaviour (Vroom and Von Solms 2004).

3.7.2 Theory of Reasoned Action (TRA)

The TRA, which was developed by Ajzen and Fishbein 1980, Fishbein and Ajzan 1975, is the most accepted theory in human behaviour research (Leonard, *et al.* 2004). The core of the theory is based on the view that individual behaviour is influenced by the different attitudes and subjective norms, which contribute to the individual's intention to behave. This intention to behave leads to the actual behaviour. According to the theory, individual attitudes are driven by individual's beliefs and evaluations.

Subjective norms contribute to the intention to behave and are influenced by normative belief and motivation to comply, as illustrated in Figure 3-1. From the privacy point of view, this can be understood as the employee's attitude towards privacy and subjective norms, which can lead to the individual's intention to use the information.

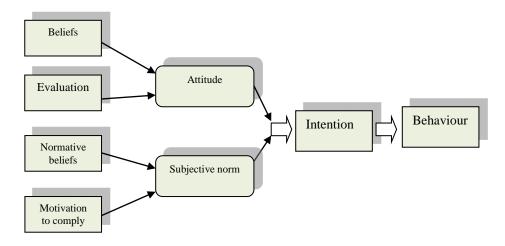


Figure 3-1: Theory of Reasoned Action (Ajzen and Fishbein 1980, Fishbein and Ajzen 1975)

3.7.3 Theory of Planned Behaviour (TPB)

The TPB can be classified as an extension of the TRA (Ajzen and Fishbein 1980, Fishbein and Ajzen 1975). The TPB has been widely used to investigate individual decisions, such as on buying and accepting the use of technology, accepting computer security measures, information systems' ethical behaviour (Lee and Kozar 2005, Leonard, *et al.* 2004).

The theory is based on the behavioural intention (BI) index, which states that individual behaviour is influenced by three main constructs. The three core constructs are influencing the individual's intention to behave, are the following: the individual attitude towards the behaviour, perceived behavioural control, and subjective norm, as illustrated in Figure 3-2. An individual's attitude can be defined as the positive or negative feelings towards a specific behaviour. Subjective norms can be critically analysed as an individual's perception that develops from the people who are important to him or her, such as family, friends, and colleagues. Contrastingly,

perceived behavioural control refers to the individual's perceived ease or difficulty about the performance of a specific behaviour (Leonard, *et al.* 2004).

From the privacy point of view, the theory can be explained as individual compliance with privacy behaviour. This can be influenced by individual evaluation and normative beliefs towards complying with privacy within the organisation's working environment.

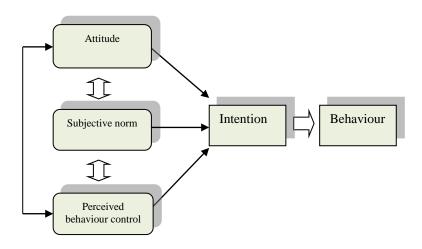


Figure 3-2: TPB Model

3.7.4 Technology Acceptance Model (TAM)

The TAM is a well-established model that is used to investigate and analyse the main constructs of individual intention to accept the use of technology. The model, which was developed by Davis (1989), is based on two main constructs, which includes the perceived usefulness of the technology (PU) and perceived ease of use of the technology (PEOU). From the privacy perspective, the TAM is used to determine the employee's intention to behave with regard to the organisation's privacy policy. The main constructs for the intention to behave with regard to privacy are easy to use, and there are numerous benefits of using this information.

3.7.5 Protection Motivation Theory (PMT)

The PMT was originally developed by health psychologists to provide an explanation for coping with a threat by engaging in the protective behaviour (Rogers 1983). The theory was developed to enhance and help predict individual behaviour concerning engaging in the physical protective behaviour (Anderson and Agarwal 2010). The literature identified two cognitive mediated appraisals for the employee's behaviour towards information security. These appraisals are the threat appraisal and coping appraisal (Bulgurcu, et al. 2010). The threat appraisal consists of two main perceived items, perceived severity and perceived vulnerability and includes the threat perception. The employee's threat perception is determined by response cost and response efficacy, which reflect the individual's potential ability to cope with the threat. The theory argues that an employee's awareness of the threat of potential security risks improve his or her attitude to the perception of these threats to security as well as his or her coping response (Anderson and Agarwal 2010, Herath and Rao 2009). Several researchers have adopted this theory when investigating and predicting individual behaviour about computer security and information security policy both at home and within the organisation (Anderson and Agarwal 2010, Lee and Larsen 2009). From the privacy context, PMT can be used to determine the individual's behaviour in information privacy based roles on improving employees' attitudes towards privacy within an organisation, towards the perception of threats and the ability to cope with such threats.

3.7.6 General Deterrence Theory (GDT)

This theory, which was developed from criminal justice research, is based on balancing the costs and benefits of an individual's rational decision-making behaviour. The theory states that the decision to engage in crime is influenced by the perceived severity and certainty of sanctions, which are determined by balancing the costs and benefits of the action that are being taken (Straub 1990). From the privacy point of view, the theory can be explained by the individual's evaluation of the costs and benefits of the intention to misuse the information and/or disclose personal information.

3.7.7 Theory of Privacy Calculus

Culnan and Bies (2003) argued that the individuals consumer's privacy behaviour be primarily driven by privacy calculus. Privacy calculus can be analysed as the costbenefit trade-off analysis that takes into consideration the inhibitors and drivers that simultaneously influence the individual's decision to use or misuse information (Culnan and Bies 2003, Dinev and Hart 2006). The privacy calculus argues that the main driver of privacy and privacy disclosure be the economic factor (Klopfer and Rubenstein 1977). The benefit and values of the return from the information privacy disclosure are the calculated risk of the disclosure and the value return (Culnan and Bies 2003). Xu (2009) argued that on privacy issues, the benefit generated from disclosure must exceed the risk to ensure the main motive for individual self-disclosure.

Li and Chen (2010) combined the TPB with privacy calculus to develop the integrated model for privacy disclosure on network sites, as illustrated in Figure 3-3. This model is based on three main constructs: attitude, behaviour control, and subjective norms all of which are related to the individual privacy concern. Both privacy concern and perceived benefit represent the main motive for the individual's intention to disclose private information. With regard to perceived benefit, most of the literature is based on the actual return of the disclosure, such as the acquisition of the coupon, discount, and improved services in marketing (Yang and Wang 2009). The privacy concern contributes to the individual's intention and reflects his or her concern regarding the threats to his or her privacy as a result of the action taken.

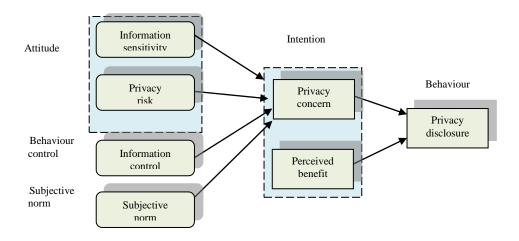


Figure 3-3: Combined TPB and privacy calculus model (Li and Chen 2010)

It can be concluded that the literature identified several theoretical models for individuals' intention-behaviour. One of these models namely the Theory of Reasoned Action (TRA) was developed further and used in this research to determine the principal dimensions of the UAE employees' behaviour towards information privacy. The main reason for using this model is a use of attitude as the drive for the individual behaviour. Attitude is a critical factor in UAE citizens behaviour due to culture and region of the Emirates. It is also important to stress that this theory is the most accepted theory in human behaviour research.

3.8 Summary

The literature indicated that most of the research on privacy are based on Western countries and can be argued that most of the literature on the role and impact of privacy take place in the USA and Europe due to the awareness of the authority and public towards their right to privacy (Bélanger and Crossler 2011, Crossler, *et al.* 2013, Zuiderveen Borgesius 2015). The literature is also indicated the lack of research in privacy in Arabia countries, particular in Arabian Gulf countries. This research is focusing on UAE with distinctive Islamic and Arabian culture and the main contribution of this research will fill the gap in the literature.

Chapter Four: Methodology

4.0 Introduction

The aim of this research was to investigate and analyse factors influencing employees information privacy behaviour and employees' perceptions, awareness and behaviour on the handling of private information in one organisation in the Abu Dhabi Emirate public sector, ADEC, as well as to provide practical recommendations to improve the privacy. A survey approach has been adopted in this research to achieve the research aim.

Appropriate research methodology is needed to achieve the research aim and objectives, providing reliable and valid research findings. This is mainly due to the various method options that are available to the researcher to select and implement. It can be argued that the adoption of the research method depend mainly on the nature of the research, and the questions asked.

This chapter presents and discusses the methodology adopted in this research. The chapter develops a framework for the research methodology to ensure appropriate methodology was adopted. This is needed to ensure the reliability of the main outcomes of the research. The research philosophy was analysed and outlined that were appropriate to achieve the research aim and objective, namely privacy in the UAE. The research strategy adopted in this research is analysed and justified. The selected research strategy is based on the research objectives. Figure 4-1 overleaf shows the research philosophy based on identifying a research paradigm, ontology, epistemology, methodology, and methods used.

The chapter will discuss and justify the data collection methods used in the research. This includes the use of both quantitative and qualitative data. For the quantitative data, a questionnaire has been developed and designed to survey the organisation's employees. For the qualitative data, interviews and focus groups were conducted to get in-depth data, such as information based on the employees' experience, the knowledge and understanding of privacy and its main issues.

The chapter also presents and provides justifications for its research sample. The research closes by offering a brief explanation of the approaches and tools used to

analyse both quantitative and qualitative data. The chapter closes with a pilot study of the questionnaire and the interviews to ensure the design, the questions raised in the interviews and the focus groups are valid and correct.

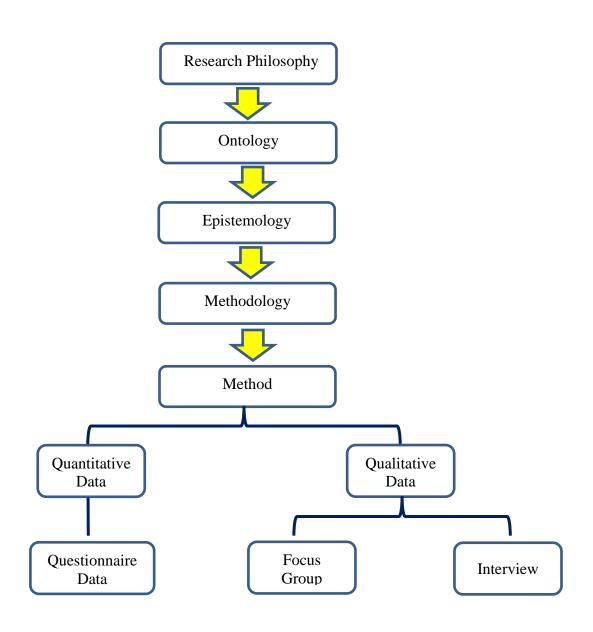


Figure 4-1: Research philosophy

4.1 Research Paradigm and Philosophy

A research paradigm is a research perspective that is based on a set of shared values, concepts, assumptions and practices (Johnson and Christensen 2010). These shared values are represented by a combination of research methods and philosophies (Johnson and Christensen 2010). It can be argued that choosing the most appropriate research paradigm is essential for achieving the overall objective of the research because certain research methods might not complement particular research philosophies. This could cause difficulties in interpreting the research data. Rubin and Rubin (2012) stated that research paradigms guide researchers when conducting studies and are helpful when explaining the research to third-party reviewers (e.g. editors or professors). Also, they argued that 'fully understanding the assumptions that undergird the techniques you use gives you the confidence to build on the strengths and offset the weaknesses of those techniques (Rubin and Rubin 2012: p.15).

Guba and Lincoln (1994) claimed that choosing appropriate research methods is secondary to determining the most relevant research paradigm. They define this as 'the basic belief system or worldview that guides the investigation, not only in choices of the method but ontological and fundamental epistemological ways' (Guba and Lincoln 1994: p.105).

Positivism and Interpretivism are well-established research philosophies in the literature that a researcher needs to think about and adopt in the research process. Positivism is often called the scientific method, and its assumptions are based on quantitative rather than qualitative data (Creswell 2009). Positivism is used to predict and explain phenomena based on quantitative evidence (May 2011). With positivism, social scientists use the same approach as physicists, chemists and physiologists to study social phenomena. Research based on this method produces a set of true, precise and ranging laws. From the data generated, the researcher can develop statements about social phenomena that analyse the population through the research outcomes and observations (May 2011). On the other hand, interpretivism can be seen as a typical approach to qualitative research (Creswell 2009). Scholars that use this approach argue that individuals develop subjective meanings for their experiences

with certain ideas and objects and that they attempt to understand the world in which they work and live (Creswell 2009). Interpretivism explains reality based on the understandings and perceptions of an individual or group. According to Crotty (2003), interpretivism seeks to understand and explain social and human realities. It identifies and explores individuals' and groups' feelings, understandings and perceptions of social phenomena.

From this research perspective, the positivism approach is needed to collect the appropriate measurable and objective quantitative data to investigate and analyse employees' main factors that influence their privacy behaviour at their workplace. This can be achieved through designing a quantitative survey for the Abu Dhabi Education Council. Also, interpretivism is needed in this research to provide in-depth data and information regarding employees' perceptions, understandings and attitudes towards privacy. It explores privacy issues not included in the quantitative survey and provides evidence explaining the main outcomes of the quantitative survey.

4.2 Research Strategy

The researcher needs to identify appropriate and suitable research strategies to collect the right data and solve the right problem with appropriate tools. The researcher has several strategies that he/she can be adopted in his/her research, such as case study strategies, survey strategies and archive strategies. The research strategy selection needs to be based on the research nature, research philosophy, research aim and objectives and types of questions required to be answered at the completion of the research. Historical and archive strategies are not suitable for this research as both strategies are based on investigating and analysing historical documents and archives, this is not the case in this research. Case study strategies are suitable when the focus of the research is in one case study and the main outcomes of the research are appropriate and useful for the selected case. The main results of the case study can only apply to the case selected and cannot be generalised and this is not the case in this research. Case study has not been used in this research due to the need a generic outcomes that can be used to generalise to the UAE organisations. It is also important to mention the research questions are generic questions and not focused on one organisation. Therefore, case study has not used in this research.

The most suitable strategy for the research is the survey strategy. This is mainly due to the nature of the research and objectives and the need to generate a general understanding and individual behaviour model for the UAE to help develop and establish laws, policies and strategies for privacy in the workplace and society. Positivist and Interpretive approaches are used in this research to collect data and information.

A positivist approach is needed to provide data that can be used to predict the research issues raised. On the other hand, an interpretive approach is required to provide an indepth explanation of the issues raised based on the participants' experience, knowledge and background.

4.3 Data Collection

Based on the previously mentioned research philosophies, this research seeks to use a mixed-method approach for its design, which incorporates elements of both qualitative and quantitative research. It has been observed that mixed-method research employs, and often creates, diverse philosophical positions (Creswell, *et al.* 2011, Greene 2007). This can be a challenge for researchers who have different philosophical beliefs since they may be at odds with each other (Creswell, *et al.* 2011). For example, interpretivist viewpoints may emphasise qualitative approaches to research whereas positivist approaches may emphasise quantitative approaches to research.

This research methodology has been chosen in order to increase the overall reliability of the research, increase the insights obtained from the research data, help triangulate the research data and increase the strength, robustness and well-rounded nature of any research findings and proposed interpretations. In short, the research combines a quantitative research approach with a qualitative research approach. Creswell (2009) noted that a mixed-method approach is more than simply collecting and analysing both qualitative and quantitative data; it uses both approaches in tandem to increase the overall strength of the study.

4.3.1 Quantitative Data: Questionnaire

A questionnaire was designed to collect information from the Abu Dhabi Education Council, which can be used subsequently as data to analyse employees' perceptions, attitudes and opinions towards privacy and the main factors influencing their behaviour towards privacy (see Appendix D). The questionnaire consists of a set of questions that reflects the main topics of the research. This approach ensures that each participant reads and answers the same set of questions. This helps and ensures consistency and precision which wording the questions (Denscombe 2007). Questionnaires allow researchers to survey a large number of participants in a reasonable amount of time and at a reasonable cost.

In brief, the questionnaire was based on both close and open structured questions. The majority of the questions were closed due to the nature of the question. However, open questions have been added to give the respondent the opportunity to express his/her view further.

The research has the option of using open and unstructured questions or closed questions (Denscombe 2007). The decision on selecting the approach depends mainly on the nature of the research topics and the expected key results. In this research, a semi-structured questions approach is used. The vast majority of the questions are closed and structured questions. This is needed to allow only answers which fit the main research objectives. The question allows the respondents to select an answer from a range of options. The questionnaire also consists of open and unstructured questions. This is needed to allow respondents to express the wording of their answers, decide on the subject matter to be explored and the length of the answer (Denscombe 2007). Unstructured questions enable respondents to explore issues that the research is not aware of, such as the factors that influence the employees' behaviour.

4.3.1.1 Questionnaire Design

The questionnaire included a cover page as an introduction to the respondent. (See Appendix D) .This is needed to give the respondent briefly the research aim and objectives and ensure the confidentiality of the respondents. The cover page also stressed the right of the respondent to withdraw from the survey any time they wish.

The main purpose of the cover sheet (introduction to the questionnaire) was to encourage participation in the survey (Sekaran 2006).

The questionnaire has been designed to reflect the research aim and objectives. The questionnaire has twelve sections and these sections are:

Section A; Personal Details

This section covers the respondent's working regional office name, gender, nationality, job role in the organisation, age and years of experience.

Section B: The current Main Issues and Problems in Privacy

The purpose of this section was aimed to explore key issues and problems in privacy in the organisation. The section has six questions on issues and problems. The statements include consent of information owner, sharing information among the employees, the process of printing information in public, recording and storing personal information, transmitting/sending personal information without the consent of the owner and the employees' working culture.

Section C: Employee's perception towards privacy

The purpose of this section was to explore the respondent's perception towards privacy. The section has five statements and these statements are to explore the respondent's perception of privacy as a human right, importance of privacy to the organisation image, individual employees should control his/her personal information, the organisation is the owner of the employees' personal electronic record, and the employees are the owner of personal electronic record in the organisation.

Section D: Types of Information

The purpose of this section was aimed to explore the respondents opinions towards types of information considered private. The section has six statements of information types including personal wage, Spouse name, family females' details, personal appraisal, personal mobile number and family picture.

Section E: Role of Organisation Culture on Privacy

The purpose of this section was aimed to explore the respondents' opinion towards the role of the organisation's culture on privacy. This section has five statements including norms to share information among the organisation's employees, norms to print personal information in open area, there is no privacy policy in the organisation, the organisation's value of personal information and organisations that considered each document in the organisation as private information.

Section F: Role of National Culture on Privacy

The purpose of this section was aimed to explore the respondents opinion towards the role of national culture on privacy. The section consists of three statements in the UAE culture, and they are society encouraging sharing of personal information, national culture has influence employees privacy practices and how it is normal in the UAE culture to pass on your personal information.

Section G: Employees' Perceived benefits

The purpose of this section was aimed to explore the respondents' opinion towards the perceived benefits of passing information. The section consists of five statements, including statements about being happy to pass information to other organisation for financial benefit, willing to pass information to other organisations for moral benefit, not happy to pass information for future benefit, and happy to pass private information to the public media for public image.

Section H: Subjective Norms

The purpose of this section was aimed to explore the respondents opinions towards the role of subjective norms on the individuals' behaviour towards privacy. The section consists of four statements on subjective norms including statements on sharing information with family, sharing personal information with colleagues, sharing personal information with a line manager and sharing information with a tribe/national member.

Section I: Employees' Attitude and Privacy Behaviour

The purpose of this section was aimed to explore the respondents' attitudes and privacy behaviours. This is needed to identify whether the attitude of the employees influences the employees' behaviour in the organisation. The section consists of three statements on attitudes including employees' value of privacy and how this has an influence on their behaviour towards privacy, employees' behaviour towards privacy influenced by their personal understanding of privacy, and employees' behaviour

towards privacy influenced by the awareness of the importance of private information on the organisations image.

Section J: Subjective Norms and Behaviour Intention

The purpose of this section was aimed to explore the respondents' opinions towards the role of subjective norms on individuals' behaviour and intentions towards privacy. This is needed to test whether the subjective norms are influencing intentional behaviour by the employee. The section consists of three statements on subjective norms including statements on subjective norms and the employees' behaviour intentions, including intent to share information with family, intent exchange information with colleagues and intent to share information with a line manager.

Section K: Organisation Culture and Employees' Behavioural Intention

The purpose of this section was aimed to explore the respondents' opinions towards the role of the organisation's culture on individuals' behaviour intentions towards privacy. This is needed to test whether the organisation's culture is influencing intention-behaviour of the employee. The section consists of four statements on the organisation's culture and behaviour which the employee has towards privacy. It includes statements on organisational norms influencing employees' behavioural intentions, organisation's communication systems has influenced employees' privacy behavioural intentions, trust between the employees and the management has influenced employees' privacy behavioural intentions, and trust among the employees has influenced employees' privacy behavioural intentions.

Section L: Open Question: Add any further information regarding of privacy at Abu <u>Dhabi Education Council</u>

The purpose of this section was to give the respondents a chance to express their own views on any points that have not been covered, or that the researcher is not aware of on the questionnaire.

4.3.1.2 Questionnaire Distribution

The questionnaire was distributed to all Abu Dhabi Education Council employees who were considered carefully by the researcher and the organisation's senior management due to the organisation policy, reliability of the data and confidentiality of the responses. The questionnaire distribution strategy includes the following:

- The questionnaire was prepared in two languages, English and Arabic, to
 give the respondents a selection of which language version he/she was
 comfortable with due to a large number of English speakers in the
 organisation.
- The questionnaire distributed electronically using the organisation's internal communication system.
- Email reminders were sent to the respondents through the organisation's communication system to encourage them to participate in the survey.

4.3.2 Qualitative Data: Interviews

One of the main objectives of the research is to explore and identify employees' perceptions, understandings and awareness' of privacy at their workplace and the main issues related to it. This requires obtaining in-depth data and information to gain insights into the current privacy situation of an organisation. Interviews are needed to enhance the main outcomes of the quantitative data. This data was collected through face-to-face interviews with the principal personnel of the organisation.

<u>Face-to-Face Interviews</u>

Face-to-face interviews provide visual interaction components between the researcher and the interviewee, unlike telephone interviews (May 2011). This type of information is important because of the nature of the project's aims and objectives, which require exploration into the interviewees' perceptions, feelings and opinions.

Face-to-face interviews with key personnel of Abu Dhabi Education Council were carried out in order to explore and identify employees' perceptions of privacy and the main factors influencing their behaviours regarding privacy. The number of the interviews, participants and justification for selecting the participants presented and discussed in section 4.4 and Table 4-2. Face-to-face interviews can be used to explore an interviewee's perception and attitude regarding a particular issue based on the interviewees' experience, knowledge and understanding of that issue, which is difficult to obtain through questionnaires (Mcqueen and Knussen 2002). To ensure that data and information that would achieve the goals of the interview are obtained, the interviewer must be skilled. This is due to the need to interact directly with interviewees and efficiently manage and control the interview process.

The research designed semi-structured interviews to discuss and explore the research topics, (see Appendix E). Questions are designed that reflect the research topics and ensure that the interviewees' answers were based on their experience, knowledge and understanding of the topic in question. The research was non-intrusive to encourage the interviewees to explore their perceptions, attitudes and opinions towards the research topics. Some of the interviews undertook in English language and some in Arabic based on the interviewees language competence. Interviews in Arabic language transcripts translated to English and have the scripts available in both languages.

Interview Structure

Section A: Main Issues and Problems

This section's main purpose is to discuss in depth the main issues and problems of privacy at their workplace and in a society based on the interviewees' experience and knowledge. This is needed to get understanding and identify the privacy issues.

Section B: Employees' Perception towards Privacy

The main purpose of this section is to discuss at depth the employees' privacy perception in order to understand and explain their behaviour towards privacy. This is needed to provide a qualitative data statement to support the main outcomes of the research.

Section C: Employees' Perception towards Different Types of Information

The main purpose of this section is to discuss in depth the employees' perception towards the types of information considered as private information. The discussion aims to find out which types of information are sensitive when disclosed to third parties. This is needed to be cooperated with the focus groups to provide a final list of the kinds of information considered as private and sensitive information. This is necessary for developing privacy policies and laws in the UAE in general, and Abu Dhabi Emirate in particular.

Section D: Definitions and Understanding of Privacy from the UAE Perception

This section's main purpose is to discuss in depth the definition and understanding of the term privacy from the UAE perception. This is needed to explore the different opinions and attitudes towards defining and understanding privacy and their perception of the term privacy. This is needed for a lack of generic agreement in the term privacy worldwide, and there is no precise definition of privacy in Arabic language dictionary.

Section E: Main Constructs for Employees' Attitudes and Behaviour towards Privacy

This section's main purpose is to discuss the employees' attitude towards privacy in order to explore the main factors influencing the employees' behaviour. This is needed to develop and design conceptual models for the employees' behaviour towards other employees. The main outcome of this section is also needed to help in explaining the main outcomes of the quantitative data and the factors influencing individual behaviour towards privacy.

Section F: Open Question: Add any Other Issues of Privacy not covered in the interview

The main aim of this section is to give the interviewee the opportunity to add any comments or issues of privacy that have not been covered and discussed throughout the interviews.

Interview Strategy

The main strategy adopted in this research can be summarised in the following statements:

- Interviews carried out at the interviewee's appropriate date and time.
- Interviews conducted in a comfortable place at the organisation with no interruption to the interview process.
- Recording the interview based on the interviewees' preference, writing the responses or audio recording the interview.

4.3.3 Qualitative Data: Focus Groups

The main goal of the focus groups was to make use of group dynamics through interactions of small groups who were brought together by the researcher to discuss and explore their perceptions, attitudes, opinions and feelings about a particular topic (Denscombe 2007). A number of focus groups carried out participants and justification for selecting the participant which are shown in section 4.4 and Table 4-3. Focus

groups for the three locations of the Abu Dhabi Education Council have been designed (see Appendix F) to explore several research issues through interactions, knowledge and information sharing with groups of employees. It also provides opinions and attitudes of several interviewees.

The main driver for selecting focus groups in this research includes:

- 1. Highlights the interviewees' attitudes and understandings (Kitzinger 1994).
- Encourage a variety of communication methods to explore and enhance the quality and quantity of the data and information needed in the research, (Kitzinger 1994).
- 3. Help identify the groups' values and norms (Kitzinger 1994).

The main strategy of the focus group includes the following:

- 1. The group discussions are based on the interviewees' experience and understanding of privacy at their workplace.
- 2. The discussions emphasise the main research topics through appropriate and effective interactions within groups.
- 3. The researcher's role in the debate process is mainly to facilitate and support appropriate interactions regarding the discussions of the topics.

4.4 Research Population and Sample

The research is adopting a survey strategy through the use of a questionnaire to investigate employees' behaviour regarding privacy. The procedure needs to select the number of employees who need to be interviewed and participate in the questionnaire. These numbers need to be selected from a sample, which is defined as, "A sample is a portion or a subset of a larger group called population" (Fink 1995). It is important to select the sample characteristics from the same as those of the research population (May 2011). The research is focusing on the UAE public sector, and the education sector has been selected by the UAE education authority. The survey carried out in Abu Dhabi Emirate focusing on ADEC, Abu Dhabi Education Council, and the survey includes three regional offices: Abu Dhabi regional office, Al-Ain regional office and Western Region Regional Office. The research sample size was

selected from the population of the ADEC and is shown in Table 4-1 below. The size of the sample has been checked to ensure that variability within the sample could be measured and the findings could be used to estimate the general characteristics of the population (May 2011).

Table 4-1 shows the main research sample questionnaire. The survey has included all the employees of the three most important offices of Abu Dhabi Educational Council, namely Abu Dhabi regional office, Al-Ain regional office and Western Region Regional Office. The total number of the distrusted questionnaires for the three regional offices is 650. The number represents the total number of the employees in the Education Council. The Table indicated that the vast majority of participants and responses are from Abu Dhabi regional office. This is mainly due to the fact that this office is the largest office of ADEC and has majority of the employees.

Table 4-1: Questionnaire research sample

	Questionnaire	Justifications
Abu Dhabi Regional Office	100% of the population (504 participants Employees) 40.55% respondents (205 Respondents)	 All three regional offices employees have been selected to participate in the survey. This is needed to provide a significant number of responses to help to predict the issues raised in each question.
Al-Ain Regional Office	100% of the population (126 participants Employees) 27.77% respondents (35 Respondents)	 The questionnaire distribution was conducted by the organisation information system with help and support of the research office of Abu Dhabi Education Council, Use of questionnaire relatively cheap to conduct and with reasonable time, relatively short period.
Western Region Regional Office	100% of the population (20 participants Employees) 25% respondents (5 Respondents)	

Table 4-2 shows the main research sample for face-to-face interviews. The total number of the interviewees is 18, six interviewees from each educational council office. The interviews include senior managers, managers and administrators. The table also provides justifications for the selection.

Table 4-2: Face-to-face interview research sample

	Face-to-face Interviews	Justifications
Abu Dhabi Regional Office	6 1 Senior Manager 2 Manager 3 Administrators	Abu Dhabi large educational office in Abu Dhabi Emirate with the highest number of employees. Al-Ain regional and Western Regional offices are included to cover all the educational offices
Al-Ain Regional Office	6 1 Senior Manager 2 Manager 3 Administrators)	 A senior manager has been selected to explore their opinion and experience at senior levels with privacy issues. Two Manager opinions and attitudes and perceptions are needed as he/she manage groups of employees. Therefore, their
Western Region Regional Office	6 1 Senior Manager 2 Manager 3 Administrators	 opinions based on their observation and role helps to provide insight into the privacy issues. Three administrators from each off have been selected to represent the employees in the survey. Administrators opinion is
Total	18	needed as they present the majority of the employees' in the council

Table 4-3 overleaf shows the main research sample for focus groups conducted in this research. The total number of the focus groups is 3. One focus group has been carried out in each educational council office. The focus groups participants for each one are between 4-8 participants. The participants are selected from key personnel in the organisation. This includes senior managers, managers and administrators with a minimum experience of five years in the organisation.

Table 4-3: Focus group research sample and justifications

	Focus Group	Justifications
Abu Dhabi Regional Office	1	• The three offices of Abu Dhabi Educational Council have been selected for the focus group to have the opinions of the three regional offices on the research issue.
	(6 key employees)	 Senior managers have been selected to participate in the focus group discussions to reflect the senior managers opinions in the research issues raised in the focus group
Al-Ain Regional	1	discussions.
Office	(5 key employees)	 Manager opinion and attitude and perception are needed in the discussions the research issues as they manage and observe employees behaviour through their job responsibility to manage a group of the employees.
Western Region Regional Office	(4 key employees)	 Administrators have been asked to participate in the focus group discussions because they represent the majority of the organisation employees. They have selected based on their experience,
Total	3 focus groups 15 participants	

4.5 Reliability and validity

The reliability and validity of the collected data need to be carefully assessed. This is mainly due to their role and impact on the main outcomes of the research.

There are several definition and description of reliability in the literature, Carmines and Zeller (1979: p.11) defined reliability as the "extent to which an experiment, test, or any measuring procedure yields the same results on repeated trials". Oppenheim (2000: p.144) referred to reliability as "the purity and consistency of a measure." On the other hand, the validity defined as "the degree that a particular indicator measure what it is supposed to measure rather than reflecting some other phenomenon" (Carmines and Zeller 1979: p.16).

4.6 Pilot Study

The pilot study, pre-test, the designed questionnaire, focus group and the interviews have been conducted before they are conducting the survey in the research sample. This is needed to validate and assess the reliability of the interviews, focus groups and designed questionnaires and the questions constructed. The pilot study assists the research in understanding the main concerns of the questionnaire's participants and how they interpret particular questions (May 2011).

Oppenheim (2000) stated that every research survey needs to be checked and tested beforehand to ensure it works as intended and stated:

"Questionnaires do not emerge fully; fledged; they have to be created or adapted, fashioned and developed to maturity after many abortive test flights. In fact, every aspect of a survey has to be tried out beforehand to make sure that it works as intended."

A small group of the UAE employees were selected to participate in the pilot study for this research. The pilot study participants have been chosen based on certain criteria to ensure the validity of the pilot study. The pilot study data was analysed and assessed to ensure the main outcomes of the analysis are serving the main goals of the research and that it works as intended.

Table 4-4 overleaf shows the pilot study of participants to test the questionnaire, face-to-face interviews and the focus groups. The participants are from the Abu Dhabi Educational Council.

Table 4-4: Pilot study participants

	Participants	Justifications
Questionnaire	5 Participants Abu Dhabi Educational Council	
	Employees	 To check the design of the questionnaire, focus group and the interview.
Interviews	2 Participants Abu Dhabi Educational Council Employees	 To check the structure of the questionnaire, focus group and the interview To check wording of the
	Employees	questions, and activities used in the questionnaire, focus group and the interview,
Focus group	1 Focus group 5	 To check the analysis of the pilot data it works as intended, serving the research aim and objectives.
	Participants Abu Dhabi Educational Council Employees	

4.7 Data Analysis

The collected data are in two forms, quantitative and qualitative. In the quantitative data analysis, the approaches and tools used were based on the nature of the data. The quantitative data is a large volume and needs statistical analysis to analyse relationships between the variables. The SPSS software package has been used to analyse the quantitative data, i.e. questionnaire analysis. The SPSS is a powerful software package with strong statistical functions to use. The package also provides data in numerical tables and graphs. Qualitative data are in the statement and comment forms; it needs to be analysed with a different approach and tool. NVIVO has been used as a tool for analysing the qualitative data. NVIVO is a powerful software package with several options available to the researcher in order to link the participants' statements with the responses. It can also link key words used by all the

participants. The package can also provide graphical models of the issues and link them with associated keywords.

4.8 Summary

Chapter four has presented, identified and outlined the research methodology with justification. The chapter has also provided the data collection methods used in gathering the research data. The quantitative data analysis used statistical techniques and tools as analysed in the chapter. The SPSS software package has been used in the analysing of the quantitative data due to its capability and powerfulness in analysing such data. The approach and the tool used in analysing qualitative data were also presented in the chapter. The NVIVO software package has been used in the analysing of the qualitative data due to its capability and powerfulness in analysing such data. The next chapter discusses the analysis of the data elicited from the qualitative data, interviews and focus groups analysis.

Chapter Five: Qualitative Data Analysis: Opinions, Perceptions and Attitudes towards Privacy in the UAE

5.0 Introduction

This chapter presented an analysis of the qualitative data collected from the field research. The analysis is based on the use of NVIVO and using direct statements of the interviewees and the focus groups to support the analysis argument. The qualitative data is needed to explore at depth the current situation of privacy in the UAE and the main factors influencing the employee's attitude and behaviours towards privacy. The qualitative analysis is used in conjunction with the quantitative data to support and argue the research's key results.

5.1 Participants Background

Table 5-1 shows the interviews and focus groups participants' backgrounds of the three regional offices of Abu Dhabi Education Council. Total of 18 interviewees participated in the face-to-face interviews and three focus groups. The qualitative data aims to explore opinions, perceptions and understandings of the privacies based on key personnel's experience and knowledge of within the organisation.

Table 5-1: Interviews and focus groups participants' background

Location	Face-to-Face Interviews	Focus Group
Abu Dhabi Regional Office	6	1
	1 Senior Manager	(6 key employees)
	2 Manager	
	3 Administrators	
Al-Ain Regional Office	6	1
	1 Senior Manager	(5 key employees)
	2 Manager	
	3 Administrators	
Western Region Regional Office	6	1
	1 Senior Manager	(4 key employees)
	2 Manager	
	3 Administrators	
Total	18	3 focus groups
		15 participants

5.2 Definitions and the Understanding of Privacy from the UAE Perspective

5.2.1 Definition of Privacy

One of the main objectives of this research was to define privacy. Therefore, part of the interviews and the focus groups focused on the employees' personal definition of privacy. The research identifies the following:

- 1. There is no general agreement on a generic definition of privacy.
- 2. The definition of the privacy reflected the employees' position.
- 3. The organisation has fallen short in providing an appropriate definition of its documents to help and enhance the employees' privacy and understanding.

The vast majority of the interviewees stressed and agreed that privacy is personal information and should not be shared with a third party. One of the interviewees' stated:

"Information belongs to me and shouldn't be shared with anyone without my permission."

Interviewee A

One of the definitions explored was protecting personal information from any abuse to the value and integrity of the information. One of the interviewees defined privacy from this perspective by stating,

"To keep the personal information away from people who are trying to abuse it."

Interviewee B

The main surprise in the employees' definitions is the lack of recognising the use of individual rights toward his or her own information. Only one of the managers stated that privacy is an individual's human right. The interviewee stated:

"I defined privacy as a human right."

Interviewee C

One of the focus groups defined privacy from a different angle. They defined privacy as an individual's space that individuals can interact with his or her environment privately without any influence from any intruder. The focus group argued that any definition should define clearly the individual's space to practice his/her private life. The focus group defined privacy with strong support of the statement:

"Privacy is to have your space when practising a habit or having a private area for yourself."

Focus Group B

Another interviewee defined privacy close to the above definition. The definition is based on setting up certain boundaries for individuals that nobody has the right to intrude without the permission of the individual. This definition and understanding of privacy are close to the above definition. There is a similarity in defining space and surrounding boundaries. In principle, they lead to the same meaning and explanation of privacy.

"I see privacy such as a boundary for the information which surrounds the person, and nobody needs to be in this boundary except the one who has had permission from the person in question. Example; the door of the office which gives a person feelings of privacy, anyone who comes through this door has had permission to come."

Interviewee D

The other definition explored in one of the focus groups stressed on protecting personal information from the general public. The focus group discussed and agreed that privacy is simply not exposing personal information to the public, such as newspapers and social media. The focus group agreed on a definition of privacy as;

"Privacy is personal information that wouldn't pass the information in public or share it."

Focus Group A

The other definition explored by one of the interviewees was focused on sharing personal information. The group discussion rejected any form of sharing information among the employees regarding personal information. The interviewee defined privacy by stating:

"Any information related to the person should not be allowed to be shared with others without his permission."

Interviewee E

A non-national definition was focused on individual control of his or her personal information. The non-national defined privacy as based on individual control and protecting this control by certain rules within the organisation. They argued that nobody has the right to control such information without the individual's permission. One of the interviewees stated a privacy definition from an information point of view as:

"Information should be held by me along with the control, and no one has the right to pass it on or to do something with it without my permission."

Interviewee F

Other definitions explored and argued in one of the focus groups was based on respecting others personal information.

"Privacy that means the respect of the other people's information and life."

Focus Group C

5.3 Main Issues and Problems of Privacy in the UAE

It is critical to identify and analyse the main issues and problems of privacy in the organisation in order to develop action plans to overcome such problems. One of the main tools used in this research is to identify privacy issues through in-depth face-to-face interviews and focus groups with key personnel.

Lack of Awareness towards privacy

The first issue of privacy is a lack of awareness towards the importance of privacy among the employees. This lack of awareness is due to various factors explored and discussed in the interviews and the focus groups.

"Lack of employees' awareness of the important consequences of a leak or breach of other's personal information."

Interviewee A

One of the interviewees' expressed strong concerns regarding employees' awareness towards the privacy behaviour in the organisation. He explained the awareness problem by arguing that employees be giving personal documents and record files to other colleagues to take to other departments. Employees were asked about such behaviour and the common reply usually was:

"I am not aware of such handling of personal information is breaching individual privacy."

Interviewee D

One of the important points raised in the interviewees is the lack of some of the expatriate awareness of the UAE culture, particularly towards females. One of the interviewees explored this point with an example. The interviewee stated at the beginning by saying:

"No awareness of the UAE culture towards females among some of the expatriates' employees played a role in the privacy breach."

Interviewee G

The interviewees explained the above statement with a good example that happened to her during her first employment in the organisation when she asked to explain the above statement with examples if possible.

"Let me explain to you the case that happened to me to clarify my statement that you wished to explain and give you an example. One of the UAE female colleagues gave me her mobile number in case I needed help to settle in the department and in the Emirates. Few months later I gave the number to one of my male colleagues who are normal in my background culture. Passing the female number created a massive problem between my colleagues. The lady was critical and angrily tried to establish how he got her mobile number. I was brave enough and honest and told her that I am the one who gave him your number. apologised for my personal behaviour and I promised I would not do it again. I have used the story with any expatriate in the country to make sure that they will not fall into the same mistake."

Interviewee K

Besides the lack of awareness towards the importance of privacy, lack of awareness towards the consequences of breaching privacy and the penalty from unauthorised behaviour on disclosing private information explored as a critical problem. The employees are not aware of any policy or guidelines of any disclosing information within the organisation or to other organisations. One of the interviewees explored this issue by stating:

"Not aware of the importance of privacy and penalties of breaching privacy."

Interviewee D

Document Printing

It seems documents printing is one of the biggest problems facing the organisations privacy. Employee's handling and attitudes towards printing were explored in some depth, as the main problem facing privacy within the organisation. Typically the most common attitude and behaviour regarding privacy are leaving printed documents containing personal and private information on the printer or the desks of the employees. Several interviewees explored this issue and stated:

"Some official letter for other staff left it on desks or printers."

Interviewee G

"Personal documents left over the printer which contains personal information or private information and files and documents on desks left carelessly."

Interviewee H

This issue has also been explored and discussed in some depth in focus groups. One of the focus groups statement's on this issue was:

"Left papers in the printer. Why it's important is because forgetting papers on the printer or pending printers will lead to leaks and invade others private information, such as personal information or management decisions by the employee and knows what the consequence of the disclosure of such information."

Focus group A

One of the employees was very concerned towards the issue of the printing of personal documents in open space. He gave the following example to support his strong argument:

"One of the employees in my department let disciplinary outcomes of one of the employees in the printer. Several employees read the outcomes and the panel decision spread in the organisation quickly. This action has led to the employee stress and asked for legal action as the story destroyed his creditability and integrity."

Interviewee B

Access to the employees' offices and employees' workplace boundaries

Leaving the office and filing room unattended leaves private information and documents exposed for unauthorised access to the rooms and the information. This had caused serious privacy problems before, although the organisations policy and guidelines stated no one should leave offices or filing rooms unsupervised or unattended. This issue has been explored and discussed several times in face-to-face interviews and focus groups. One of the interviewees stated this:

"Filing rooms are sometimes left open during working hours."

Interviewee H

This issue has also been explored and discussed in some depth in focus groups. One of the focus groups statements on this issue was:

"Open environments lead to easy access to data or reports that are not necessarily needed to be shared, the organisation could arrange a guideline and awareness about papers that should be covered properly."

Focus group A

Lack of Clear Privacy Policy and Procedure

Lack of clear privacy policies at the national and organisational level was explored as one of the main problems for managing privacy effectively. Lack of such policies has led to confusion among the employees from the best practice that is needed for privacy. At a national level, the participants still feel that there is a need for clearer and specific details on how to deal with privacy issues. The participants felt that the time is right for establishing such policies due to the pressure from a legal point of view. From the organisational point of view, the organisation has failed to clarify its own policy and procedures on privacy.

"Management need to support privacy by making a clear procedure and policy for dealing with private information in the organisation."

Interviewee E

Lack of clear and effective national policy in privacy is explored in several interviews as one of the main issues of privacy in the organisation. One of the interviewees stated:

"I think the lack of clear national policy towards privacy played a role in the organisations lack of understanding in the importance of privacy."

Interviewee B

The focus groups discussed the lack of organisations clear and effective privacy policy as one of the main issues and challenges to the organisations. One of the focus groups strongly agree on this issue by stating:

"Lack of clear policy within the organisation is the main issue of privacy in the organisation."

Focus Group C

Lack of Appropriate Training

In the three focus groups, lack of appropriate training in privacy is explored as the current main issue of privacy in the organisation. One of the focus groups stated this with the following statement:

"One of the issues is how to handle the personal filing properly and to keep the personal filing unreachable for any person or unauthorised person."

Focus Group C

One of the comments regarding the lack of training in privacy stated that employees lack training and protocol in privacy especially the new joiner, comments stated as:

"The lack of training and protocol for new and inexperienced employees in this area is of serious concern."

Questionnaire Responder 15

Lack of appropriate training in privacy is the one of the main reasons for employees breaching privacy. One of the interviewees' stated:

"Lack of appropriate training in privacy is the main reason for the employees breaching privacy. There is a need to establish effective training and education programmes in privacy within the organisation."

Interviewee B

Several focus groups stated lack of training in privacy and it is critical to promote and enhance employees privacy awareness and understanding of the organisations employees. One focus group stated:

"Training is critical to promote and enhance employees" privacy awareness and understanding."

Focus Group C

NVIVO coding analysis shows the three most important issues contributing to the employees' behaviour towards privacy in the organisation. The issues include lack of training, lack of awareness and lead to difficulties of dealing with personal information; Figure 5-1 explores the importance and the needs of clear and effective training programmes to enhance employees' awareness, understanding and knowledge of privacy.

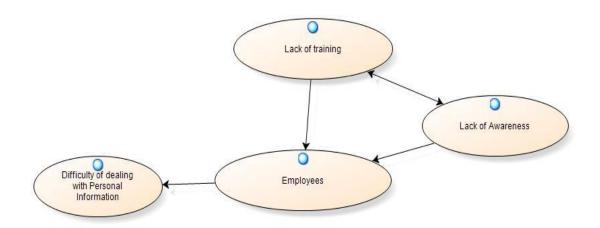


Figure 5-1: Employees privacy issues: NVIVO coding

Human Error

Human error has been explored in the focus groups as one of the common privacy issues in the organisation. The typical error is sending emails containing private information to the wrong address.

"Transfer and leaks of the information before any official announcement is an issue of privacy because it will allow others to know information that they are not required to know, an example would be an email that is not meant for you and you receive it by mistake so you are not allowed to distribute."

Focus Group B

The other common human error is storing private documents in wrong places or losing private information through dealing with the information from the system. One of the employees argued on this issue by stating:

"The way of dealing with personal documents and file storing leads to loss of the file."

Interviewee C

In one of the interviews, one of the interviewees expressed human errors as one of the main issues, due to the lack of training and created a problem within the organisation. The employee was asked to give an example to support his argument. He stated:

"In one occasion, one of the employees was emailed by mistake all the organisations employees and executive manager's personal information, including his current wage and the promotion he has got. This has created several problems within the organisation as some employees believed his wage is unfair compared with his. This created a problem for the management and the employees."

Interviewee D

Use of Technology

The development in technology has made accessing, storing, and transferring information easier and faster. Such a development was explored as the main threat for abusing private information from misusing the information system and technology.

"Easiness of transferring the data in a different way, such as emails, USBs and CDs which will make a problem if it's lost."

Interviewee E

Figure 5-2 shows the NVIVO coding analysis for sending and receiving information. The figure indicated personal information disclosed by human error. Such a mistake can lead in sending and receiving the information through emails as disclosing personal information.

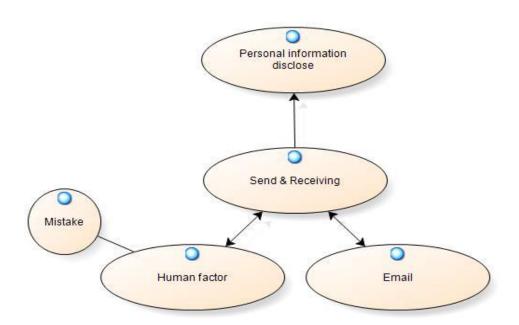


Figure 5-2: Role of human factor in personal information disclosure: NVIVO coding

Employees Working Culture

Sharing passwords

Focus groups explored Employee's working culture as one of the critical issues for the organisations privacy. One of the common working cultures, from a privacy point of view, is sharing passwords among the employees. It has become a norm that employees pass their passwords to their colleagues. Some employees, especially the UAE National argued that it is embarrassing and not right to not trust colleagues. Some of the participants went further by arguing sharing passwords can facilities and help with improving working efficiency and productivity. The main drivers for such arguments are that the employees feel that the vast majority of the information is organisation related. Then the employees asked about sharing passwords of the information related to their families or any females of the family. The answer was clear; there should be no sharing of such information. One of the focus groups stated:

"Shared passwords creates an issue because it will lead to mis-used emails, servers and information even though we have to change our password every month, but still employees share their passwords."

Focus Group B

One of the interviewees was strongly arguing that sharing passwords be a good working practice. He argued that sharing passwords with a colleague are part of respect, loyalty, and trust of the colleague and there was nothing wrong with such sharing. He stated in this issue:

"Sharing passwords among the employees expressed a good practice in showing loyalty to colleagues."

Interviewee E

The interviewee extends his argument to the support of sharing passwords by stating:

"I consider my colleagues as loyal to the organisation as myself and keen to protect the personal information as me. The organisation trusts them in employing them. Therefore, I trust them with my password."

Interviewee B

Social interaction

Social interaction during break time has become a place to discuss employees' private information. In social interaction, trust can be built up between employees and this may lead to discuss specific information. The social interaction has become the main problem of the privacy in the organisation. One of the focus groups stressed this issue by stating:

"Open conversations. Why it's an issue is because it exposes information which should be held in a private area. It exposes private information that should not be shared in public, such as a person's salary or benefits, and the way we need to handle this issue by making aware the employees."

Focus Group A

Updating personal files in an open space

One of the criticisms to the organisations employees' behaviour and working culture is updating personal files in open space. There is no concern or clear guidelines to manage such information in open space.

"I can highlight is update personal files in an open space which leads to a disclosure of information, especially if it's seen by unauthorised persons since it's an open area."

Interviewee G

Dealing with Visitors

Visitors to the organisation currently can enter any office without any restrictions. It is part of the organisations culture that the visitor or the organisations customers follow paperwork processes by himself/herself.

"Letting visitor clients enter to the workplace, especially our office."

Interviewee G

Figure 5-3 shows the NVIVO coding analysis for the main factors for personal information disclosures. The figure indicated that the main factors for personal information disclosures included the current open printing area (can be accessed and used by several departments employees), the design of workspaces (the way the employee's desks and department design is not appropriate), and organisation's visitors and customers. These factors represent the organisation working environment and culture.

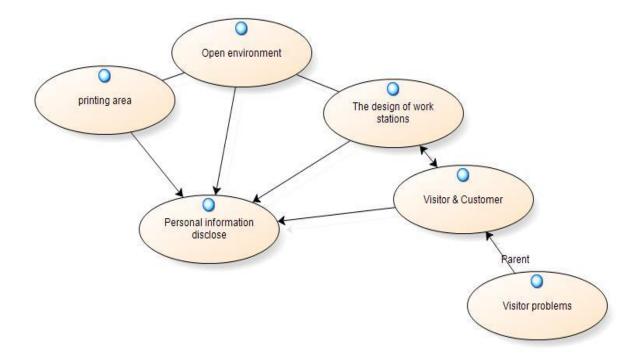


Figure 5-3: Main factors for personal information disclosed: NVIVO coding

5.4 Employees' Perception towards Importance of Privacy

One of the key findings of the employees' perception of privacy is the diversity of perception that differs from one employee to another. This finding has been clearly identified and stated in the focus groups as well as in the face-to-face interviews.

"It depends on person to person and his understanding of privacy."

Interviewee H

"It's different from person to person and what is their his/her understating of the term privacy and what they think about it."

Focus Group B

One of the comments regarding the perception towards privacy stated that perception of privacy is subjective based on the nature of employee's daily responsibilities and role within the organisation. Employees, who deal with private information such as Human Resources (HR) Department, are more aware of privacy compared with other departments within the organisation.

"Perception of privacy is different from one department in the organisation from another based on the values of information to the department, and the working environment and specialisation of the department."

Questionnaire responder 6

The background of the employees also has a role in the perception of privacy. It has been found that employees from the Western countries have the appropriate perception and understanding of the role of privacy in organisations while the UAE employees are the least aware and understanding of privacy.

"The perception of "privacy rights" is either largely non-existent or very different from the Western view. Western views and practices regarding privacy rights are litigious and highly regulated in all aspects. In the UAE, this does seem to be the case across the board, although it isn't in some cases."

Questionnaire responder 1

"Privacy is important because it's related to myself, of integrity and value."

Interviewee F

Individual employees' culture is a critical factor in the individual perception of privacy. One of the focus groups discussed in some details the role of national culture in developing individual's attitudes and behaviours towards privacy. They argued, as an example, the UAE national by default considered any information regarding their adult females personal, or other employee's adult female's information cannot be revealed and disclosed as it's against the individual culture. This reflects the UAE national culture towards females.

"We believe as a group; individual national culture is the main factor for individual perception towards private information. The UAE female personal information cannot be disclosed due to cultural factors."

Focus Group A

The value of private information was explored as an important factor in individual attitude and behaviour towards privacy. The Value of the information from subjective points of view is explored as the main drive for individual attitude and behaviour towards privacy. One of the interviewees stressed that the main problem among some of the employees is that they do not value privacy from individual and organisational perspectives due to lack of understanding and awareness of privacy and its policy within the organisation and society.

"They don't value privacy however it depends on the person's understanding."

Interviewee C

The focus groups and the interviews indicated that the senior managers and high-rank employees are more aware and understanding of privacy compared with other employees. This may be due to educational backgrounds and work experience. For example, the managers stressed in the focus group discussions and the interviews that privacy is an employee's right and the organisation needs to respect this privacy and do whatever it can do in its power to ensure employee's privacy. It was evident from both the focus groups discussions and the interviews that the individual employees are the owners of his/her personal information and not the organisation. Therefore, the organisation has a responsibility to protect the personal information throughout the organisations systems and operations. Several focus groups stated this clearly:

"It's highly important and it's a personal right to have and form our point view that the employee is the owner of the information."

Focus Group C

"The importance of privacy is highly needed from both the human rights and personal rights due to the great impact it will reflect on the workplace where the employees and organisations are equal owners of the information and should respect to which limit it is acceptable to expose data, even when the employee leaves the company."

Focus group A

One of the impacts of privacy behaviour in the organisation is trust between the employees and the organisation management and confidence among the employees themselves. One of the focus groups discussed and argued that trust among the employees and trust between the employees and their managers be critical to the organisations performance as well as on the individual's performance. They indicated employees' needs to trust their management on dealing with information professionally through establishing clear and effective privacy policies. They need to trust other colleagues on dealing with their personal information. Any lack of trust among the employees can lead to negative impact on individual performance. One of the arguments that were stated in the interview was:

"Lack of trust between us as the organisation and employees and management could lead to disrespect to management decisions, policies and procedures and this may lead to the disclosure of personal information."

Interviewee I

This issue is also explored and stated in one of the focus groups:

"Impact of the employee's perceptions will surely affect the company and employees by having trust and confidence from both sides due to the privacy provided."

Focus Group A

5.4.1 Importance of Privacy

The importance of privacy has been explored in some depth in the focus groups and the interviews in order to explore the employees understanding of privacy at their organisation. Almost all the interviewees and the focus group's participants stated that privacy is important. They stressed that the employees are aware of the importance of privacy at their workplace. One of the administrators, for example, stated clearly in the importance of the privacy:

"They are aware of the importance of privacy."

Interviewee A

One of the managers of the organisation stated that approximately 80% of the employees are aware of privacy. When he was asked to give percentages based on his personal experience and knowledge he stated:

"I can say 80 % are aware and value privacy."

Interviewee M

Other interviewees stated the same percentage, 80%; when he asked to give percentages of people who take care of privacy in their daily working activities He said:

"80% of the employees care about the privacy of the information."

Interviewee F

One of the interviewees went further by stating that privacy is important as it plays an important role in the individual employees' morality. He argued in some depth about the role of morality on the individual's performance and behaviour within the organisation:

"Very important, it needs to maintain it as it will affect the employee morally if it's disclosed."

Interviewee H

Action plan, clear policies and implementation of clear strategies are more important than just privacy publicity alone. One of the interviewees discussed in some depth that privacy is more than publicity. The interviewee argued clearly the needs for clear and effective action plans, such as clear policies in privacy and effective training programmes:

"The privacy is more than publicity."

Interviewee G

One of the main issues from the employee's understanding of a privacy point of view is the lack of clarity of privacy as a term from organisations. They are aware of the term in general but they had fallen short in explaining the term. One of the comments stated:

"The is a lack of clarity in the concept of privacy and its importance among the staff of the council."

Questionnaire responder 4

5.4.2 Employee's Privacy Rights: Individual Human Rights

HR employees were the most aware of employees' right to privacy. One of the employees stated clearly that every employee of the organisation has the right to privacy. The participant argued strongly that this needs to be the core component of the organisation HR practices. The participant stated:

"Every employee should have the right to privacy because it is a basic component of HR practices."

Questionnaire responder 13

Focus groups participants have been asked to provide two sentences of their perception of privacy. They have been asked to include the right of the individual and human right as part of their statements. From the responses of all the focus groups participants it clearly indicated that privacy is an individual's right to have private information, and the organisation needs to protect such information:

"No doubt, each employee of the organisation has a right towards his/her private information. No one should access such information without his or her consent. It is a human right and everybody should understand and respect such rights."

Focus Group A

One of the interviewees has also stressed clearly that the privacy is a human right and individuals have the right to control his or her private information. The interviewee has also stressed that no one has the right to disclose individual private information about any employee without clear consent from that person. The participant stated clearly:

"100% important and it's a human right to have and nobody needs to disclose any information about the person."

Interviewee D

Human rights have been indicated clearly in focus group statements. They loved national and international bodies such as the United Nations as they stressed the human right to have private information. They stressed organisations need to respect national and international bodies recognition of such rights through establishing clear policies and strategies to protect individual private life and information.

"It is a human right to have a private life and private information. National and international bodies have recognised such rights and the organisations need to comply to protect individual private information."

Focus Group B

Individual's right to manage and control his or her private information as part of a human right was stated clearly in one of the interviews. It has been defined as an organisational process to manage, control and protect individual private information. It reflects individual human rights to have such private information.

"Privacy is a process within the organisation to ensure individual employee rights to manage and control his or her information and reflects of human rights."

Interviewee N

5.4.3 Information Ownership: Organisation vs. Individual Employees

In the focus groups, the participants asked the top state, the owner of the information, to help understand the right of the information in the organisation from the UAE perspective. The vast majority of the participants of the focus groups as well as the interviewees argued in favour of individual employee rights. They argued strongly towards the need of the organisation's respect and such rights must not abuse rights by disclosing private information to a third party without consent of the information owner, the interviewee stated:

"Private information should always be owned and controlled by the individual. Organisations must not abuse such information."

Focus Group B

Other employees stated clearly that the sole owner of the information is the employee himself/herself and no one within the organisation has a right to share such information. The interviewee stated:

"The individual employee is the sole owner of his or her information; no one else should share of such right."

Interviewee B

One of the interviewees argued that the ownership of the information should be shared between the employees and the organisation. The main argument of the interviewee was:

"Organisations should share ownership of its employees in case of using such information in business advantages."

Interviewee K

Another interviewee had different opinions compared to others when he stressed that the organisation is the owner of the information once the employee is employed and signed proper contracts with the organisation. The interviewee argued that the information ownership should be the organisation as far as the organisation does not misuse or abuse of such information:

"Organisations should be the owner of information as long as disclosing any of this information has not been misused and abused in a way impacting the employees' moral, dignity and belief."

Interviewee M

5.5 Private Information from UAE Perspective

It is important and critical from this research perspective to identify types of information considered as private information from the UAE organisation perspective. This is needed in developing and establishing clear and effective privacy policies and to help the employees' understanding and awareness in dealing with private information. One of the principal purpose of the focus groups and face-to-face interviews is to identify types of information considered as private. Both focus groups and the interviewees identified several kinds of information considered as private information and argued that the organisation need to protect the integrity of such information. They were also asked to give the weight of the information and which information was the most critical for them after significant amounts of information were identified and discussed. Details of adult females were identified as the most critical personal information regarded by both focus groups and the interviewees. Adult female's personal details such as a phone number and her picture came out on the top of the list which was considered the most private information. This reflects the role of culture on the employees' opinions towards private information. Non-UAE, particularly the Western employees, were less enthusiastic towards female's personal details. The UAE participants argued strongly towards the importance and the need to protect their females' personal details. One of the employees analysed such responsibility as a moral responsibility.

"The organisation has a moral responsibility to protect our privacy, particularly our adult females' details."

Interviewee A

On the other hand, the Western participant considered his wage and personal contract with the organisation as private. This reflects the individual's life experience and cultural background. The Western participant on one of the focus groups commented on the adult females' information by stating:

"I do understand why the vast majority of my colleagues considered adult females as sensitive for them due to cultural issues. For me this is not the case, I considered my personal contract and salary as private information."

Focus Group B

What is surprising of the private information, males' private information, such as their mobile number or salary or promotion, were least sensitive to the employees. This may reflect the role of culture on the opinions and attitudes towards private information. Table 5-2 overleaf shows a list of types of information considered as private information based on the focus groups and the face-to-face interviews. The table demonstrates the importance (weight of each type of information) that the females' personal information came in at the top of the list. The first four top types of information on the list were clearly the adult females' private information. It is not surprising the adult female detail-picture came in the top of the list due to the UAE culture. Education background-qualification, employment history, loan details, job role and responsibilities came at the bottom end of the table. These are not considered sensitive information in the UAE culture compared with females as types of private information.

Table 5-2: Types of private information list

Rank	Types of private information	
1	Adult female personal detail-picture	
2	Adult female personal detail-mobile number	
3	Adult female personal detail-work place	
4	Adult female personal detail-marital status	
5	Spouse name	
6	Social media account	
7	Passport details-copy	
8	Children details	
9	Warning letters	
10	Salary	
11	Job grade	
12	Medical record	
13	Male-picture	
14	Marital status	
15	Private mobile number	
16	Promotion	
17	Home address	
18	Performance Appraisal	
19	E-mail address	
20	Personal office address	
21	Education background -qualifications	
22	Employment history	
23	Loan details	
24	Job role and responsibilities	

5.6 Role of culture on organisations

This section presents and discusses roles of national and organisational culture on privacy behaviour.

5.6.1 Role of Organisation Culture on Privacy

Focus groups divided into groups of two and three were asked to provide a list of five organisation culture practices they considered have an impact positively or negatively on the employees' privacy behaviour. The groups were then requested to re-arrange the list based on its sensitivity and importance from their opinion and points of view. Top of the list of the organisation culture practices considered to have an adverse impact on the employees' privacy behaviour is sharing passwords among the employees. The general attitude when this issue was discussed openly in focus groups is that every employee has a care for the organisation and they have trust in each other not to abuse the system. The second on the list is to make it common and normal, among the organisation's employees, to have open discussions on organisational issues openly. There have been several occasions when discussions of personal issues in an open discussion has led to staff stress and a decrease in morale. The table indicated that sharing passwords among the employees are on the top of the list of organisation practice considered to have a negative impact on the employees' privacy behaviour, followed by the open discussions on private information. Sharing the food session place is affecting females' privacy when having their lunches came at the bottom of the table. Initially, the employees argued that sharing the food session expose females to interact with other employees and this may lead for the female to leave/forget her personal mobile.

Table 5-3 List of organisation culture practice considered have negative impact on the employees' privacy behaviour

1	Sharing passwords	"Sharing passwords between the team members could affect the work negatively.", (Focus Group C)
2	Open discussions	"Open discussions which affect staff morale especially when it's about their information or situation." (Focus Group A)
3	Use of social media among teams	"Social media usage among teams which could lead to negativity reflects on the perspective of people (following personal Twitter, Instagram account)", (Focus Group A)

4	Workplace environment	"Workplace environment which gives our customers easy access to the back of our offices." (Focus Group B)
5	Workplace not designed properly	The open design of employee workspace contributes to this practice; (Questionnaire responder 15)
6	Sharing the food session	"Sharing the food session affects the female's privacy when having their lunches.", (Focus Group B)

Table 5-4 shows a list of an organisation's culture practice considered to have a positive impact on the employees' privacy behaviour. On the top of the list of the table is a reminder to change their passwords on a regular basis. The focus groups agreed that the strict requirement of changing the password helped in ensuring the security of the systems information.

The second in the list is employees' code of conduct. The organisation's clear and effective code of conduct is an essential part of the organisation to develop organisation's culture.

Table 5-4: List of organisation culture practices considered to have positive impact on the employees' privacy behaviour

1	Reminder password	"Regular reminders to change access to the organisation systems on regular basis is a good organisation practice to help protect the information", Focus Group B "the organisation information system forces the employees to change their password every three months", Interviewee C
2	Code of conduct	"Organisation has a clear and effective code of conduct", Interviewee Q "the organisation has a strict policy in dismissing employees if they abuse his ability and trust within the organisation", Interviewee I
3	Appropriate induction for new staff	"The organisation has appropriate and well-planned induction programmes for new member of staff", Focus Group B "The new employee needs to be mentored by one of the employees after one-month induction to his/her role within the organisation", Interviewee C

4	Internal communication	Internal communication (getting new baby – or Consolation on death of his/her family) Focus Group B
5	Need for authority approval for disclosing any information.	"Access to information, or transferring, or exchanging information within the organisation or with external organisations requires several approvals, a strict process." Interviewee I
6	Information handling	"Employees are not allowed to pass hardcopy to the customers or clients by hand and has to be electronically carried out." Interviewee I

Figure 5-4 shows the NVIVO coding analysis for organisation culture and its role in the privacy behaviour within the organisation. It explores the role of sharing the culture of the organisation and sharing the performance appraisal influences and the employees' relations. This has an impact on the privacy within the organisation, eventually conflicting among employees has been built up from sharing practices.

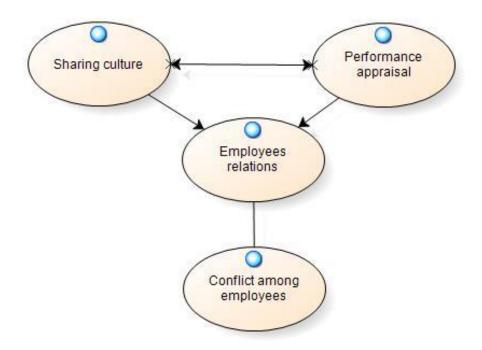


Figure 5-4: Organisation culture: NVIVO coding analysis

5.6.2 Role of the UAE National Culture on Privacy

The role of the UAE national culture has been discussed in-depth in the focus groups and face-to-face interviews to investigate and explore in some detail the main elements of national culture that have an impact and a role on privacy at the organisation. The focus groups have been asked to list the main UAE national cultures and re-arrange the list based on the importance of each one. Table 5-5 shows the list of national cultures that consider influencing employees' privacy behaviour. The tribal culture was indicated as the most UAE national culture which may influence individual employees' privacy behaviour. The strong relations and loyalty among the tribe members have led to trust among members and willingness to share information openly. In one of the interviews, one of the interviewees went further and in some cases, the loyalty of the individual towards his tribe and tribe values was more than his or her loyalty to the organisation.

"For me, it is a loyalty issue. Some of the tribe members are loyal to their tribe and its values more than their loyalty towards their organisations."

Interviewee K

The main drivers for the tribe loyalty are that they cannot survive if he/she rejected from his own tribe but easily survive in case of organisational rejection. The second most agreed national culture is the high trust among the nationals with work based interactions. The trust and respect among the UAE nationals make sharing information and passing information easy. There is a feeling each UAE National is keen in caring for the sake of the organisation like any other body, and therefore, there is no worry or concern.

The role of the UAE national culture on privacy has also been observed by non-UAE nationals, such as the Western background employees. They have observed several practices have been accepted and become part of the organisations norms while it cannot be tolerated in Western culture and vice versa. One of the Western participants in the survey stated:

"I believe culture plays such a significant role in this issue. I am American and American's do not ask someone's salary or the results of their PPM, but in the UAE, this is shared quite openly and often you are asked. I have witnessed teacher's observations or reprimands taking place in front of a group of colleagues instead of in the privacy of an office. This was accepted by both people as if the behaviour was appropriate."

Questionnaire responder 3

Table 5-5 show the main national cultures that consider influencing employees' privacy behaviour based on the interviewees. The main cultural factors explored are Tribe, culture, value and loyalty, trust and family relationship.

Table 5-5: List of national culture that considered influencing employees' privacy behaviour.

1	Tribe culture value and loyalty	"Difficult to reject or ignore demand for information between two employees from the same tribe, it is tribe value" Interviewee A "difficult for us to reject or ignore demand cousins or member from our tribe for information", Interviewee D "it's very difficult to say no to your tribe member", Interviewee J
2	Trust	"trust between the UAE nationals employees has led to shared information among the employees", Interviewee P "trust and loyalty of the UAE employees, especially if they are from the same tribe, school, or living area", Interviewee P)
3	Family relationship	"Strong relationship between family members and their extended family can lead to the disclosure of information. Some employees have trust and loyalty to their family more than the organisation" Interviewee C "The strong relationship among the UAE family has a clear influence on the employees when it comes to his/her immediate family member. Simply some of them they can resist not disclosing private information to them", Interviewee F

Figure 5-5 shows the NVIVO coding analysis of the UAE culture. This is needed to understand individual behaviour towards privacy in the organisation. The figure indicates religion, national culture, tribe values and traditions of the national people contributed to drawing the main characteristics of the UAE national culture. The figure also indicates that pictures of females and female personal information are critical information for the UAE national due to culture perceptions.

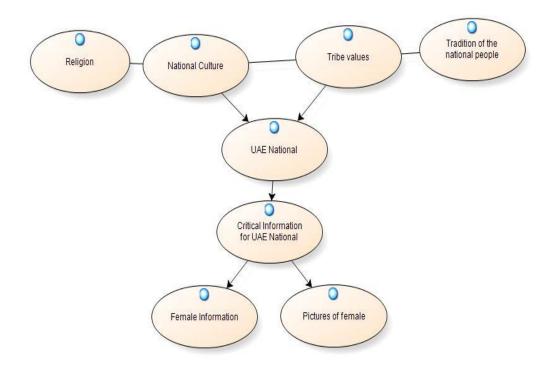


Figure 5-5: UAE culture: NVIVO coding analysis

Figure 5-6 shows the NVIVO coding analysis role of loyalty on the individual behaviour towards privacy. The figure indicated that behaviour is influenced by the balance between loyalty to his tribe values and loyalty to the organisation. This balance in loyalty dictated the individual behaviour towards dealing with information.

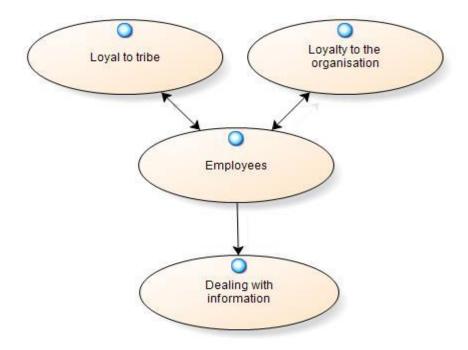


Figure 5-6: Role of individual employees' loyalty on dealing with information: NVIVO coding analysis

5.7 Employees' Attitudes towards Privacy

5.7.1 Main Factors that Construct Individuals' Attitude

Trust

Trust has been explored and discussed by several employees and focus groups as one of the constructs that influence employee's attitudes towards privacy. Trust among the employees and respect believed to be an important construct for the employee's behaviour towards information and privacy. One of the interviewees stated this construct:

"I see trust can contribute to employees' attitudes especially among the employees."

Interviewee D

One of the focus groups identified the trust between the employees and organisation management as an important construct for the employees' behaviour and attitudes toward privacy. The argument was, once the trust was lost with the organisations leadership and management, the employees no longer respect the management's decisions and this has an influence on the employees' behaviour in managing and

handling personal information. If the employees lost trust in their managing leadership, for several reasons, this could lead to losing trust in their management. This can lead to not complying with their decisions, policies and procedures. The focus group stated:

"Trust between the employees and the organisation management is a critical construct for the individual and groups behaviours and attitudes towards privacy."

Focus groups B

The second focus group went further by providing and arguing that trust on the organisation policy, decision making, and guidelines play a role in the employees' behaviour and attitude towards privacy. They argued a lack of clear policy in privacy contribute to the employees' behaviour towards privacy. The focus group stated:

"Trust in the management policy, decision making and guidelines is an important construct in the organisations privacy."

Focus groups C

Subjective Norms

The role of friends and family on individual attitude and behaviour was identified as one of the constructs by several interviewees. The argument is that the trust and interactions between employees and their friends and family play a role in the individual's attitude towards privacy. One of the employees stated:

"I found that friends and family of the employees play a role in the employees' behaviour towards privacy, such as the employees' attitudes and perception."

Interviewee D

Focus groups explored the role and impact of work colleagues in the employees' attitude towards privacy. The focus group strongly argued that colleagues can influence employee's behaviour due to work relationships and exchange benefit. The focus group stated in regards to this issue that:

"Through our experiences, we can state the impact of colleagues, friends and family have an influence on the employees' attitude."

Focus group B

Employees Culture

Several employees stated the UAE national culture as a construct for the employees behaviour in the organisation. They argued the UAE national culture, such as the Bedouin values and norms, were found to be on several occasions stronger than the organisation's interest. One of the interviewees' stated this issue:

"From the UAE point of view, I strongly believe that the UAE national culture plays a role in the individual and group employees' opinions and attitudes towards privacy in the organisation."

Interviewee G

One of the examples discussed in one of the interviews explored the employees' attitude towards females has an influence on their behaviour when they deal with interacting or handing their personal information. They are concerned to keep their personal information private.

Individual cultural backgrounds have been explored as one of the factors for the employees' attitude and behaviours towards privacy. The UAE organisation, in general, has a large number of non-national manpower as there are employees from other Arabic countries such as Egypt, Jordan, from European countries such as the UK, and from Canada and the USA. There are also employees from the Far East, India and Pakistan. The interviewees' argued that employees' cultural backgrounds

have contributed to different perceptions towards privacy, and that has influenced employees' attitudes towards privacy. One of the interviewees stated:

"As you know we have employees from different cultural backgrounds and this, I feel, has created different views and perception towards privacy based on the individual's cultural."

Interviewee H

Individual employees' belief, faith and values were identified as factors contributing to the individual's behaviour in the organisation and critical in privacy behaviour. One of the focus groups argued this construct by stating:

"Employee's belief, faith, and values are the main drivers for individual employees' attitudes and opinions towards privacy behaviour."

Focus Group A

Organisation Working Culture

The role of organisation cultures such as values and norms was explored as one of the constructs that influence individual behaviour in the organisation. Lack of clear policies or proper processes for maintaining information, and protecting the individual, has created, among the employees, culture to misuse information and disclose information without an individual's consent. One of the employees stated:

"There is no clear policy or proper way to maintain information in the organisation and I think this has contributed to employees' behaviour and attitude towards privacy and protecting individual privacy."

Interviewee D

The current operational norms in the organisation have created a relaxed culture on privacy. It has become normal to share private information with colleagues. One of the focus groups explored this issue clearly and stated:

"The organisations normal behaviour toward information has influenced individual and group behaviours and attitudes towards privacy."

Focus Group A

Jealousy between the employees was identified as one of the constructs that influence the employees' behaviour and attitude towards privacy. One of the interviewees stated:

"I would like to say that jealousy between the employees has an influence on the employees' behaviour and attitude towards privacy."

Interviewee N

Key factors influencing employees attitudes towards privacy is shown in figure 5-7 The figure indicated a lack of policy, lack of awareness amongst the employees, organisation penalties, consequences and the sharing culture of the employees are playing a role in the employee's attitudes towards privacy. The employees' attitude is the main drive for the employee's behaviour. The figure 5-7 also indicated sharing

knowledge, such as passwords, contributes to the employee's behaviour.

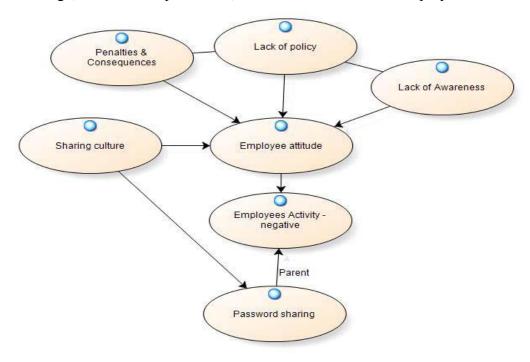


Figure 5-7: Main factors for employees' attitude towards privacy: NVIVO coding analysis

Job Security and Job Satisfaction

Job satisfaction and the employee's work enjoyment was explored and found to be an important construct for individual behaviour in the organisation and play an important role in the individual attitude towards privacy. One of the focus groups argued the positive relationship between job-role satisfaction and the individual's behaviour in the organisation. One of the focus groups argued this construct by stating:

"Level of job-role satisfaction and enjoying the job role is an important construct on the employees' attitude and behaviour towards privacy."

Focus Group C

Job security and job position, identified by more than one interviewee, as an important factor for the employees' behaviour in the organisation and contributes to the individual's attitude towards privacy. One of the employees stated:

"Job security, secure contracts and job position in my view is an important factor in the employees' behaviour and attitudes towards information and privacy."

Interviewee H

5.8 Summary

The chapter analysed critically qualitative data collected, namely face-to-face interviews and the focus groups. The analysis used NVIVO as a tool to help and support the analysis process. The main outcomes of the analysis represent employees' opinions and attitudes towards privacy in the UAE. The chapter concluded that the employees lack a clear understanding and a definition of privacy. This is mainly due to a lack of clear organisation policy and training in privacy. The chapter has also identified the main construct that influences employees' behaviour towards privacy in the UAE organisation. These constructs include trust, subjective norms, employees culture, organisation working culture, job security and job satisfaction.

Chapter Six: Quantitative Data Analysis:

Opinions, Perceptions and Attitudes towards Privacy in the UAE

6.0 Introduction

Chapter 5 presented qualitative data collected from face-to-face interviews and focus groups with key personnel of the organisation. This chapter, Chapter 6, presents and discusses quantitative data. The analysis is based on a distributed questionnaire to all of the organisation's employees. Both the qualitative and quantitative data with main outcomes of the literature review will be used to discuss the main results of this research, chapter 7.

6.1 Survey Respondents Background

This section presents the respondents backgrounds.

6.1.1 Surveyed Regional Offices

The survey carried out in Abu Dhabi Emirate focusing on ADEC, Abu Dhabi Education Council. Table 6-1 overleaf shows total number of the organisation employees' participants in the research survey, number of employees at each regional office of ADEC and number of responses received from each region. The survey included all the respondents from the three most important workplaces of the ADEC organisation, namely Abu Dhabi regional office, Al-Ain regional office and Western Regional office. The Table indicated that the vast majority of the respondents are from Abu Dhabi, 83.67%, Al-Ain 14.22% and the Western Region 2.04%. It is important to stress that the Abu Dhabi workplace is the largest due to the fact that Abu Dhabi is the capital of the Emirates and the majority of the organisations activities are in Abu Dhabi.

Table 6-1 Survey participants and respondents

	Questionnaire	Justifications
Abu Dhabi Regional Office	100% of the population (504 participants Employees) 40.55% respondents (205 Respondents)	All three regional offices employees have been selected to participate in the survey. This is needed to provide a significant number of responses to help to predict the issues raised in each question.
Al-Ain Regional Office	100% of the population (126 participants Employees) 27.77% respondents (35 Respondents)	 The questionnaire distribution was conducted by the organisation information system with help and support of the research office of Abu Dhabi Education Council, Use of questionnaire relatively cheap to conduct and with reasonable time, relatively short period.
Western Region Regional Office	100% of the population (20 participants Employees) 25% respondents (5 Respondents)	

6.1.3 Respondents Nationality

There is a large number of non-nationals working in the UAE due to a lack of manpower in the Emirates and the sharp expansion in its economy. Therefore, it is important to identify expatriates of Abu Dhabi's Education Council employees' opinions and attitudes towards privacy issues and employees behaviours towards private information. The majority, 67.07% of the surveyed staff, were national and 32.93% non-nationals.

6.1.4 Respondents Age

Figure 6-1 shows the respondents' age. The figure indicated that almost half, 49.59% of the survey employees are less than 35 years old and nearly a quarter, 22.54% of them are aged between 25-30 years old. The Figure also indicated only 20.5% are over 45 years. These figures show that the majority of staff at the Abu Dhabi Education Council are young.

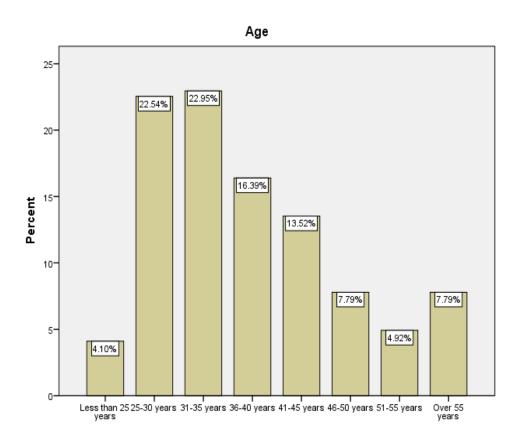


Figure 6-1: Respondents age

6.1.5 Respondents Working Experience

Employees experience in the organisation may play a role in the individual's behaviour towards privacy due to the individual's awareness, understanding and knowledge of the organisation's values, policy and working culture. Figure 6-2 shows only 20.99% of the respondents have over 20 years of experience. The figure also indicated that the majority of the employees, 45.68% have less than 10 years' experience.

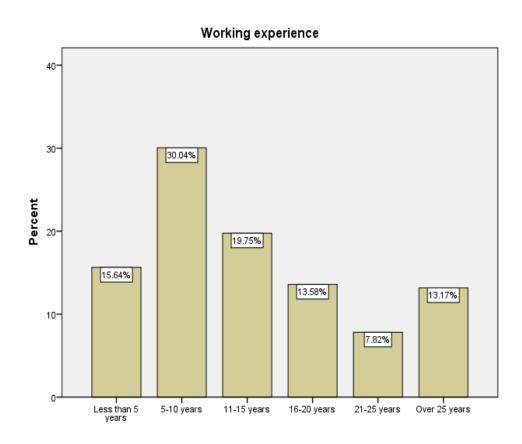


Figure 6-2: Respondents working experience

6.1.6 Respondents Job role in the Organisation

Figure 6-3 shows the respondents job-role in Abu Dhabi Education Council. The figure indicated that the majority of the surveyed population, 36.99%, were team leaders/senior specialists. This high number of team leaders is due to the structure and the nature of the Abu Dhabi Education Council. The figure also indicated only 0.41% of the respondents are Executive Directors and 4.88% Division Managers.

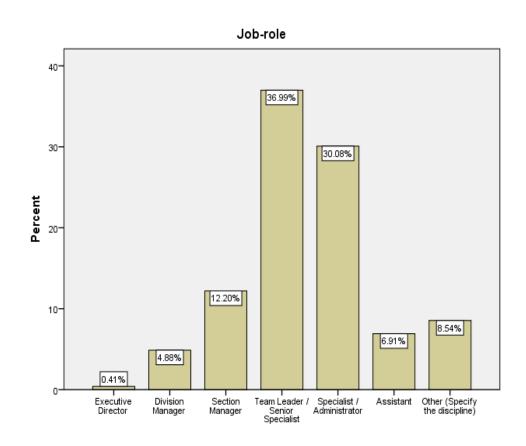


Figure 6-3 Respondents job role in the organisation

6.1.2 Respondents Gender

The respondents' gender of Abu Dhabi Education Council analysed: The analysis indicated that the majority of the survey population are females, 55.56% and 44.44% males.

6.2 Issues and Problems in Privacy

6.2.1 Information Owner Consent

One of the main objectives of this research is to identify the respondents' opinion towards the key issues and problems in privacy at the Abdu Dhabi Education Council. This is needed to help understand the extent and nature of the privacy issue in the organisation. Figure 6-4 shows that the vast majority, 62.14%, disagreed or strongly disagreed with the statement "passing personal information to a third party without the consent of the information owner" and only 25.11% agreed or strongly agreed with the statement and 12.7% remained neutral towards the statement.

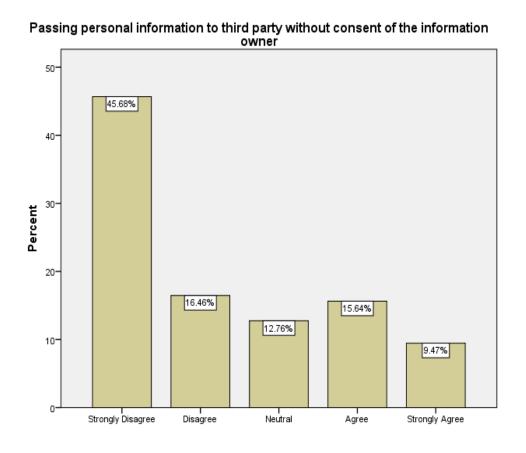


Figure 6-4: Information Owner Consent

6.2.2 Employees' Sharing Information Culture

Figure 6-5 shows the respondents response towards the sharing information culture among the employees as one of privacy issues and problems in the organisation. The figure indicates that the vast majority, 51.02%, agreed or strongly agreed with the statement "Sharing information, as a culture, among the employees" and only 28.57% disagreed or strongly disagreed with the statement and 20.41% remained neutral towards the statement.

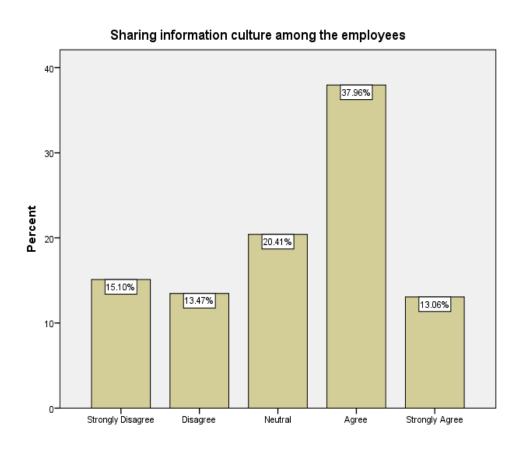


Figure 6-5: Employees sharing information culture

6.2.3 Printing Private Information

Printing private information in open areas is one of the identified privacy issues. The vast majority of the survey respondents disagreed or strongly disagreed with such issues. Only 26.81% strongly agreed with the issue, and 19.51% remained neutral as shown in Figure 6-6. The figure indicated just over quarter of the employees agreed with printing in an open area. This illustrates the extent of the issue in the organisation. This reflects the lack of awareness and education of the employees towards private information.

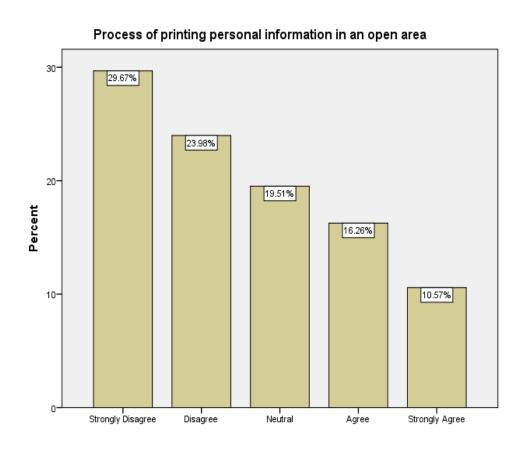


Figure 6-6: Printing private information

The Pearson Chi-Square test showed a significant difference of opinion between national and non-national, employees at the organisation, towards printing private information out in the open, p=0.003. The UAE national employees are the main employees printing in open space compared with non-national.

6.2.4 Recording and Storing Private Information

Figure 6-7 shows the respondents response towards recording and storing private information among the employees as one of privacy issues and problems in the organisation. The figure indicates that the majority of the respondents, 34.43%, agreed or strongly agreed with the statement, and 32.78% disagreed or strongly disagreed with the statement, and 32.79% remained neutral towards the statement.

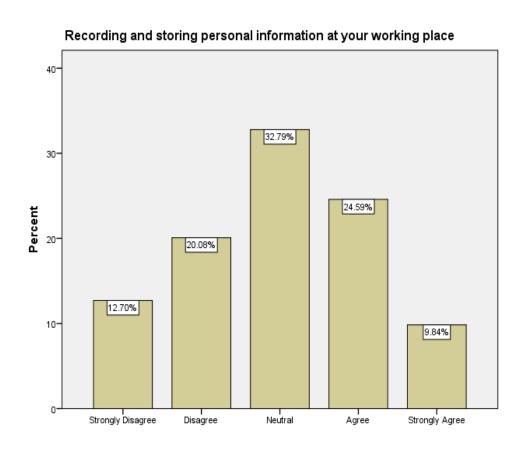


Figure 6-7: Recording and storing private information

6.2.5 Transmitting/Sending Personal Information

The survey respondents were asked to express their opinion on the "Transmitting and sending of personal information without the consent of the owner" statement as one of the issues and problems of privacy in the organisation. The vast majority of the respondents disagreed or strongly did not agree with the statements and only 23.27% agreed or strongly agreed with the statement, 16.33% remained neutral, Figure 6-8.

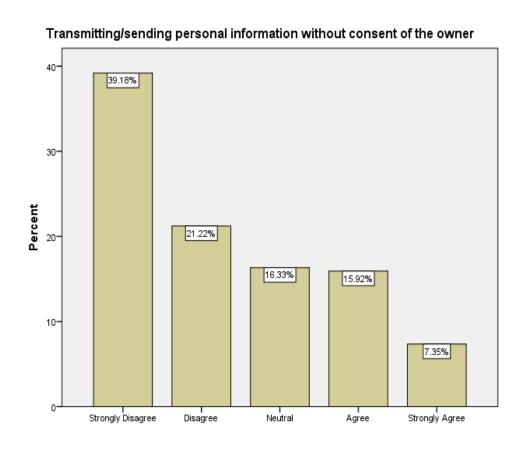


Figure 6-8: Transmitting and sending personal information

The Pearson Chi-Square test showed a significant difference between national and non-national employees in the organisation transmitting/sending personal information, p=0.001. Non-national employees are the strongest in agreeing compared with national employees.

6.2.6 Employees Working Culture

Figure 6-9 shows the respondents response towards the employees' working culture and towards private information among the employees as one of privacy issues and problems in the organisation. The figure indicates that the majority of the respondents, 41.56%, agreed or strongly agreed with the statement and 28.8% disagreed or strongly disagreed with the statement, 29.63% remained neutral towards the statement. The figure indicated that the employees' working culture is one of the privacy issues within the organisation. This indicates the employees' daily work norms have a lack of appreciation and value of privacy. This can be argued due to lack of training in the understanding of privacy and awareness of privacy.

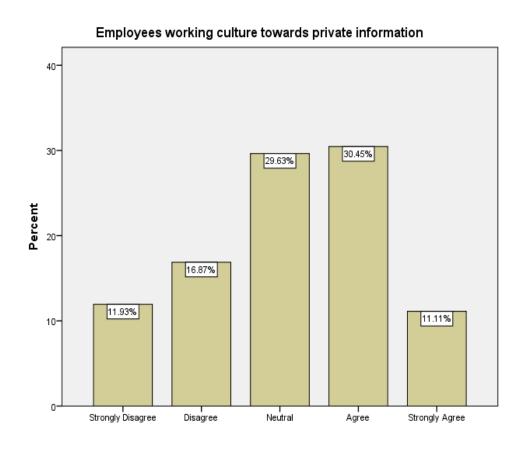


Figure 6-9: Organisation's working culture

6. 3 Employees Perception of Privacy

This section presents the respondents perception of privacy in the Abu Dhabi Education Council.

6.3.1 Employee's Human Rights towards Protecting their Personal Information

Arguably, individual private information is his/her human right and needs to be protected by the organisation. The vast majority of the respondents agreed or strongly agreed, 82.93%, with the statement "Privacy is a human right" and only 4.88% disagreed or strongly disagreed with the statement, 12.20% preferred to remain neutral, Figure 6-10. This indicates that the employees are aware that privacy is a human right. This needs to be reflected in their working norms and values.

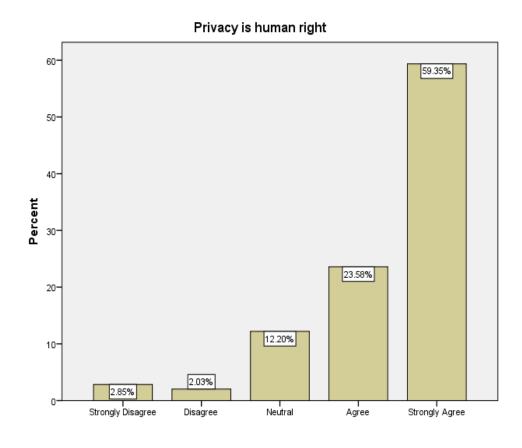


Figure 6-10: Employee's' Human Rights towards Protecting their Personal Information

6.3.2 Privacy and the Organisation Image in Society

Figure 6-11 shows the respondents perception towards the importance of privacy in the organisation's image in the society. The figure indicates that the vast majority of the respondents, 82.5%, agreed or strongly agreed with the statement and only 5.29% disagreed or strongly disagreed with the statement, 12.20% remained neutral. This indicates that the employees have a strong opinion toward the role of privacy in society. This may reflect the organisation's emphasis on the role of the organisation's image in the society. This is quite understandable as the organisation is one of the critical public sectors in the Emirates.

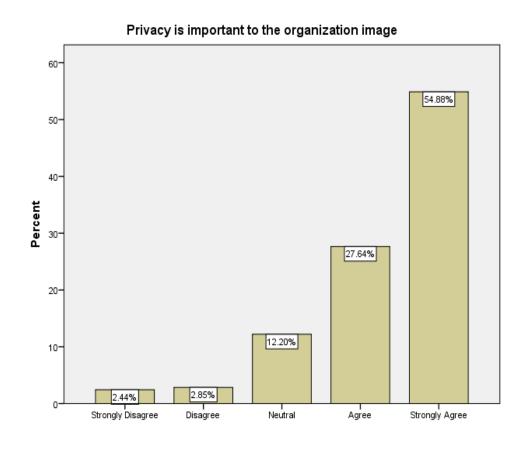


Figure 6-11: Privacy is important to the organisation's image in the society

The Pearson Chi-Square test showed a significant difference between national and non-national employees towards the importance of privacy for the organisation's image in the society, p=0.021. National employees are the strongest in agreeing compared with Non-national employees.

Pearson Chi-Square tested to establish any difference between the genders' attitudes towards the statement. The test indicated to be of great significance, p=0.043. Female employees are the strongest in agreeing compared with Male employees.

6.3.3 Individual Employees' Rights to control his/her Personal Information

The organisation's employees have been asked to express their opinion towards the individuals' rights to control his or her personal information. The vast majority of the respondents agreed or strongly agreed 76.64% with the statement, and only 6.56% disagreed or strongly did not agree with the statement, and 16.80% remained neutral Figure 6-12. The figure suggests strongly that the employees have strong views that the individual owners of the information should have control of his/her personal information.

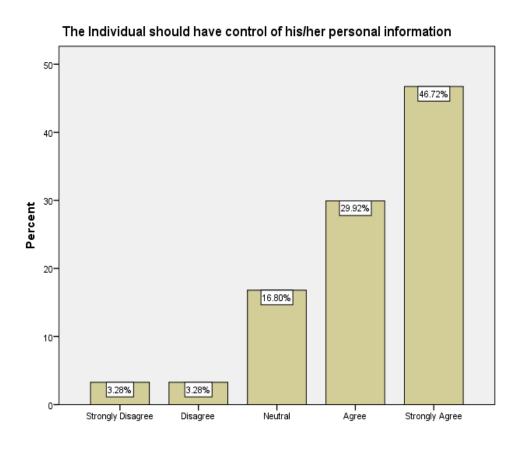


Figure 6-12: Employees' right to control his/her personal information

6.3.4 Personal Electronic Records Ownership

6.3.4.1 Organisation Ownership

Figure 6-13 shows the respondents perception towards the organisations ownership of the employee's personal electronic records. The figure indicates that the vast majority of respondents, 63.38%, agreed or strongly agreed with the statement and only 23.45% disagreed or strongly disagreed with the statement, 13.17% remained neutral. The figure indicated that there is a significant number of employees agreeing with the statement.

The organisation is the owner of the employees' personal electronic records 4039.92% 23.46% 10Strongly Disagree Disagree Neutral Agree Strongly Agree

Figure 6-13: Organisation ownership of the employees' electronic records

6.3.4.2 Employees Ownership

Figure 6-14 shows the respondents perception towards the employees' ownership of the employees' personal electronic records. The figure indicates that the vast majority of the respondents, 59.6%, agreed or strongly agreed with the statement "Employees are the owner of the personal electronic records in the organisation" and only 20% disagreed or strongly disagreed with the statement, 20.41% remained neutral. The figure indicated that the employees have a strong feeling that they, the employees, are the owners of their private information within the organisation. This may reflect that the employees value their personal information.

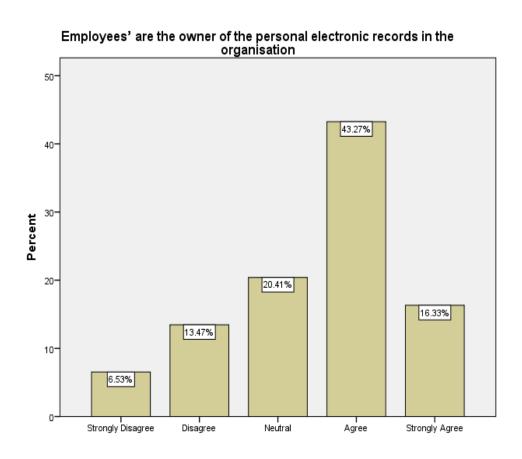


Figure 6-14: Employees' ownership

6.4 Types of Private Information

From an organisation's point of view, the organisation needs to be identifying types of private information to help establish appropriate and effective privacy policies and procedures within the organisation that reflect the UAE's employees' culture. This section presents types of private information based on the respondents opinions.

6.4.1 Personal Wage

An individual's personal wage was considered by the vast majority of the employees as private information. 74.7% of the respondents agreed or strongly agreed in considering their personal wage as private information. Only 7.03% of the respondents disagreed or strongly disagreed, 18.18% remained neutral as shown in Figure 6-15. It seems that the employees consider their wage to be private information. This may be due to the gap in the wages.

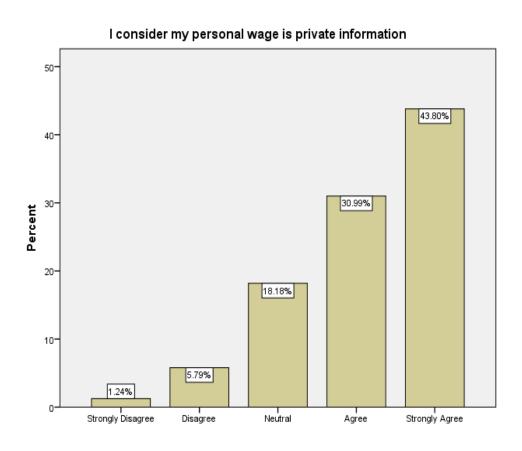


Figure 6-15: Personal wage is private information

6.4.2 Spouse Names

The majority of the respondents, 54.36%, agreed or strongly agreed that the employee's spouse is considered as private information and only 18.26% disagreed or strongly disagreed, 27.39% remained neutral as shown in Figure 6-16. The Figure also indicated clearly that the non-national employees are considering their wife's names as being private a lot less than the UAE nationals (38.96% of the national compared with 16.45% of non-national agreed or strongly agreed with the statement). This is mainly due to the Arabian culture.

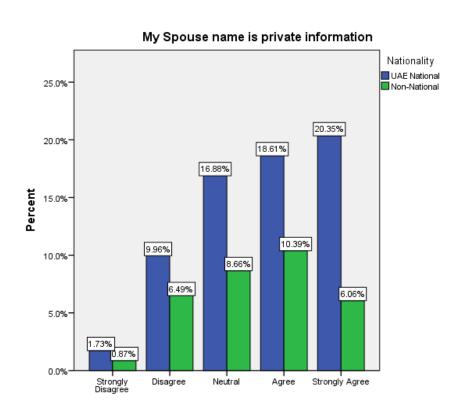


Figure 6-16: Spouse name is private information

6.4.3 Family Females' Personal Information

Figure 6-17 shows that 53.72% of the respondents agreed or strongly agreed that family's females' details are private information and only 14.05% disagreed or strongly disagreed, 32.23% remained neutral. The figure is also showing that the non-nationals considered less that their female's details are private information (37.5% of the national compared with 17.24% of non-national agreed or strongly agreed with the statement).

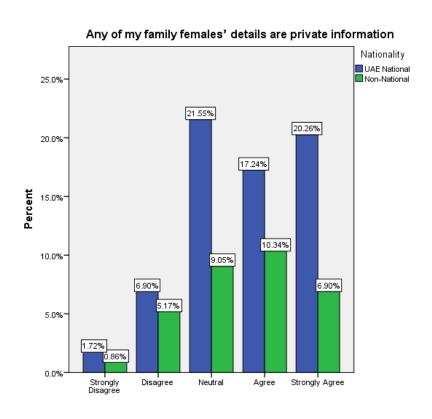


Figure 6-17: Family's females' details are private information

6.4.4 Performance Appraisal

Figure 6-18 shows the vast majority of the respondents, 71.17% agreed or strongly agreed with the statement, "My annual performance appraisals is private information" and only 9.06% disagreed or strongly disagreed with the statement, 19.75% remained neutral. The figure is also indicating that females were more concerned than the males towards the statement (42.17% of the females' compared with 30.44% males' agreed or strongly agreed with the statement).

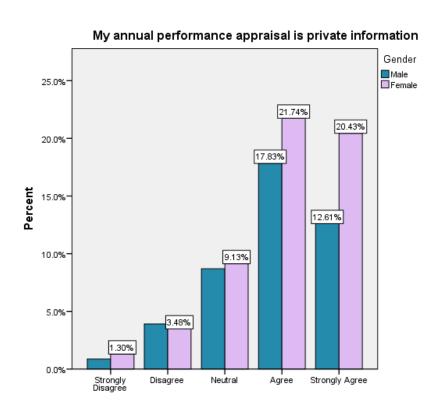


Figure 6-18: Annual performance appraisal is private information

6.4.5 Personal Mobile Number

Figure 6-19 shows the respondents response towards, "Personal mobile number is private information" statement. The majority of the respondents, 59.34% agreed or strongly agreed with the statement and only 14.1% disagreed or strongly disagreed with the statement, 26.56 remained neutral. This reflects the nature of the UAE culture and particularly its views towards females' private mobile number. It is not normal for female UAE citizens to pass her personal number on to males (39.91% of females compared with 21.06% males agreed or strongly agreed with the statement).

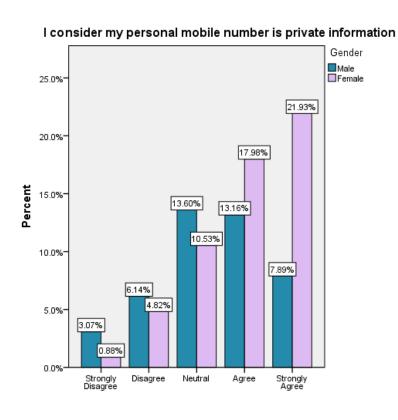


Figure 6-19: Personal mobile number is private information

The Pearson Chi-Square test showed a significant difference between female and male employees at the organisation towards Personal mobile numbers are private information, p=0.001. Female employees are the strongest in agreeing compared with Male employees.

6.4.6 Family Picture

Figure 6-20 shows that Family pictures were considered as private information by a vast majority of respondents, 80.58% and only a minority, 4.13% disagreed or strongly disagreed, 15.29 remained neutral.

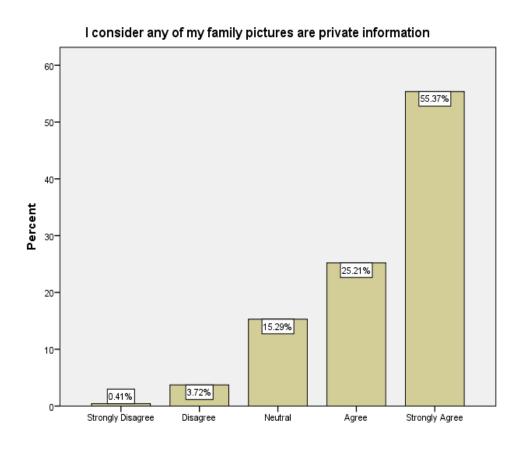


Figure 6-20: Family pictures are private information

6.5 Role of the Organisation's Culture on Privacy

This section presents the role of the organisation's culture on privacy based on the respondents opinions.

6.5.1 Share Information Culture among Employees

Figure 6-21 shows respondents responses towards, "It's normal to share private information amongst the organisation's employees" statement. The vast majority of the respondents, 62.5% disagreed or strongly disagreed with the statement and only 23.33% agreed or strongly agreed with the statement, 14.17% remained neutral. The responses clearly indicate that sharing private information among the organisation is normal behaviour within the organisation's activities.

It is normal to share private information among the organization employees 4030301010Strongly Disagree Disagree Neutral Agree Strongly Agree

Figure 6-21: Normal to share private information among the organisation employees

6.5.2 Printing Information Culture

The vast majority of the respondents, 64.59% disagreed or strongly disagreed with the statement, "It is normal to print personal information in an open area" and only 24.58 agreed or strongly agreed with the statement, 10.83% remained neutral. Figure 6-22

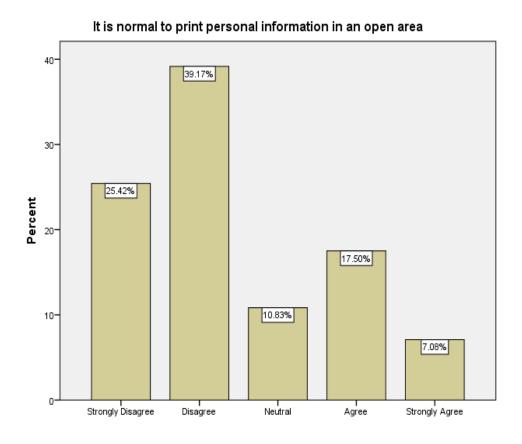


Figure 6-22: Normal to print personal information in an open area.

6.5.3 Organisation Privacy Policy

Figure 6-23 shows the respondents responses towards, "There is no privacy policy in the organisation." statement. The vast majority of the respondents, 40.33% disagreed or strongly disagreed with the statement, and 35.40% agreed or strongly agreed with the statement, 24.28% remained neutral. Although the majority of the respondents did not agree with the statement, there are a large number of employees who agreed. This reflects the lack of awareness in the organisation's policy amongst the employees.

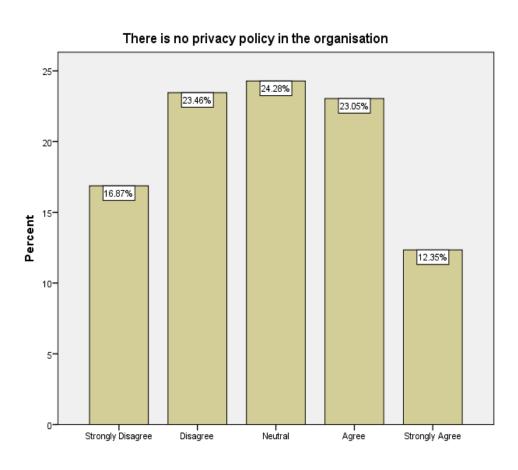


Figure 6-23: No privacy policy in the organisation.

6.5.4 Organisation Value Personal Information

The vast majority of the respondents, 55.56% agreed or strongly agreed with the statement, "The organisation values personal information" and only 16.05% disagreed or strongly disagreed with the statement, 28.40% remained neutral, Figure 6-24.

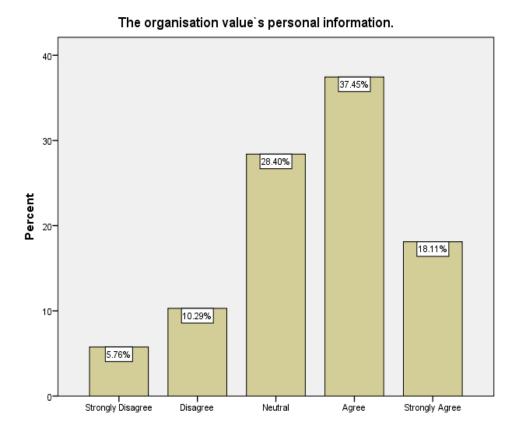


Figure 6-24: The organisation values personal information.

6.5.5 Value of the Organisation Document

Figure 6-25 shows respondents responses towards the statement, "The organisation considered documents in the organisation to be private information". The majority of the respondents, 49.38% agreed or strongly agreed with the statement, and only 18.52% disagreed or strongly disagreed with the statement, 32.10% remained neutral. The figure indicated that a large number of the employees agreed with the statement due to the nature of the organisation's activities. However, there are still employees who disagreed with the statement. This may be due to the nature of some of the individual's specific work activities. It could be argued for example that the HR department's employees considered that documents are private information from their point of view; on the other hand, the marketing department may consider the information needs to be of public ownership.

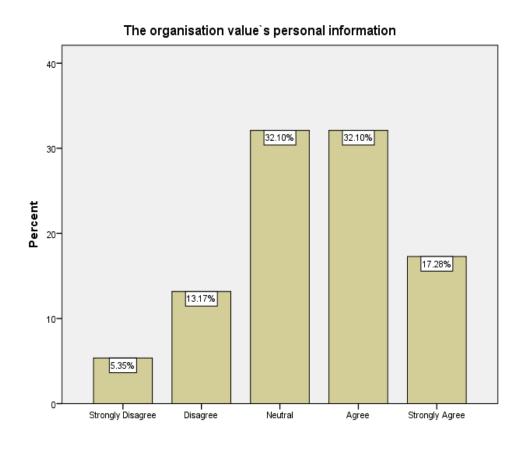


Figure 6-25: Documents in the organisation are private information.

The Pearson Chi-Square test showed a significant difference between national and non-national employees at the organisation towards, "The organisation considered

documents in the organisation to be private information" statement with, p=0.005. Non-national employees are the strongest in agreeing compared with national employees.

6.6 Role of the UAE National Culture on Privacy

The vast majority of the respondents, 61.41%, agreed or strongly agreed with the statement, "National culture has an influence on employee's privacy practices" and only 13.4% disagreed or strongly disagreed with the statement, 25.73% remained neutral, Figure 6-26. This reflects the strong role of national culture on individual employee's beliefs on individual privacy. This can be understood from the role of national culture on the individual's behaviour and attitudes to certain private information.

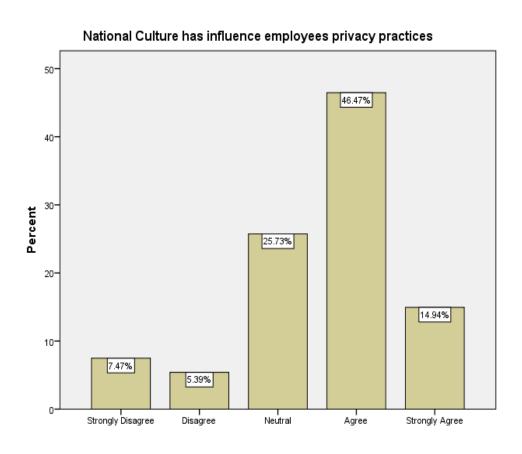


Figure 6-26: National culture has influence on employee's privacy practices

6.6.1 Society Sharing Culture

Figure 6-27 shows respondents responses towards, "The UAE society encourages sharing personal information" statement. The majority of the respondents, 53.18%, disagreed or strongly disagreed with the statement and only 20.99% agreed or strongly agreed with the statement, 25.93% remained neutral. The figure indicates that the employees disagreed with the statement. This may be due to the role and impact of the nature of the UAE culture, mixed with Arabian tribe culture and religious values, which in general conservative society makes them reluctant to share information with a third person, particularly with their female's private information.

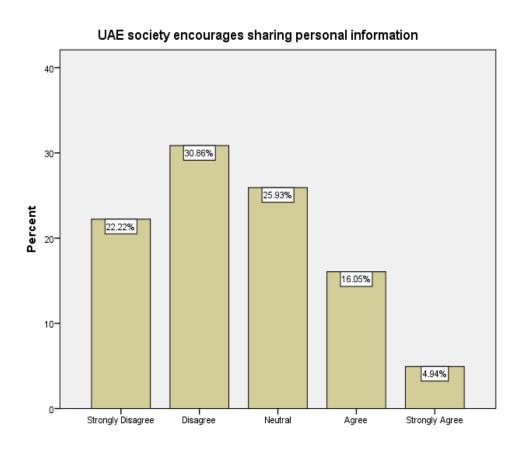


Figure 6-27: UAE society encourages sharing personal information

6.6.2 UAE Culture Passing Personal Information

The vast majority of the respondents, 61.25% disagreed or strongly disagreed with the statement, "Passing personal information is a norm in the UAE culture" and only 22.91% agreed or strongly agreed with the statement, 15.83% remained neutral, Figure 6-28.

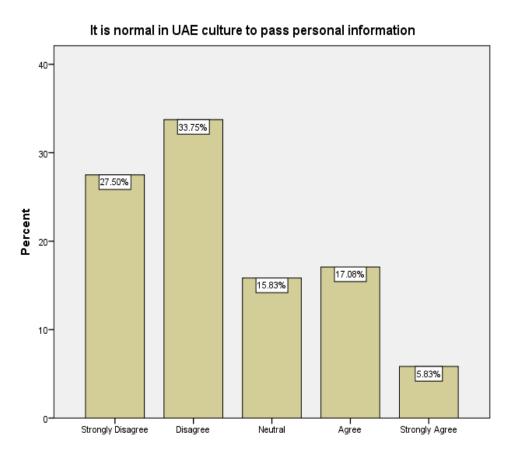


Figure 6-28: Passing personal information is a norm in the UAE culture

The Pearson Chi-Square test showed a significant difference between national and non-national employees at the organisation towards, "Passing personal information is a norm in the UAE culture" statement with, p=0.009.

The Pearson Chi-Square test showed a significant difference in gender within the organisation towards, "Passing personal information is a norm in the UAE culture" statement with, p=0.043.

6.7 Perceived Benefits of Disclosing Private Information

6.7.1 Financial Benefit

Figure 6-29 shows respondents responses towards, "Passing employees personal information for financial benefits" statement. The vast majority of the respondents, 81.41%, disagreed or strongly disagreed with the statement and only 10.33% agreed or strongly agreed with the statement, 8.26% remained neutral.

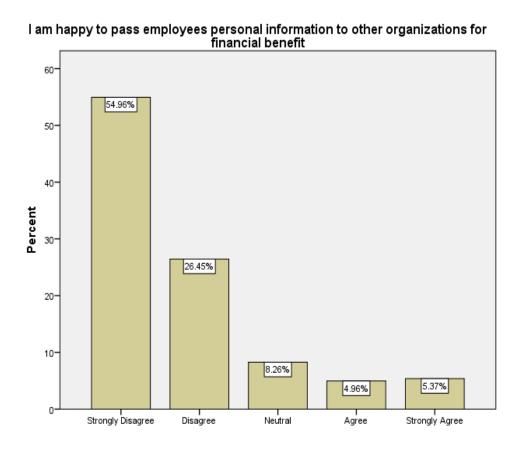
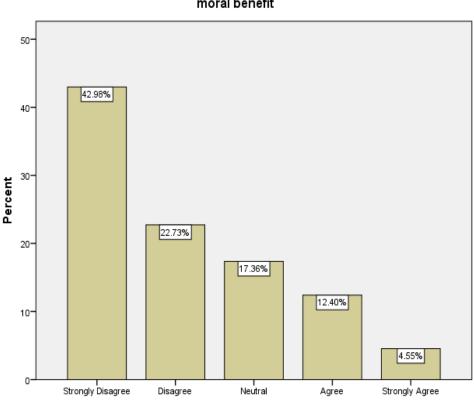


Figure 6-29: Passing employees personal information for financial benefits

6.7.2 Moral Benefit

The vast majority of the respondents, 65.71%, disagreed or strongly disagreed with the statement, "I am willing to pass employees' personal information to other organisations for moral benefit" and only 16.95% agreed or strongly agreed with the statement, 17.36% remained neutral, Figure 6-30.



I am willing to pass employees personal information to other organisations for moral benefit

Figure 6-30: Passing employees' personal information for moral benefit

The Pearson Chi-Square test showed a significant difference between national and non-national employees at organisation towards "I am willing to pass employees personal information to other organisations for moral benefit" statement with, p=0.029. Non-national employees are the strongest in agreeing compared with national employees.

6.7.3 Future Benefit

Figure 6-31 shows respondents responses towards "I am happy to pass employees' private information for future benefit". The vast majority of the respondents, 65.07%, disagreed or strongly disagreed with the statement and only 14.437% agreed or strongly agreed with the statement, 14.47% remained neutral.

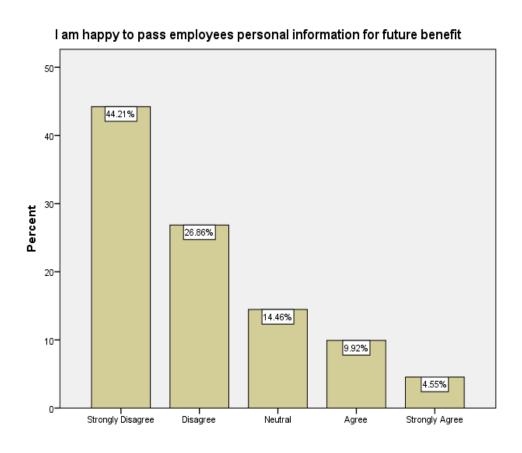


Figure 6-31: Passing employees' personal information for future benefit.

6.7.4 Promotion Benefit

The respondents disagreed or strongly disagreed, 66.53%, with the statement "I am happy to pass employees' private information for promotion benefit". Only 19.84% agreed or strongly agreed with the statement, 13.64% remained neutral, Figure 6-32.

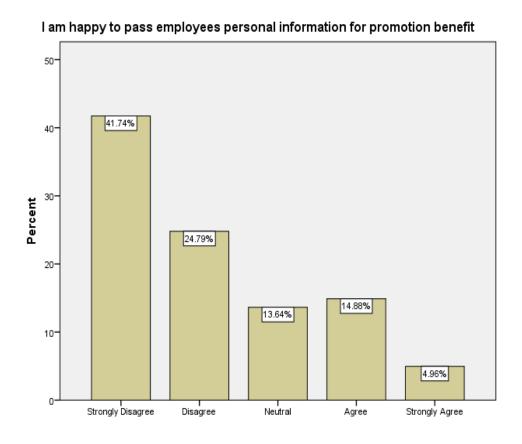


Figure 6-32: Passing employees' personal information for promotion benefit.

6.7.5 Publicity in Public Media

The vast majority of the respondents, 86.77%, disagreed or strongly disagreed with the statement, "I am willing to pass employees personal information to the public media" and only 4.96% agreed or strongly agreed with the statement, 8.26% remained neutral, Figure 6-33.

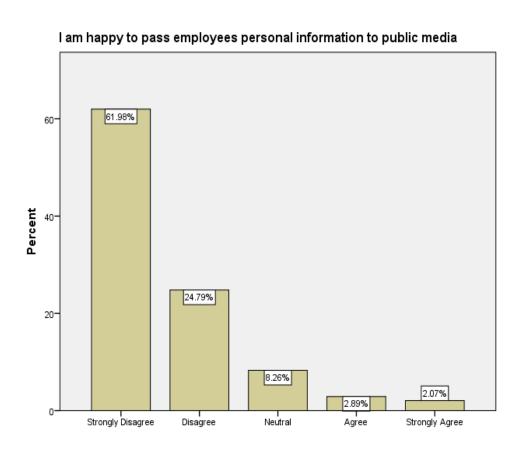


Figure 6-33: Passing employees' personal information to the public media.

6.8 Role of Subjective Norms

6.8.1 Sharing Employees Personal Information with Family

The vast majority of the respondents disagreed or strongly disagreed with the statement "I share employees' personal information with my family", 75.31%". Only 13.16% agreed or strongly agreed with the statement, 11.52% remained neutral, Figure 6-34.

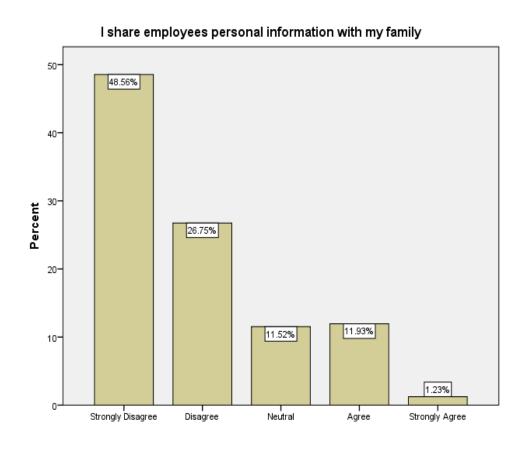


Figure 6-34: Sharing employees' personal information with family.

The Pearson Chi-Square test showed a significant difference between national and non-national employees at organisations towards, "I share employees' personal information with my family" statement with, p=0.025. Non-national employees are the strongest in agreeing compared with national employees.

6.8.2 Sharing Employees' Personal Information with Colleagues

Figure 6-35 shows respondents responses towards, "I share employees' personal information with my colleagues". The vast majority of the respondents, 76.23%, disagreed or strongly disagreed with the statement and only 11.48% agreed or strongly agreed with the statement, 12.30% remained neutral.

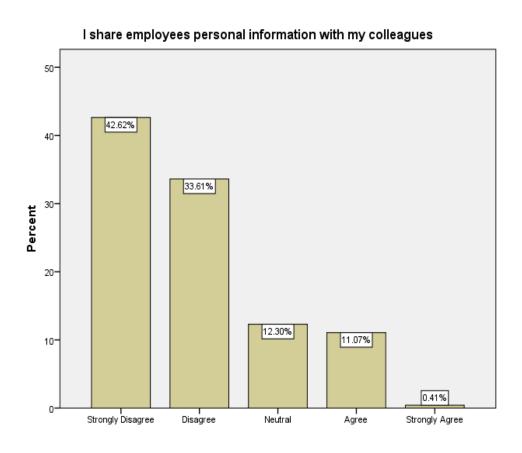


Figure 6-35: Sharing employees' personal information with colleagues.

6.8.3 Sharing Employees' Personal Information with the Line Manager

The vast majority of the respondents disagreed or strongly disagreed with the statement, "I share employees' personal information with my line manager", 68.57%". Only 18.36% agreed or strongly agreed with the statement, 13.06% remained neutral, Figure 6-36.

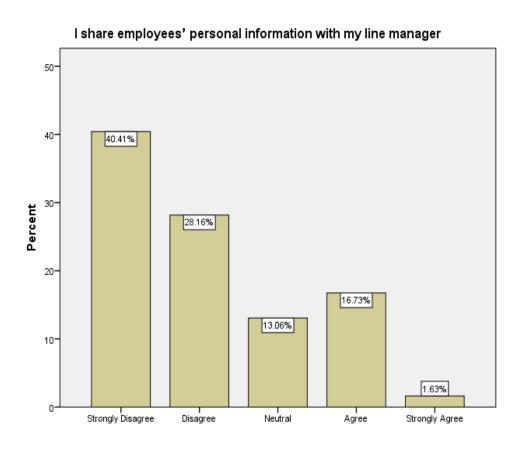


Figure 6-36: Sharing employees' personal information with the line manager.

6.8.4 Sharing Employees Personal Information with my Tribe/National Member

Figure 6-37 shows respondents responses towards, "I share employees' personal information with my tribe/national member". The vast majority of the respondents, 68.57% disagreed or strongly disagreed with the statement and only 10.78% agreed or strongly agreed with the statement, 11.62% remained neutral.

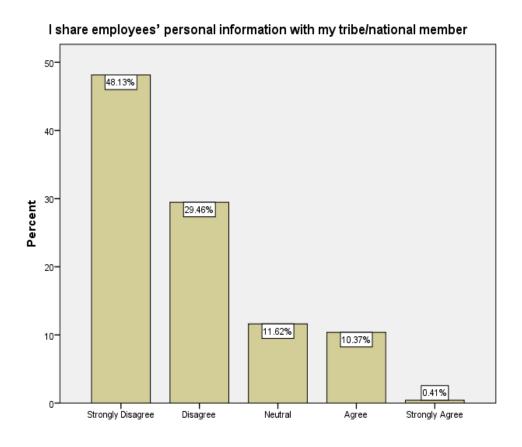


Figure 6-37: Sharing employees' personal information with tribe/national member.

Pearson Chi-Square test indicated a significant difference between national and non-national employees of the organisation towards, "I share employees' personal information with my tribe/national member" with p=0.003. Non-national employees are the strongest in agreeing compared with national employees.

6.9 Employees' Attitude and Privacy Behaviour

This section presents respondents attitudes towards privacy.

6.9.1 Employees' Value of Privacy

The vast majority of the respondents agreed or strongly agreed with the statement, "employees' value of privacy has influenced their behaviour towards privacy" 75.11%". Only 5.91% disagreed or strongly disagreed with the statement,18.99% remained neutral, Figure 6-38.

Employees' value of privacy has influence their behaviors towards privacy 6050402010Strongly Disagree Disagree Neutral Agree Strongly Agree

Figure 6-38: Employees' value of privacy has influenced their behaviour towards privacy.

6.9.2 Employees' Understanding of Privacy

Figure 6-39 overleaf shows respondents responses towards, "Employees' behaviour towards privacy is affected by their personal understanding of privacy". The vast majority of the respondents, 86.5%, agreed or strongly agreed with the statement and only 3.8% disagreed or strongly disagreed with the statement, 9.70% remained neutral.

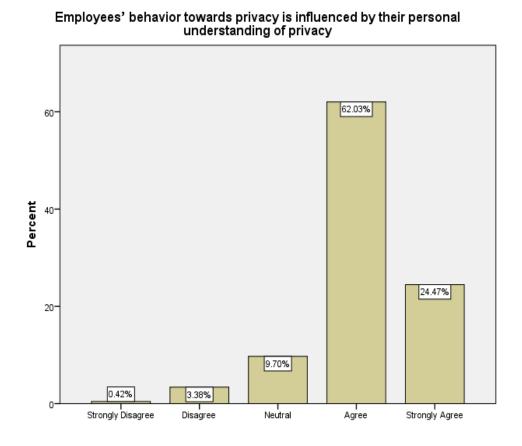


Figure 6-39: Employees' understanding of privacy influences their behaviour.

6.9.3 Awareness of the Importance of Private Information on the Organisation's Image

The vast majority of the respondents agreed or strongly agreed with the statement, "employees' behaviour towards privacy is influenced by the awareness of the importance of private information on the organisation's image", 82.63%". Only 5.51% disagreed or strongly disagreed with the statement, 11.86% remained neutral, Figure 6-40.

Employees' behavior towards privacy is influenced by the awareness of the important of private information on the organisation image 605040201021.97% Strongly Disagree Disagree Neutral Disagree Strongly Agree Strongly Agree

Figure 6-40: Employees' awareness that privacy influences the organisations' image.

6.10 Sharing Expectation: Behavioural Intention

This section presents the behavioural intention towards personal information in the organisation.

6.10.1 Intention to Share Personal Information with Family

Figure 6-41 shows respondents responses towards, "I intend to share employees' personal information with my family". The vast majority of the respondents, 76.47%, disagreed or strongly disagreed with the statement and only 9.66% agreed or strongly agreed with the statement, 13.87% remained neutral.

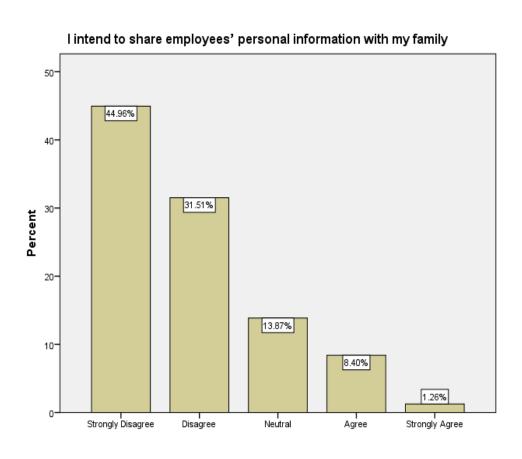


Figure 6-41: Employees' intention to share personal information with their family.

The Pearson Chi-Square test showed a significant difference between national and non-national employees at the organisation towards "I intend to share employees' personal information with my family" statement with, p=0.037. Non-national employees are the strongest in agreeing compared with national employees.

6.10.2 Intention to Share Personal Information with Colleagues

The vast majority of the respondents disagreed or strongly disagreed with the statement, "I intend to share employees' personal information with my colleagues", 73.22%". Only 13.81% agreed or strongly agreed with the statement, 12.97% remained neutral, Figure 6-42.

39.75% 33.47% 30. Percent 12.97% 12.97% 10-0.84% Strongly Disagree Disagree Neutral Agree Strongly Agree

I intend to share employees' personal information with my colleague

Figure 6-42: Employees' intention to share personal information with their colleagues.

The Pearson Chi-Square test showed a significant difference between national and non-national employees towards, "I intend to share employees' personal information with my colleagues" statement with, p=0.016 Non-national employees are the strongest in agreeing compared with national employees.

6.10.3 Intention to Share Personal Information with their Line Manager

Figure 6-43 shows respondents' response towards, "I intend to share employees' personal information with my manager". The vast majority of the respondents, 66.67% disagreed or strongly disagreed with the statement and only 15.19% agreed or strongly agreed with the statement, 18.14% remained neutral.

40-30-29.96% 10-Strongly Disagree Disagree Neutral Agree Strongly Agree

I intend to share employees' personal information with my line manager

Figure 6-43: Employees' intention to share personal information with their line manager.

The Pearson Chi-Square test showed a significant difference between national and non-national employees towards, "I intend to share employees' personal information with my manager" statement with, p=0.011 Non-national employees are the strongest in agreeing compared with national employees.

6.11 Role of Organisation Culture on Employees' Behavioural Intention

6.11.1 Organisation's Working Norms

The vast majority of the respondents agreed or strongly agreed with the statement, "Organisation's normal working practices has influenced employees' privacy behaviour intentions towards private information", 63.75%". Only 12.50% disagreed or strongly disagreed with the statement, 23.75% remained neutral, Figure 6-44.

Organisation normal working practices has influenced employees' privacy behavioral intention towards private information

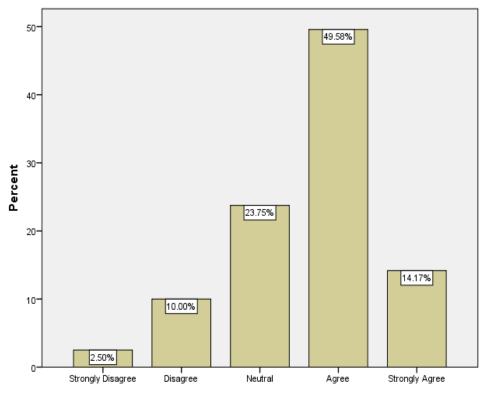


Figure 6-44: Organisation's working norms influence employees' privacy behaviour intentions towards private information.

6.11.2 Organisation Communication System

2.95%

Strongly Disagree

Figure 6-45 shows respondents responses towards, "Organisation communication systems have influenced employees' privacy behaviour intentions towards private information". The vast majority of the respondents, 62.87%, agreed or strongly agreed with the statement and only 13.92% disagreed or strongly disagreed with the statement, 23.21% remained neutral.

Figure 6-45: Organisation's communication systems influence employees' privacy behaviour intention towards private information.

Neutral

Agree

Strongly Agree

Disagree

6.11.3 Trust between Employees' and the Management

The vast majority of the respondents agreed or strongly agreed with the statement, "Trust between the employees and management has influenced employees' privacy behaviour intentions towards private information", 66.95%. Only 10.46% disagreed or strongly disagreed with the statement, 22.59% remained neutral, Figure 6-46.

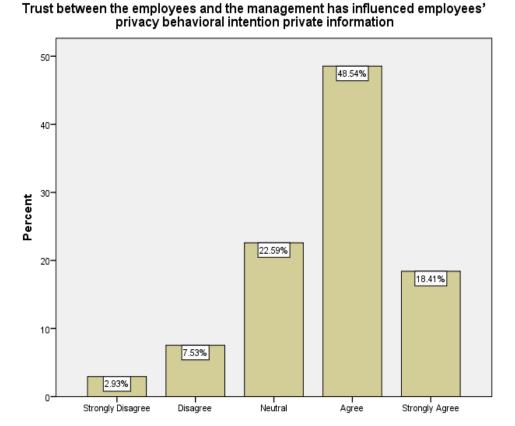


Figure 6-46: Trust between the employees and management has influenced employees' privacy behaviour intentions towards private information.

6.11.4 Trust between the Employees

2.55%

Strongly Disagree

Figure 6-47 shows respondents responses towards, "Trust between the employees and management has influenced employees' privacy behaviour intentions towards private information". The vast majority of the respondents, 67.66%, agreed or strongly agreed with the statement and only 8.08% disagreed or strongly disagreed with the statement, 24.26% remained neutral.

Trust between the employees has influenced employees' privacy behavioral intention 5040401010101010101017.87%

Figure 6-47: Trust between the employees has influenced employees' privacy behaviour intention towards private information.

Disagree

Neutral

Agree

Strongly Agree

6.12 Summary

Chapter five presented qualitative data analysis and this chapter presented the quantitative data. The chapter identified the main factors that influence employees' behaviour toward privacy as well as the role of their awareness towards privacy. The data analysis will provide the basis for the research's key conclusions that has been discussed in this chapter and to be further explored in chapter 7.

Chapter Seven: Discussion

7.0 Introduction

The UAE has seen fast developments in the last few decades due to business and tourist success aiding the UAE's economy. The Emirates organisations have become multi-cultural due to large numbers of expatriates employed in the organisations for a lack of skilled manpower in the country that needed to cope with the Emirates growing economy and industry. Privacy has become an important part of the individual's rights and organisations have been put increasingly under more pressure to develop transparent and effective privacy policies. This chapter presents and discusses the main outcomes of this research. The discussion is based on the principal findings of the literature and the collected data analysis. The chapter discusses the main drivers for privacy in the UAE, understanding and awareness of privacy and provides practical recommendations to enhance privacy at three levels; individual, organisational and societal.

7.1 Main Drivers for Privacy in the UAE

Drivers for transparent and effective privacy policies and procedures, in organisations and society, have developed over the last few decades due to a change in the UAE economic policy (open market) human rights and the individuals' rights. The fast development in digital electronic technology has led to the introduction of social media. This led to the rapid spread of data and information within society. Malhotra et al., (2004) argued with advances in technologies availability and at a reasonable cost, an individual's data can be accessed, collected, aggregated and analysed more quickly and in greater volume than ever before.

It can be argued this has facilitated breaching of privacy and can lead to serious consequences. The United Arab Emirates is one of the fast developing countries in the Middle East with multi-culture societies with a large number of expatriates as the marked labour force. Privacy of individual information has led to the importance of developing transparent and effective privacy policies and procedures for the organisations and for society. The core of this discussion is based on the research's main data analysis and observations during the field work.

This section briefly discusses the main drivers for the need for transparent and effective privacy policies and procedures in the United Arab Emirates.

Society Protection

The United Arab Emirates has its unique cultural values and norms. The core of the culture is based on Arabic traditional culture, Bedouin culture, and religious values and norms. The key feature of this culture is the protection of the adult females. Therefore, the photo of the adult female in social media at large can create serious social problems and a breach of the privacy rights of the individual. The good example which created some social problems in the UAE was some of the females were without hijabs, head covers; in wedding dress videos and pictures spread on the social media without the consent of the individual has created serious social issues to some families and to the individual. The understanding and a transparent policy are needed to protect social issues and problems. Therefore, this research can argue one of the main drivers for clear a privacy policy at national level is to safeguard social problems. One of the key personnel stated this in one of the interviews regarding privacy,

"The main threat of adult privacy is the social media due to the fast and uncontrolled media tool; there is no policy to control the use of social media."

Interviewee G

Fast Development in Communication System

The rapid development of digital electronics in the last few decades has led to the development of several communication systems that facilitate transferring data and information to a large number of people quickly with ease. One of the good examples that are currently widely used is the social media communication systems, such as Facebook and Twitter. This development can be used to breach the individual's privacy if misused and lack of policy and consequences of such a breach. Therefore, there is a need in the UAE for clear privacy policy regarding using social media in breaching individual's privacy. Several individual privacy breaches by social media have created several problems for the individual. One of the interviewees clearly expressed his anger towards Facebook due to the violation of individual privacy and one of his friends suffered moral fatigue from breaching his privacy by Facebook.

"To be honest, Facebook has created many problems for many of my friends as their privacy is breached without any consent."

Interviewee I

Therefore, it is critical and necessary for UAE authorities to develop and implement a clear policy on privacy and a special section on privacy in social media to protect society and individuals from problems.

Avoiding Legal Disputes with Individuals and Organisations

The damage of breaching privacy can lead to damaging the image of the individual's moral, social status and financial losses of the individual. The seriousness of the impact can result in legal disputes between individuals and the organisation. The avoidance of the dispute is needed for two main reasons. The first is the cost involved in the dispute process. This includes the cost of the court, the time and effort that is needed by the organisation and the individual to defend their side of the story. The second reason is the organisation's image in the industry which is critical for the customers and the competition in the markets point of view. The lack of understanding and clear definition of privacy with effective policy can lead to such disputes. It is also important for an increase in awareness for the individual to their privacy rights and encourages individuals to dispute any breach of their privacy. One of the interviewees expressed this argument and stated:

"In recent years, I feel the organisation worried about any dispute regarding individual privacy due to its serious social impact of the UAE citizens and the awareness of the expatriate's privacy right."

Interviewee B

Fast Expansion in Information and Data in the UAE

The UAE is one of the fastest developed countries, with a significant number of public and private organisations operating in the Emirates. The use of electronic tools in managing, controlling, and accessing information created a large quantity of data and information. One of the main challenges for the organisation is to manage and

control the extensive data and information they have and the most challenging aspect is to protect this data and information from any abuse and internal misuses or external traders that they may try to abuse such data and information.

Therefore, this data and information need to be protected from any misuse. At this stage in the UAE, there is no legislation specifically in place to protect individual privacy rights. However, various laws cover certain rights in regards to the protection of personal data, such as the UAE Constitution, Penal Code (Practical Law 2012).

7.2 Perception and Awareness of Privacy in the UAE Organisations

One of the critical factors for individuals' behaviour towards an action is his or her perception and awareness towards the actual action. Social policies and strategies are focusing on developing social awareness and perception as part of social change. Individual and societal perception and awareness towards privacy need to be investigated and analysed in the process of the authorities strategy in building justice and securing information handling and transfer. It is recognised and appreciated that changing individual and societal perceptions and attitudes are not straightforward and easy. This is mainly due to several factors influencing the perception and awareness in society and the privacy that can be critical for individuals. From the UAE point of view, historical, religious and cultural backgrounds have developed a particular awareness and perception towards what is acceptable and what is not acceptable from an information privacy point of view. The information privacy that is associated with these contexts is mainly related to their family, particularly their female members of the family. Awareness of privacy in other information has not been critical due to the minor impact of such information compared with Western Society. Most of the abuse of private information in Western society has serious repercussions on finances and culture from the misuse of information of elite people in society, such as sportsmen and women, artists and politicians. From the UAE privacy context, the elite and the politicians are mainly the rulers and Sheikhs. Over the years, the individuals have a perception and awareness of the elite's privacy in society. It is part of the culture in society to respect the elite and sheikhs.

From an organisation's point of view, the UAE organisations have expanded and have become multi-cultural in their employees. The perception and awareness towards privacy show a clear diversity among the employees. The main factors identified the support of diversity among the employees. These can be argued from the individual's cultural background, country of origin and educational background. The individual cultural background was identified in the qualitative data as an important factor in the individual perception and awareness towards privacy. Employees of the organisations from Western countries (mainly Canada, the UK and the USA) are aware of the importance of privacy. On the other hand, employees with a background in Asian culture are less aware of privacy issues.

This research data analysis indicated that there is diversity among the employees' perception and awareness towards privacy. The vast majority of the respondents of the quantitative and participants of qualitative data indicated that they are aware and have a positive perception towards privacy. However, there are several pieces of evidence of behaviours within the organisation that indicates there are still some employees who are not aware of privacy issues. This may be due to a lack of clear and effective organisational policy towards privacy at the start of the employment, i.e. at the employee's induction programme, or in part of their Career Professional Development (CPD) training programme within the organisation. This finding is that there are some employees with a lack of awareness of the information privacy, and the need to protect such privacy. Acquisti *et al.* (2015a) argued in a similar finding by stating "people are often unaware of the information they are sharing, unaware of how it can be used, and even in the rare situations when they have full knowledge of the consequences of sharing, uncertain about their own preferences".

It is well argued in the literature that privacy is a human right and has been protected by several international bodies such as the United Nations. However, from a practical and an implementation point of view, the privacy is still not taking the right steps within organisations and society. This is due to a lack of clear and transparent policy in the Arab World in general, and the UAE in particular. From a perception and awareness point of view, both quantitative and qualitative data agreed that individual privacy is an individual human right, 82.93% of the respondents agreed or strongly agreed that the privacy is an individual human right. Both the face-to-face interview, with key personnel of the organisation and the focus groups has confirmed the quantitative outcomes. They stressed and confirmed that privacy is an individual's right. Although individuals recognised that privacy is a human right, they failed to explain how to protect their rights and to what extent the effect their rights had. This

reflects the need to research deep into the area of privacy, such as types of information considered by the individual as a human right.

The perception and awareness of information ownership were explored in this research and discussed in order to understand and draw a conclusion. The question asked, and attempted to answer, was whether or not the ownership of the information is indeed the employees or that of the employer. Although the qualitative data, face-to-face interviews and the focus groups stressed that the ownership of the information is the employees, only 59.6% of the employees surveyed agreed or strongly agreed that the employee is the owner of the information.

On the other hand, the respondents of the quantitative data agreed or strongly agreed that the information owner is the organisation. There is a discussion within the focus group suggesting that the ownership of the information is the organisation's, especially the management groups. They argued that the ownership should always be owned and controlled by the organisation. They claimed that the organisation has the ability, tools and means of protecting the employees' information. They also argued that once the employees were employed within the organisation, their personal details need to be owned and controlled by the organisation. The discussion is also suggested the organisations can protect the private information through transparent and effective privacy policies. The discussion becomes more heated when electronic records were raised, and who is to own the information as electronic records can be transmitted, primed and deleted, and changed by the organisation. It became in stronger favour towards the employees' ownership of the information due to the fear of any abuse because of its difficulty to be monitored and checked.

The key elements of enhancing the employees' perception and awareness towards privacy are to be through a well-planned educational background at an individual level, organisational level and societal level. This needs to be taking form for educational programmes from all stakeholders of the society and organisation. Clear and effective educational programmes need to include training courses, seminars, the use of multi-media and traditional tools, such as newspaper articles and magazines to promote and enhance individual and organisational privacy. This research is strongly argued and the employees training on privacy is to promote and strengthen their awareness and perception towards privacy and is needed as part of the organisation's strategy. The training needs to take into consideration three main elements to ensure getting effective and productive training courses as so many training courses are

running for the sake of training without effectively aimed outcomes. The element that needs to be considered carefully by the organisation is the trainee's learning style and status, and the skills and competence of the trainer of the privacy course, and providing an appropriate training learning environment to facilitate the learning process. Currently, the organisation failed on delivering and planning appropriate training on privacy for their staff.

7.3 Definition, Understanding and Challenges of Privacy in the UAE

This section presents and discusses the definition, understanding and challenges of privacy in the UAE

7.3.1 Definition of Privacy

One of the main challenges authorities have on their decision-making progress in developing privacy laws is a precise definition of privacy to help any argument, the dispute on developing a policy for privacy. To help organisations to develop their own privacy policy and procedures the individual employees and the individuals need to understand their rights. The literature has failed to define a generic definition that can be used and adopted worldwide. The main issue of this failure is due to cultural differences and a lack of understanding and awareness of the impact of breaching privacy. Cannataci (2009) clearly argued that there be no universal worldwide definition of privacy although similarities are present. On the other hand, Newell (1995) went further by stating that several languages do not have clear definitions of privacy, such as the Arabic language. Tavani (2008) argued that privacy as a concept be evolving and difficult to define the term conclusively. On the other hand, several researchers considered privacy as a set of norms and rules (Minkkinen 2015, Nissenbaum 2010, Solove 2008). Swire and Berman (2007) argued that the "information privacy" as a term used to refer to the appropriate handling, and collection of individual information.

However, due to changes in communication systems and transport facilities, foreign cultures and backgrounds have started to merge and become more understood by societies. This development helped in transfer knowledge, information and physical goods. It has also assisted in changing society due to the interactions, and it has become easier which helped in understanding different cultures. The transfer of technology has also contributed to breaking barriers between societies. These helped for developing an understanding and awareness of privacy among the individuals within the societies.

Therefore, in this research, a definition of privacy has been explored to establish a definition of privacy based on the main outcomes of the interviews and the focus groups. The research shows that there is no agreement among the participants on a definition of privacy. This finding is agreed in the literature. The definition of privacy has been defined based on several points of view. The key elements that have been used in the definition of privacy include, **respect** of other people's private information. Others should not share personal information. Personal information must not be **passed** to a third person without consent. Individuals have the **right** to a personal **space** that must not be abused by others. Privacy is an individual's **human** right that must be respected, **protect**ing personal information from any abuse. Personal information is **owned** by the individual and must be respected. Therefore, the key words that have been used by the participants are respect, share, passing, right, space, human, protecting and owned. These words were derived from the data collected using the qualitative analysis and the experience gained in the project. This research defined privacy as such:

"Privacy is an individual's personal information, space and human right owned by him/her, no person or organisation has the right to share or pass it to a third party without the consent of the individual owner."

To be able to close the discussion on the definition of privacy it is important to stress that most literature on privacy has come from the USA and Europe due to the awareness of the authority and public towards their right to privacy (Bélanger and Crossler 2011, Crossler, *et al.* 2013, Zuiderveen Borgesius 2015). Of course, the research reflects the USA's and Europe's culture and many do not apply to other societies such as the UAE. Therefore, it is critical to provide transparent definition of privacy to reflect the needs and the nature of the society and organisation culture. This identified culture is one of the main factors for individual behaviour towards privacy. The vast majority of research carried out in Europe and North America with

lack of such research in Arab world in general and UAE in particular(Greenaway, et al. 2015)

7.4 Information Concerns: Types of Privacy Information

The main challenge to establishing an information privacy policy, strategy and decision-making processes is identifying types of privacy information that can be classified as private and considered to be concerned by the information owner. This may differ from one society to another or from one organisation to another due to the differences in cultural and attitudes toward particular information. Identifying types of private information and creating a policy and a code of compliance will help in any dispute that occurs; both parties will know where they stand with their rights and will expect the consequences. Both qualitative and quantitative data explored the main information that was considered to be private, they argued towards the importance and the need for policy to protect such information. The outcomes of the qualitative and quantitative data information agreed that the adult female's private information was at the top of the list. The adult females picture, mobile number, workplace and marital status come in the top of the list in sequences of the qualitative, face-to-face interviews and the focus groups. This list shows the role and impact of national culture on the types of information regarded as private information. The implications to establish privacy legislation and policy to protect such information as well as to educate the national and non-national towards the types of information regarded by the UAE citizens as private information.

The quantitative data analysis and questionnaire analysis agreed with the qualitative data by confirming that the adult female's details are of private information. 53.72% of the respondents agreed or strongly agreed that family details are private information and only 14.05% disagreed or strongly disagreed, 32.23% remained neutral. It can be argued that the main drive for such opinions towards adult female's personal details be mainly due to the UAE culture and the impact that it can cause if such detail becomes widely spread in society, particularly with the use of social media such as the Facebook. The revelation of such details can create social embarrassment to a female's family and this may lead to degrading the family's social status. It is important to stress the impact and role of the revelation of such information may vary from one family to another within the UAE society or at the workplace. This is mainly due to the fact that the UAE society has become a multi-cultural society with different

cultural and ethical backgrounds. It is also due to the change in the UAE's economy, political style and standard of living that may have contributed to change in some of the attitudes and opinions towards their female family members personal details. The most serious impact is on the families with strong Arabic Bedouin culture and they represent the core of the UAE citizens. It is also important to stress the importance and role of religion on culture and the opinions towards the female's details. The expatriates, such as the European part of the society and the organisation, are less concerned regarding the personal details of their females. This has been confirmed by the quantitative data analysis and questionnaire analysis. The analysis indicated that the non-nationals are less considered that their female's details are private information. (37.5% of the national compared with 17.24% of non-national agreed or strongly agreed with the statement).

The bottom of the private information list that was considered by the participants were found to be less important from a privacy point of view. It includes the individual's education background and qualifications gained during his or her career, employment history, personal loan details and his or her job role and responsibility; Again this reflects the citizens culture background as this type of information has no impact on the individual cultural status.

Types of information that ranked between 6 to 20 in the qualitative data analysis presented in the previous chapter represent the least considered as private information. It reflects the cultural background of the individual, for example, the male picture is 13th in the list; this indicates the difference in the opinions towards the female picture which ranked 1st on the list. The table also shows that a personal email is not much of a concerned piece of information for the participants. The personal email ranked 19th in the list. This has been confirmed by the focus groups and the interviewees. This may be due to the extensive use of emails and trust on the security of the details contained in emails. One of the interviewees expressed this point when the discussion led to the use of email.

"I feel that the email is secure and easy to manage and control personal information."

Interviewee J

The types of information that ranked between 6 to 20 in the qualitative data analysis as presented in the previous chapter. It can be argued that most the surprising information data in the list are the medical records (ranked 12th). Private personal mobile numbers ranked 15th. However, the quantitative data showed the majority of the respondents, 59.34%, agreed or strongly agreed with the statement and only 14.1% disagreed or strongly disagreed with the statement.

One of the most surprising outcomes is the difference between the qualitative data analysis and the quantitative data analysis in performance appraisal. The qualitative data analysis ranked the performance appraisal 18th. While the quantitative data showed that the vast majority of the respondents agreed or strongly agreed with performance appraisal as private information, 71.17%, and only 9.06 disagreed or strongly did not agree with this type of information.

"Performance appraisal is discussed among colleagues without any hesitation."

Interviewee A

The main drivers for such difference are that the focus groups insist that performance appraisals discussed by the team help the individual with motivation to do better. Also, individuals with high performances are able to show their efforts and achievements.

7.5 Issues and Problems of Privacy in the UAE

This section presents and discusses key issues and problems explored and identified in this research. This is needed to help the organisation's management in understanding the extent of such issues and problems in developing and establishing transparent and effective privacy policies to avoid any dispute and embarrassment in abusing personal information. The following are the discussions of the main issues and problems.

Lack of Awareness towards privacy

One of the main issues of privacy explored in this research is the lack of awareness of privacy in the organisation. The qualitative data indicated clearly the lack of awareness of the employees towards privacy. This has been confirmed and discussed

based on the employee's behaviour towards privacy such as exchanging passwords, leaving personal documents in the printer and discussing personal details in open area are good example of the employees lack of awareness. The quantitative data analysis has confirmed the impact of awareness on the organisation's image (82.63% of the employees agreed or strongly agreed) and employee's behaviour. The main factors for the employees lack of awareness include lack of training in privacy in the organisation, accepting culture among the employees that involve abuse in handling and managing individual private information, and lack of clear privacy policy and transparent and effective consequences for abusing any individual privacy. These factors have contributed to the lack of awareness among the employees. The organisation's authority needs to establish a strategic plan to change the employee's awareness towards privacy and this will be discussed in this section of the chapter.

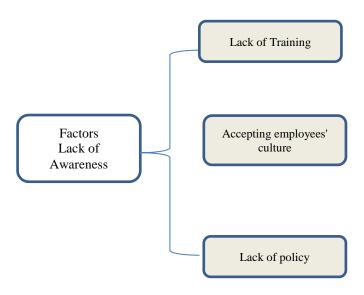


Figure 7-1: Main factors for lack awareness among the employees.

Organisation Culture: Employees Values and Norms at the Work Place

This research identified several employees' behaviour at the workplace that has become norms in the organisation. The identified behaviour involves abusing individual's privacy. This includes sharing personal passwords, printing private documents without taking appropriate measure to ensure keeping it private, leaving private information of individual employees on the printer without collecting it immediately, discussing personal appraisals openly in the organisation, dealing with visitors of the organisation and dealing with human errors that abuse private

information as examples. The other employee's behaviour that has become normal in the organisation is leaving the office and filing rooms unattended, access to the employee's offices and employee's workplace boundaries without any restrictions and the issue of employees leaving personal information on their desks while leaving the office unattended. Unfortunately, this has been accepted as normal behaviour of the employees in the organisation. The behaviour has not been recognised and identified by the organisation and no appropriate decision has been made to stop such behaviour. This type of conduct by the employees has become a norm and accepted by the employees. This is due to a lack of awareness of privacy and a lack of value of such information. It's hard to change the culture in the short term, i.e. changing employees working norms to ensure the privacy of managing and controlling private information. One of the surprising norms in the organisation is sharing passwords for accessing their personal work computers and the system. The qualitative data analysis and discussions believed that they are trusting their colleagues and there is nothing wrong with sharing passwords among the employees as all the employees are working and serving the company to their best ability and with integrity.

> "I trust my colleague as he trusts me, in other words, he is as keen on the organisation as myself."

> > Interviewee P

Use of Technology

The organisation has implemented the use of technology in its operations. This has been recognised and used well to support, improve and enhance the organisations performance. However, the qualitative data and quantitative data considered the use of technology in the organisation as having potential privacy issues. The argument is based on the power of technology in transferring, copying and deleting personal information. The key example was given in the qualitative data that the employees explored, they are the human error in using the technology, namely the email system. They expressed their concerns that several times personal information was emailed to the employees by mistake. This has created personal embarrassment to the sender and the receiver of such information. Copying and deleting of personal information are technology based issues. Individual employees have the power to copy personal

details or delete personal information. Therefore, there is a need for a clear policy on the use of technology regarding the employee's privacy.

Lack of a Clear Privacy Policy and Procedure

The key issue of privacy in this research identified is a lack of a clear transparent and effective privacy policy in the organisation. With no privacy policy in place, employees are easily able to abuse the system and exploit private information without consequences. There are several factors for lack of policy within the organisation. The first factor, it can be argued due to a lack of awareness of the organisations management towards privacy. This is indicated by the organisation's culture that has become a norm to abuse private information without serious action by the organisation. The second factor for the lack of policy is a lack of a clear and transparent national privacy policy. The UAE national privacy policy needs to be introduced and enforced by the UAE organisations. The third factor for a lack of policy in the organisation is a lack of pressure from the pressure groups for a transparent privacy policy. The pressure groups include national newspapers and magazines, TV, social media and the organisation bodies in the Emirates, such as human right campaigners. Figure 7-2 shows the main factors identified in this research for lack of transparent and effective policy in the organisation. It is important and critical for the organisation's management to develop and establish a clear privacy policy to meet the employee's expectations and ensuring their rights. This research has discussed the changes that were needed in developing a transparent policy and this will be examined in detail in the next section of this chapter.

Although, 35.40% agreed or strongly agreed with the statement that "there is no privacy policy in organisation" and 24.28% stayed neutral. The qualitative data confirmed the lack of policy. The participants discussed the policy in detail and expressed their concern that there is a lack of transparent policy in the organisation.

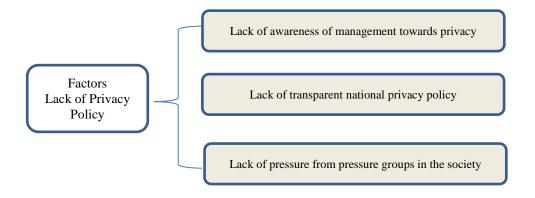


Figure 7-2: Main factors for lack transparent policy in the organisation.

7.6 The Role of Information Culture in the Individual's and Organisation's Behaviour

This research believes that culture is one of the important factors contributing to the employee's behaviour towards privacy. This section presents the information cultural dimensions in UAE organisations, cultural challenges in implementing privacy policies, and culture vs. Technology.

7.6.1 Information Cultural Dimensions of the UAE Organisations

The UAE culture dimensions are shown in Figure 7-3. The figure shows their main dimensions of the UAE culture that include males' dominance, collectivism behaviour and women dimensions. These dimensions were derived mainly from the qualitative data analysis and discussed briefly in this section.

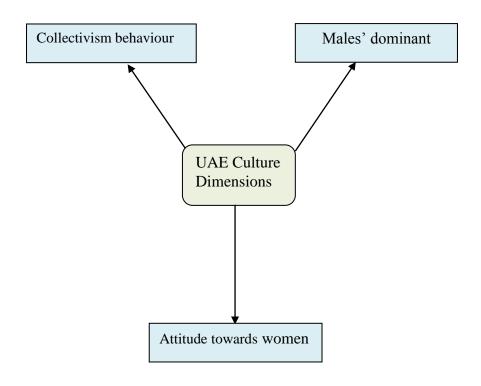


Figure 7-3: UAE cultural dimension

Males dominant culture

The UAE culture is mainly male dominant and the males have the power at home and of the decision making. However, the UAE women have started taking their right role in society and the organisation through the support and encouragement from the authorities. However, the culture is still a barrier, one of the females in one of the interviews stated this dimension:

"We have to agree that the UAE is a male dominant society and the main power is in the hands of the males at home and work. The males still believe they are the stronger part of the society and this needs to be changed."

Interviewee C

Collectivism behaviour

The key element of the UAE national culture is their collectivist behaviour. The tribe and group interests come first when he/she needs to make a decision. Their behaviour at the workplace may not be based on his own personal interests. They may be happy

to sacrifice their personal interests for his own tribe member of the group within the organisation. One of the interviews explored this dimension by stating:

"We have several employees and I am one of them and I am happy to sacrifice my personal interest for the organisation or the tribe if we need to make a decision. It is part of our cultural dimension."

Interviewee A

Attitude towards women

Attitude and behaviour towards women represent a core of interaction in the UAE society. This is mainly due to women's roles evolving from the Arabian Bedouin culture and Islamic religious principles. This has led to making the female's private information sensitive in social interactions and media. There are still parts of society that believe women are weaker when compared with men and they cannot take a lead position within the society.

"You know, our societies culture is sensitive towards women, we need to comply with our religion and Arabian culture when interacting with women or talking about women or sharing private information."

Interviewee M

7.6.2 Cultural Challenges in Implementing Privacy Policy

<u>UAE National Culture: Society Values and norms</u>

One of the main challenges for the implementation of privacy in the UAE organisation and society is the UAE national culture, Bedouin values and norms. Tribe's values and norms of Arabian culture are the main elements of the UAE national culture. The values and attitudes of the Bedouin and tribal culture towards female's personal details represent an important part of their behaviour. Female's personal details are sensitive information and represent part of their bride pride. The other significant influence of the UAE national culture is their willingness and sharing of information with their tribe members they believe it is a part of the tribe duty to

help tribe members and it would be embarrassing not to give information if he was asked by one of the members of his own tribe. This represents a serious challenge in the implementation of a privacy policy in the UAE organisation.

Staff working culture

Due to a lack of policy in privacy, lack of awareness towards the privacy and lack of appropriate training, the organisation has built certain values and norms towards privacy and private information at the workplace. There are employees that have made it a norm but in fact, they represent abuse to the privacy of individuals.

<u>Cultural Diversity of the Employees</u>

The society and organisations have employees with different national cultural backgrounds. This has created subcultural groups within the organisation and society. Employee's national culture plays a role on the individual and the sub-culture behaviour within the individual and group working environment. The diversity includes employees from Asia, Far East, Europe and North America. This diversity represents a challenge as what privacy means may differ from culture to culture. The organisation needs to establish clear planning to overcome cultural diversity issues. This will be discussed in the changes needed to enhance privacy in the next section,

Role of Religion: Values, Norms and Beliefs

Individual and group religion and belief play a major role in the individual's action and responses and behaviour; they create a set of values, norms and morals in the individuals and groups. These values and norms, such as revealing females' private information to the public, which are based on their religions and beliefs can be difficult to change, especially if they are against religions and belief. This represents a challenge of implementing a privacy policy. Therefore, it is advisable to take into consideration the employee's religions and beliefs in the privacy implementation process to ensure effective and successful implementation.

The discussion above indicated that UAE culture has an influence on privacy information and needs to be considered in any privacy policy at organisational or national level. This finding in agreement with Adelola *et al's*. (2014) finding which stated that countries differ over how privacy is respected and treated. This attitude of respecting privacy has an influence on what data protection approaches a country adopts to have effective data protection.

7.6.3 Employee Culture vs. Technology Challenges

There are two main factors in an organisation that may influence managing and controlling privacy in the UAE organisations. These two factors are a use of technology, and human culture. The argument is on the extent of the impact of these two factors and how to control and manage these factors in order to protect the privacy of the employees. This research can argue that the UAE authority can buy technology as the cost is not a big issue in the UAE to protect privacy through technology. The observation and experience in the organisation indicated that technology is used well in the organisation's system and the technology is playing its part for securing data and information. The challenge is the employee's culture factor that needs to be considered in the planning process to enhance awareness to protect privacy. Employee's culture is a challenge compared with the technology factor in the sense that the organisation can invest in technology and get what they need quickly but the culture needs time and effort. One of the statements by the focus group stated this point clear and argued strongly towards the needs to invest in the human part of protecting the privacy planning process. The focus group stated:

"We think as a group that the organisation needs to invest in cultural issues as we have the appropriate technology to protect privacy."

Focus Group B

The interviewees have supported the above statement discussed in one of the focus groups. The interviewees have explored the issue of comparing the role and impact of culture and technology factors in protecting privacy. One of the statements was expressed by one of the interviewees while discussing the role of culture in protecting privacy in the organisation.

"Our organisation invested well in technology to support the operations and activities of the organisation; we would say that our organisation uses the most advanced technology. Unfortunately, the organisation failed in investing in the human part of the organisation."

Interviewee C

7.7 Privacy Behaviour Model

A significant body of research on human behaviour and action has been discussed as the main factor influencing individuals. Herold (2010) argued that the organisation employee behaviour is the root-cause of privacy breaches and information security. Gou (2013) classified organisation employee behaviour into four main behaviour The first is the security assurance. Secondly, security compliance category. behaviour, thirdly security risk-taking behaviour and fourth category are the security damaging behaviour. Da Veiga and Martins (2015) argued the last two categories represent the main risk to the protection of information. Individual's attitudes towards action are the one of the main factors identified for human intention to act. This section critically analysed the developing privacy behaviour models based on human behaviour theory, Theory of Reasoned Action (TRA). The model has been altered and modified to reflect the UAE privacy culture. The main weaknesses of the current models are missing some of the important factors that influencing employees behaviour such as national culture. The main purpose of this model is to identify the main constructs influencing employee's attitudes towards privacy.

7.7.1 Constructs influencing Employees Intention to Behave towards Privacy

The developed model has been tested to identify the relationship of these factors on the employee's behaviour. There are four constructs needed to be checked to see whether they have positive or negative influences on the employee's intention to behave towards privacy at the workplace. The four constructs include the employee's attitudes toward privacy, perceived benefit in disclosing privacy information, subjective norms and organisation culture. The research identified that the employees attitude (β =0.331, p < 0.001) is the strongest and most significant construct compared with organisational culture constructs (β =0.132, p < 0.001) on the employee's intention to behave towards privacy at the workplace. The other two constructs, namely the subjective norms and perceived benefits are not significant constructs to the employee's behaviour. Therefore, the questions that can be asked and answered in the influencing factor include the following questions and their answers:

Q1: What is the relationship between employee's attitude and their intentions towards privacy?

The data analysis indicated that there is a positive relation between the two factors.

Q3: What is the relationship between employee's subjective norms and the employee's intentions towards privacy?

The data analysis indicated that there is a negative relation between the two factors.

Q6: What is the relationship between employee's organisation's culture and their intentions towards privacy?

The data analysis indicated that there is a positive relation between the two factors.

Q7: What is the relationship between employee's perceived benefits and the employees intentions towards privacy?

The data analysis indicated that there is a negative relation between the two factors.

Research carried out by Wilson and Valacich (2012) identified two main factors to individual irrational behaviour, namely, benefit immediacy and risk diffusion. They developed a model stating that individual perceived benefits of information disclosure tend to be immediate rather than delayed. It conceives that the perceived risks of disclosing information are low and the benefits are high. There is also research that found that individuals disclose information in order to get social capital gain (Ellison, et al. 2011, Stutzman, et al. 2012).

7.7.2 Constructs influencing Employee's Attitudes

Three constructs are needed to test the influence on the employee's attitudes; these constructs include subjective norms, the organisation's culture and national culture. The statistical analysis indicated that the national culture, subjective norms and

organisation's culture are significant constructs on the employee's behaviour towards privacy. However, the national culture is the strongest construct and most significant (β =-0.335, p < 0.001) compared with subjective norms (β =-0.171, p < 0.001). The statistical analysis indicated that the organisation's culture is not a significant construct.

Therefore, the questions that can be asked and answered in the influencing factors include the following questions and their answers:

Q2: What is the relationship between the employee's subjective norms and the employee's attitude towards privacy?

The data analysis indicated that there is a negative relation between the two factors.

Lee (2008) found in research on online banking that the social risk of is negatively influenced by the subjective norm. Social risk is related to the individual attitude towards the social risk

Q5: What is the relationship between employee's organisation's culture and the employee's attitudes towards privacy?

The data analysis indicated that there is a positive relation between the two factors.

Cullen (2009) carried out a comparative research for groups with different cultural background. The research found that the attitude and perception made in each group of participants in the research reflect the group cultural values and concept of personal identity. The research was also indicated the importance and the need of being aware of the cultural difference between individualist and collectivist cultures.

7.7.3 Role of National Culture

The qualitative data analysis indicated that the national culture has a role in the employee's behaviour towards privacy. This can be understood from the individual's belief and historical background. From the UAE point of view, the mix of the Bedouin and religion have created and drawn the characteristics of the individual's UAE citizen culture. Their statistical analysis indicated that the national culture

construct is positively related to the attitude of employees, organisation culture and perceived benefits. The answers to these questions:

Q4: What is the relationship between the national culture and the employee's attitude towards privacy?

The data analysis indicated that there is a positive relation between the two factors.

Milberg et al. (2000) found that the national culture values are associated strongly with the individual privacy concern. Other research carried out by Rose (2006) indicated that national culture values are related positively but marginally with its regulatory approach

Q8: What is the relationship between national culture and the organisations culture?

The data analysis indicated that there is a positive relation between the two factors.

Most of the research in the literature were focused and discussed role of organisational culture in the organisation information system (Indeje and Zheng 2010, Svärd 2014) and very few research in role organisation culture and national culture.

Wu (2006) illustrates that national cultural values are not static. It can be argued that values may change due to the interaction between societies and physical crossing by humans between the societies due to travel. Societies have become more open, open systems. In an open system society, the boundary of the system allows the subjects and goods to cross the boundaries. The interaction the cross of the physical and the goods are contributing to cultural change. From the organisation culture point of views has influenced by national culture and there is a need for the organisation to adapt to the employees culture particularly when they operate in different countries.

Q9: What is the relationship between national culture and the perceived benefit?

The data analysis indicated that there is a positive relation between the two.

Dinev and Hart (2006) argued that individuals decide to disclose personal information when potential gains surpass expected losses. This support the finding of this research as the individual culture, particularly Bedouin culture, individual is getting a potential gain in the form of intangible benefit, He/she can get social status.

The employees at the workplace interact within the organisation's rules and these rules must not be in conflict with his culture and religion. The employees take to the organisation's culture with him at to the workplace as it is difficult to change the individual culture in a short time, reprogramming of the mind. It plays a role in the individual and cultural group to interact with others at the workplace. It is also important to stress that national culture has an effect on the individual behaviour towards perceived benefits. The employee's beliefs, religion and culture play a major role in accepting benefits in releasing private information in the UAE society, particularly the image and personal details of adults. It is a moral issue that the employees reject such benefits.

It can be concluded that national culture has a role and impact on privacy behaviour due to its role on the individual's values and norms. Bennett and Raab (2003) argued that national culture has the power to influence decisions at various levels especially at a corporate level. This is again due to the role of national culture on the decision makers' values and norms towards individual's information privacy.

7.7.3 Developing Privacy Models

Figure 7-4 shows the developed model for privacy relevant and applicable to ADEC. It is also important to stress the model has been developed and designed to achieve one of the research and objectives promised at the start of the research. The model is based on TRA model and the model modified in order to be adopted and relevant to ADEC. The figure indicated both the significant and the not significant constructs of the model. Based on the model results, the authorities of the organisations need to take the positively treated constructs and develop strategies to enhance the privacy awareness and understanding by taking these into consideration in their policy, guidelines and actions. The figure clearly indicates the role of national culture in the employee's attitude, organisation culture and perceived benefits. The model also

indicates that the employee's attitude is a powerful construct and significant in the employee's intention to behave towards privacy.

Factors influencing behaviour

Actual Behaviour

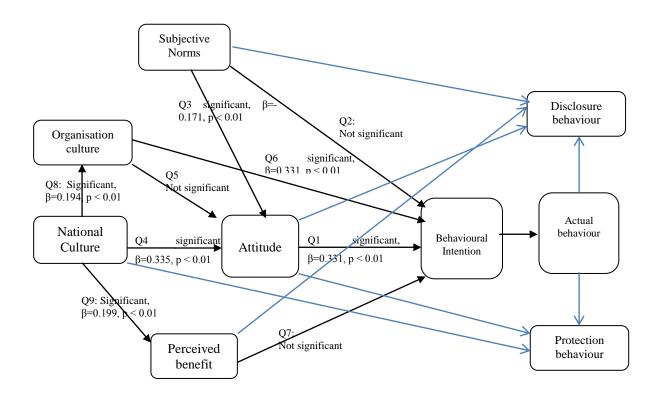


Figure 7-4: The Developed Privacy Network Model, objective 6.

7.8 Reflection on the Main Findings: Means and Response

This section reflects on the main research findings meaning at the individual, organisation and national level. The section also discusses the meaning of privacy development theory. Response to changes based on the reflection of the main findings to improve the current situation of privacy.

7.8.1 Individual Level

The main findings of the research suggest at an individual level, the definition and understanding of privacy are not clear. The culture background of the individual, types of information considered as private indicated clearly the influence of individual cultural background and religion as well as on the individual behaviour towards handling private information.

The finding contributes to our understanding of what privacy mean from two points of views. The first we need to understand that privacy is individual feeling and response to private information based on balancing and interaction with individual culture, values and norms, and benefit that can get from disclosing private information. The findings are also confirmed and defined as the individual human right to protect his private information. It means each individual has a right to manage and control his private information and no one has the right to abuse or use this information without the consent of the individual owner of the information. It is not up to the organisation or individual to decide to give or disclose personal information, simply is individual human right to have it.

Therefore, the privacy at individual levels can be considered as a core of privacy policy and needs to consider carefully in developing privacy policy of a society or organisation. As the individual culture dominate individual behaviour and attitude towards privacy, changing individual attitude and perception towards privacy is challenging and cannot be the quick fix solution. An educational programme for a considerable time can be the appropriate tool for changing the individual. The next section provides recommendations at individual level

7.8.1.1 Response to the Main Findings: Recommendations for Change at Individual Level

This section presents the main response to the main research findings by providing a recommendation for change at individual level.

Individual Education and Training

In response to the main research findings regarding individual employees awareness, understanding of privacy, the research is also identified the organisations lack of privacy training. This needs to be changed to enhance the employee's privacy awareness, understanding and knowledge of privacy. The research argues that in order to have effective training the organisation needs to do the following:

- The organisation needs to establish a clear and effective privacy policy and provide the individual employee with adequate training on privacy. The training should be annual to enhance the awareness and understanding of the privacy policy.
- To identify the individual's learning style and preferred training delivery. The training methods should reflect the employee's ability and learning style. The designed training should tailor to the employees need and use case studies to enhance the learning rather than a generic training (Brooke 2006, Parsons, *et al.* 2014).
- To identify and select skilled and competent trainers to deliver the training programme.
- Develop privacy training programmes on three levels, an introduction to
 privacy, intermediate level and advanced levels. All the employees need to
 attend the introduction to privacy programme. The second programme is based
 on the employee's position in the organisation; this may include the managers
 and head of departments. The advanced privacy training programme should be
 targeted at the employees working in the organisation's information system.
- Provide appropriate individual learning environments to ensure the effective learning process. This includes selecting appropriate data, time, training and resources.
- The organisation is also encouraged to develop an introductory online training course on privacy for an individual employee to train online.

Individual Attitude

The research identified that the employee's attitude plays an important role in the employee's behaviour towards privacy. The research has also identified the main factors that influence the individual employee's attitude; these factors include subjective norms, national culture and organisational culture. The research is urging the organisation to take into consideration the three main factors and establish strategic plans to overcome such factors to improve the employee's attitude towards privacy. The changes include specific training featuring national culture, subjective norms and organisational culture.

7.8.2 Organisation Level

At the organisation level, the findings indicated that the organisation has a challenge in two folds. The first is to manage individual behaviour towards privacy and ensuring an individual level of trust in dealing with the private information bearing in mind the individual cultural background and role on the individual behaviour. The second challenge is to create organisation culture with a positive value of private information and norm of the employees to behave in protecting individual private information. It is also important for the organisation to understand the meaning of the privacy and to have a clear vision and adopting appropriate system and processes to protect individual privacy.

The findings contribute to the organisation understanding and meaning of the privacy in three main areas. The first are is that the organisation play a major on the promoting and enhance employees awareness towards the importance and the need to protect private information through clear and effective educational programmes for the employees and establishing clear policy and procedures for protecting private information. The organisation needs to consider two main factors in designing, implementing privacy policy and education of the employees. The first factor is the employees culture background. This is critical for multi-national operational organisations as the national culture has a role in the individual behaviour as indicated and found in this research. The second is recognising the individual human rights

when they establish and designing the organisation policy, procedures and processes to protect the individual human right.

7.8.2.1 Response to the Main Findings: Recommendations for Change at Organisation Level

This section presents the response to the main research findings by providing a recommendation for change at organisation level.

Change in the Organisation's Privacy Policy

The research identified that there is a lack of a transparent and effective privacy policy in organisations in Abu Dhabi Emirate. Therefore, the organisation needs to develop and introduce a clear and effective privacy policy. The policy should stress the individual's right to his or her private information. The policy should also be able to identify clearly the consequences of any abuse of an individual's privacy.

Change in the Organisation's Management Structure and Processes

The organisation needs to modify the current organisation structure to include an information security and privacy team within the department of information. The team needs to be responsible for managing, monitoring and implementing the organisation's privacy policy. The organisation needs to select skilled and competent employees in privacy to take the leads in the created section. The organisation also needs to change the processes to include a process for monitoring the privacy policy through the created department. It will also use advances in technology to protect and monitor privacy.

7.8.3 National Level

The main research findings indicated that at a national level, people awareness, perception and understanding the meaning of the Privacy falls short of national expectation. At national level, UAE culture has an important influence factor on the citizen's behaviour towards privacy. Changing citizens' privacy culture at national level needs time and effort. It is not a quick fix process due to the complexity of culture and its influence on individual values and norms that built over a long time. This requires the Emirates Authority to take in consideration citizens' privacy in their strategic planning to develop privacy culture within the society. The findings also

mean the need for clear and effective privacy legislations and policy at national level. It is also important to enforce such legislation and policy to ensure successful implementation.

From the contributing point of view, the research findings lead us to believe that national culture is an important factor in the individual behaviour toward privacy in society or at the workplace, in the organisation. Therefore, the national authority has a responsibility to develop and enhance privacy awareness throughout the society. Ideally, that needs to be considered from an early stage of the education, possibly from primary school education. It is also important to stress that the types of information considered to be private and UAE individual keen to keep them private is, in fact, represents the national values, norms and attitude. It is the product of the national interaction developed over a long time with the influence of religion and Arabian Bedouin culture. This was evident on considering adult females private information as the most sensitive and private and information and this type of information was at the top of the list of private information. This shows clearly the influence of the national culture on the attitude and perception of privacy.

7.8.3.1 Response to the Main Findings: Recommendations for Change at National Level

This section presents the main response to the main research findings by providing a recommendation for change at national level.

Society's Attitudes and Society's Perceptions

The attitudes and perceptions of society towards privacy, such as the norms and values of privacy through their interactions with information sharing, has an impact on the individual employee's behaviour in the organisation. Therefore, the national attitudes and perceptions of privacy need to be enhanced to build citizens with strong awareness and understanding of individual rights for their personal information. This can be achieved by national strategic planning to promote citizen awareness's and rights towards privacy. The national strategic planning includes the use of national media, such as the national newspaper, magazines, TVs, and the national organisations to promote citizens interest in privacy. National debates and discussions in public using multimedia can also be used to promote citizens awareness.

National Privacy Policy

Lack of a transparent national policy that could give guidelines and principles of the privacy that organisations can use in developing their own privacy policy is one of the main findings of this research. Lack of such a policy represents one of the main challenges in developing privacy policies. This policy needs to be reflected in the national policy. Lack of such policy is also contributing to enhancing awareness of the organisations management towards privacy and implementation of the policy. Currently, the national policy is generic with little to cope with the sharp development of information and to avoid the increase in disputes in privacy between organisations and employees. The national policy is needed especially to fulfil the expatriate's needs and pressures to protect their privacy. Therefore, this research argues strongly for a change in the national privacy policy as the current policy does not reflect the current needs and does not take into account the development in the Emirates in the last few decades. Based on the main outcomes of this research a national privacy policy is needed and should include the following:

- Stress on privacy is the individual's human right and that needs to be respected by organisations and individuals in society.
- The policy needs to provide transparent definitions of privacy.
- National culture needs to stress the consequences of any abuse of individual privacy and give the organisation the power to take measures.
- National policy needs to provide principles and guidelines for privacy in order to help the public and private organisations develop and write their own privacy policies that reflect the national privacy guidelines.
- Public and private organisations have duties to inform their employee's privacy rights through appropriate privacy training.
- Public and private organisations need to install and implement information system to protect private information.
- The national privacy policy needs to take into consideration the multicultural nature of the population.

7.8.4 Privacy Development Theory

From the privacy development theory, the research indicated the lack of clear and generic privacy definition. The main reasons for this lack are the complexity of using the term and change the meaning and types of private information from one society to another society. The most privacy theories and explanation is developed and recognised in the USA and Western Europe although the majority of the work on privacy developed in the USA. The privacy definition needs to reflect the national culture, values and belief, as it may change from one society to another. From a theoretical point of view, the role of the national culture is still no taking its place in the privacy.

It is also important to stress that the vast majority of privacy theory is based on using technology with a little emphasis on the role of human behaviour and attitudes towards privacy as the main threat to privacy. The main findings of this research indicated the importance of the human role on privacy and there is a need to develop theories to help understanding issues. The current theories are based on only on human behaviour theory, i.e. identifying main dimensions that have a positive influence on the individual attitude towards privacy with the belief that attitude leads to the individual intention to behave towards privacy information, and intention to behave is the main drive for actual individual behaviour. This research is arguing for a need for more theoretical development on human behaviour theory and developing a model for such theory.

7.9 Summary

This chapter has discussed the main outcomes of the research based on the data analysis. The chapter also discussed the developed privacy model and identified the significant and non-significant factors based on statistical analysis. The final form of the model is also presented in this chapter. The model indicated that the national culture was significant to the employee's attitudes and significant in creating the culture of the organisation. The chapter also provided recommendations to change, enhance and promote employee's awareness, attitudes, understandings and knowledge of privacy.

Chapter Eight: Conclusions, Recommendations and Suggestions to Further Research

8.0 Introduction

Privacy information has become a critical and important issue in the UAE organisations and society due to the expansion in the number of UAE public sectors, private industries, commercial organisations and manufacturing companies. It is also important to stress the sharp increase in information and use of technology in handling the information. The seriousness and impact of abusing private information can lead to legal disputes and have a bearing on the individual's and organisation's image in the market, in the public and the authorities. The focus of this research is on the role of perception, awareness and behaviours towards privacy.

The main aim of this research is to investigate and analyse factors influencing employees information privacy behaviour and employees' perceptions, awareness and behaviour on the handling of private information in the Abu Dhabi Emirate public sector, as well as to provide practical recommendations to improve the privacy.

The main purpose of this chapter is to present the researches main findings in relation to the research aim, objectives and questions. The chapter also presents the contribution and novelty of the research to the field of the knowledge of information privacy, and will present the main limitation of the research. The chapter closes with a number of practical recommendations concerning privacy in the United Arab Emirates organisations, as well as suggestions for further studies.

8.1 Conclusions

This section presents the main outcomes of this research based on achieving the research objectives.

8.1.1 Critical Review of the Literature

Critical reviews of the privacy literature and related topics was conducted at the early stages of the research and updated throughout the research process to build research awareness of other research areas and build up knowledge and experience to understand the research topic and build a research model. It is also to achieve the

research objectives. *Objective 1:* Review the current literature related to employees' perceptions, awareness, attitudes and behaviour towards privacy.

8.1.2 Privacy Issues and Problems

Objective 2 proposes is to explore and identify the main issues and problem of the current situation. *Objective 2:* To explore and identify the current main issues and challenges of privacy in the UAE. The problems and issues explored were identified based on the interviewees and their experience and knowledge at the workplace. The main issues and problems explored include a lack of awareness towards privacy. The outcomes found in this research included organisational culture, employee's values and norms at the workplace, use of technology and lack of clear privacy policies and procedures.

8.1.3 Employees Perception and Awareness Towards privacy and the Types of Information

Objective 3 of this research was to identify the main constructs influencing employee's attitudes which state *Objective 3:* Investigate and analyse employees' perception and awareness towards privacy and different types of information. This objective was achieved by exploring the employee's perception and awareness towards privacy. The research found a diversity of perceptions and awareness towards privacy. However, there is evidence that employee's behaviour indicated that they are lacking awareness of private policy and do not have the right perception towards privacy. This lack can be explained due to the lack of clear and effective privacy policies and lack of training and educational programmes in privacy at the workplace. This may be attributable to a lack of a clear and effective organisational policy towards privacy and lacks of clear and effective employee's induction and CPD training programmes within the organisation. The research has also identified types of information considered as private information. Types of information that have been deemed to be private are related to the UAE culture and focused on adult female's personal details. The top five of the private information that was found to be private includes adult female's personal pictures, adult female's personal mobile number, adult female's personal workplace and adult female's marital status and spouse. On

the other hand, the bottom of the list of the private information types is the employee's job role and responsibilities.

8.1.4 Definition of Privacy and the Understanding of Privacy

Objective 4 of this research is to clarify the definition and understanding of privacy from the UAE perspective which states *Objective 4:* Define and understand privacy from the UAE perspective. This objective was achieved by defining privacy from the UAE point of view based on the employee's opinions and views. The chapter has also explored employee's understanding of privacy. The key terms used that reflect their understanding and definition of privacy was based on the interviewee and the focus groups; they included: share, passing, right, space, human, protecting, owned. Various definitions of privacy were explored and the vast majority included one or more of the above terms. This research defined privacy as:

"Privacy is an individual's personal information, space and human right owned by him/her, no person or organisation has the right to share or pass it to a third party without the consent of the individual owner."

8.1.5 Factors Influencing Employee's Behaviour

Objective 5 of this research is to identify the main factors influencing employee's attitudes which state *Objective 5:* To determine the main factors influencing employees' attitudes and behaviours towards privacy. This objective was achieved through the identification of the main factors that affect the employee's behaviour. The constructs identified were based on the main outcomes of the quantitative and qualitative data and critical review of the literature. The constructs have been used to develop individual employee's behaviours and models. The research explored and identified the main constructs that may be influencing individual employee's attitude to include national culture, organisational culture, perceived benefits, and subjective norms.

8.1.6 Factors Influencing Individual's Private Information Behaviours

Objective 6 of the research proposed to develop and design a model of how factors are influencing individual private information behaviour, regarding private information handling, are interrelated and influence on each other. This model has been developed and designed as a network of factors indicating how one or several factors interact to have a positive or adverse effect. *Objective 6* stated: Develop and design a model of how factors are influencing individual's information and behaviour, regarding private information handling, are interrelated and have an influence on each other. The model has been developed and designed on the factors and its interrelations that affect employees. Individual employee attitudes are the main drive for the employee's intentions and actual behaviour toward handling private information, based on individual attitudes. Individual's attitudes have been used as the main driver for the individual's behaviour towards privacy.

8.1.7 Comment on Research Questions

The main outcomes of the research have provided answers to the research questions raised at the beginning of the research

Q1: What are the UAE employees' perception and awareness towards privacy?

The research indicated that there is lack of employees awareness towards privacy and their perception of privacy is focused on their family adult females' personal information

a) What are the main issues of the employees' behavioural practises in handling private information?

The research found the main issues of the employees' behaviour practices included sharing passwords, printing personal information in open space, having access to the employees' offices without permission, lack of privacy policy and procedures, employees' social interaction, lack of training in privacy, use of technology in handling information, human errors, dealing with organisation visitors, updating personal files in open air, lack of awareness of employees towards privacy,

Q2: What is the definition and understanding of privacy from the UAE perspective?

The research defined privacy from UAE perspective as "Privacy is an individual's personal information, space and human right owned by him/her, no person or organisation has the right to share or pass it to a third party without the consent of the individual owner." The research is also found diversity in understanding the meaning and definition of privacy.

Q3: What are the main factors influencing employees' behaviour in handling private information?

- a) What is the role of culture on individual's attitudes towards privacy?

 The research indicated that national culture of the employees plays a major role on privacy particularly for UAE national employees'. The Arabian Bedouin culture with the Islamic background was clear on the individual attitude, especially in female adult private information.
- b) What is the role of organisational working culture on attitudes towards privacy?

Lack of clear policy of the organisation and lack of monitoring employees' behaviour have led to organisation culture that influencing privacy, namely employees behaviour towards privacy accepted as part of the organisation culture such sharing passwords and printing private information in an open area for example.

c) What is the impact of the Arabian tribe values and norms on the individual's attitude towards privacy?

The Arabian tribe values and norms have an impact on the individual's attitude towards privacy. This was clear in their loyalty to the tribe and attitude towards females.

d) What is the role of subjective norms on the individual's attitude towards privacy?

The research found that the subjective norms have no role the individual's attitude towards privacy.

e) What is the role of awareness on the individual's attitude towards privacy?

The research found that the employees' awareness towards privacy has a role the individual's attitude towards privacy

Q4: What are the main practical recommendations for change to enhance and promote employee's perception, awareness and behaviour towards privacy in the Abu Dhabi Emirate public sector?

The research provided changes at three levels to improve privacy and these level are individual level, organisation level and national culture. These changes discussed in section 7.8

Q5: What is the role of trust among employees on the organisation's privacy practices?

The research found that the trust among the employees' has a role on the privacy. This role was clear indicated on the employees' sharing password with a colleague based on trust and the trust of the organisation management has a role in the employees respect to the management decision and procedures towards privacy.

8.1.8 Recommendations for Change

Practical recommendations were based on the researches key results and experience gained during the research that proposed to achieve Objective 7 of the research which states, *Objective 7:* Provide practical recommendations to enhance privacy in the UAE organisations. The proposed recommendations are based on three levels: individual level, organisational level and national level.

8.2 Researches Main Contribution and Novelty

Privacy as a research topic is relatively new in the UAE and most of the Arabic countries. It can be argued the reasons are due to different priorities of the authorities in most of these countries. This has led to a lack of data and information on the UAE privacy policy. This research contributes to the knowledge of the area of privacy by providing data and information on the employee's opinions and attitudes towards privacy. The research has also contributed to the knowledge by providing a model of employee's behaviour towards privacy. The model was built based on the constructs that influence individual attitudes and behaviours. The research is also contributing to the UAE planning by providing it with data, information and provides practical solutions to enhance and improve employee's perceptions, awareness and behaviour in handling private information. The novelty of this research can be put into two folds. The first is developing a model of how factors influence individual's private information behaviour. In addition, it has also provided new data for the UAE's employees in regards to handling private information.

The research contribution explored UAE employees' awareness, knowledge and understanding of privacy and to bring the UAE decision makers attention to the importance and the needs to enhance UAE citizens awareness, knowledge and understanding of privacy and the responsibility of individual and organisation to ensure privacy at the workplace and within the society. The research has also contributed to the privacy knowledge from the UAE authority point of view by identifying the types of information as regards to private information in UAE. This needs to be taking into account when developing and implementing privacy strategies, policies and legislation. It reflects on the role of UAE culture in the individual's behaviour and attitude towards privacy and the types of information considered by the individual as private information. The contribution of the research is a matter for the UAE authority and the privacy literature. From the UAE authority point of view, it is a matter to help them to use as a model for their strategy and decision making. From the privacy point of view, the contribution has added knowledge to the privacy in UAE, which has specific national culture. The contribution can be used to construct with other contribution for the different cultural backgrounds.

8.3 Research Limitations

Privacy, as a research topic, is a wide topic and research into this issue requires extensive resources such as financial resources, human resources, physical resources and time. This is purely due to the nature of this topic. Therefore, this research could not study privacy from all its angles. The main research limitations can be summarised in the following:

- The research focuses its main outcomes based on the employee's opinions and views of the public sector in regards to privacy in organisations within the UAE. There is a need for opinions and views towards the privacy of public sectors, authorities, decision makers and privacy stakeholders to help in attaining more understanding of privacy in the UAE.
- The main outcomes of the research are based on the major public organisation in the UAE, namely the Abu Dhabi Education Council only. The private sector has not been included in the research.
- The main data collection methods used and analysis is qualitative data, namely
 using the interviews and the focus groups. Therefore, the honest responses and
 interpretations cannot be ruled out, especially on a privacy issue.
- The survey's questionnaire was sent via the organisation's research and survey centre through their workplace email. Therefore, the organisation factor cannot be ruled out on their answers such as job security in case of raising negative issue regarding the organisation activities and working culture.

8.4 Suggestions for Further Research

This section presents suggestions for further research in the UAE privacy based on the main outcomes and the experience gained throughout the research process. The following are main suggestions for further research:

- The in-depth research focused on the decision makers and senior managers to explore their opinions and attitudes towards privacy to compliment the main outcomes of this research.
- Research is needed to explore the opinions of society within the UAE to identify the attitudes towards the individual's privacy as well as the types of

- information considered as private information. This research needs to be based on a national survey.
- The research focused only on the UAE culture is needed to have a full picture of the impact the culture has on individual behaviour. This research should be based on qualitative data to get in-depth information on the cultural issues.

References

Abu Dhabi Systems & Information Centre 2013 "Information Security Policy." [online] available from http://adsic.abudhabi.ae/Sites/ADSIC/Content/EN/PDF/information-security-policy-v2,property=pdf.pdf [27 November 2013]

AbuDhabi, 2015 "Abu Dhabi History and Culture " [online] available from http://www.abudhabi.com/v/history/ [20 January 2016]

Ackerman, M. (2004) "Privacy in pervasive environments: next generation labeling protocols." *Personal and Ubiquitous Computing* 8(6): 430-439

Acquisti, A., Brandimarte, L. and Loewenstein, G. (2015a) "Privacy and human behavior in the age of information." *Science* 347(6221): 509-514

Acquisti, A., Taylor, C.R. and Wagman, L. (2015b) "The economics of privacy." *Available at SSRN 2580411*

ADEC, 2016 "About ADEC." [online] available from https://www.adec.ac.ae/en/AboutADEC/Pages/default.aspx [15 January 2016]

Adelola, T., Dawson, R. and Batmaz, F. 2014 "Privacy and data protection in E-commerce: The effectiveness of a government regulation approach in developing nations, using Nigeria as a case." Conference Proceedings of Internet Technology and Secured Transactions (ICITST), 2014 9th International Conference for.

Ajzen, I. and Fishbein, M. (1980) "Understanding attitudes and predicting social behavior." Englewood Cliffs, NJ: Prentice-Hall

Alge, B.J., Ballinger, G.A., Tangirala, S., *et al.* (2006) "Information privacy in organizations: Empowering creative and extrarole performance." *Journal of Applied Psychology* 91(1): 221-232

Allmer, T. (2011) "A critical contribution to theoretical foundations of privacy studies." *Journal of Information, Communication and Ethics in Society 9*(2): 83-101

AllUAE, 2015a "The Seven Emirates." [online] available from http://alluae.ae/uae-seven-emirates/ [18 January 2016]

AllUAE, 2015b "UAE Profile - United Arab Emirates Country Profile." [online] available from http://alluae.ae/uae-profile/> [15 January 2016]

Alvesson, M. (2012) "Understanding Organizational Culture." 2nd ed. SAGE Publications

Anderson, C.L. and Agarwal, R. (2010) "Practicing Safe Computing: A Multimethod Empirical Examination Of Home Computer User Security Behavioral Intentions." *MIS Quarterly* 34(3): 613-A615

Ball, K., Daniel, E.M. and Stride, C. (2012) "Dimensions of employee privacy: an empirical study." *Information Technology & People 25*(4): 376-394

Bansal, G., Zahedi, F.M. and Gefen, D. (2010) "The impact of personal dispositions on information sensitivity, privacy concern and trust in disclosing health information online." *Decision Support Systems* 49(2): 138-150

Bedawi, 2007 "Origins of nomadic peoples are difficult to trace as they leave little evidence behind for archaeologists..." [23 July 2016]

Bélanger, F. and Crossler, R.E. (2011) "Privacy In The Digital Age: A Review Of Information Privacy Research In Information Systems." *MIS Quarterly 35*(4): 1017-A1036

Belanger, F., Hiller, J.S. and Smith, W.J. (2002) "Trustworthiness in electronic commerce: the role of privacy, security, and site attributes." *The Journal of Strategic Information Systems* 11(3–4): 245-270

Bellman, S., Johnson, E., Kobrin, S., *et al.* (2004) "International Differences in Information Privacy Concerns: A Global Survey of Consumers." *Information Society* 20(5): 313-324

Bellman, S., Lohse, G.L. and Johnson, E.J. (1999) "Predictors of Online Buying Behavior." *Communications of the ACM 42*(12): 32-38

Bennett, C.J. and Raab, C.D. (2003) "The governance of privacy: Policy instruments in global perspective." Ashgate, Hampshire:

Brewer, P. and Venaik, S. (2012) "On the misuse of national culture dimensions." *International Marketing Review* 29(6): 673-683

Brooke, S.L. (2006) "Using the case method to teach online classes: Promoting Socratic dialogue and critical thinking skills." *International Journal of Teaching and Learning in Higher Education 18*(2): 142-149

Bulgurcu, B., Cavusoglu, H. and Benbasat, I. (2010) "Information Security Policy Compliance: An Empirical Study Of Rationality-Based Beliefs And Information Security Awareness." *MIS Quarterly* 34(3): 523-548

Cameron, K.S. and Quinn, R.E. (2006) "Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework." Revised ed. San Francisco, CA: Jossey-Bass

Cannataci, J. (2009) "Privacy, Technology Law and religions across cultures ", *Journal of Information, Law & Technology (JILT) 1*: 2

Carmines, E.G. and Zeller, R.A. (1979) "Reliability and validity assessment." Sage publications

Chao-Min, C., Chen-Chi, C., Hsiang-Lan, C., et al. (2009) "Determinants of customer repurchase intention in online shoppingnull." *Online Information Review 33*(4): 761-784

Clarke, R. (1999) "Internet Privacy Concerns Confirm the Case for Intervention." *Communications of the ACM 42*(2): 60-67

Cockcroft, S. and Rekker, S. (2015) "The relationship between culture and information privacy policy." *Electronic Markets* 26(1): 55-72

Creswell, J.W. (2009) "Research Design: Qualitative, Quantitative, and Mixed Methods Approaches." Thousand Oaks, CA: Sage

Creswell, J.W., Klassen, A.C., Clark, V.L.P., et al., 2011 "Best Practices for Mixed Methods Research in the Health Sciences." Bethesda, MD: Office of Behavioral and Social Sciences Research, National Institutes of Health

Crossler, R.E., Johnston, A.C., Lowry, P.B., *et al.* (2013) "Future directions for behavioral information security research." *Computers & Security 32*: 90-101

Crotty, M. (2003) "The Foundations of Social Research: Meaning and Perspective in the Research Process." 3rd ed. London: Sage

Crowther, D. and Green, M. (2004) "Organisational Theory." Chartered Institute of Personnel and Development

Cullen, R. (2009) "Culture, identity and information privacy in the age of digital government." *Online Information Review 33*(3): 405-421

Culnan, M.J. and Bies, R.J. (2003) "Consumer privacy: Balancing economic and justice considerations." *Journal of social issues* 59(2): 323-342

Culnan, M.J. and Williams, C.C. (2009) "How Ethics Can Enhance Organizational Privacy: Lessons From The Choicepoint And TJX Data Breaches." *MIS Quarterly* 33(4): 673-687

Da Veiga, A. and Martins, N. (2015) "Information security culture and information protection culture: A validated assessment instrument." *Computer Law & Security Review 31*(2): 243-256

Davis, F.D., Bagozzi, R.P. and Warshaw, P.R. (1989) "User Acceptance of Computer Technology: A Comparison of Two Theoretical Models." *Management Science* 35(8): 982-1003

Deal, T.E. and Kennedy, A.A. (1982) "Corporate cultures: the rites and rituals of corporate life." Addison-Wesley

Deng, M., Wuyts, K., Scandariato, R., *et al.* (2011) "A privacy threat analysis framework: supporting the elicitation and fulfillment of privacy requirements." *Requirements Engineering 16*(1): 3-32

Denscombe, M. (2007) "The Good Research Guide." Maidenhead, Berkshire: McGraw-Hill Education

DePaulo, B.M., Wetzel, C., Weylin Sternglanz, R., et al. (2003) "Verbal and Nonverbal Dynamics of Privacy, Secrecy, and Deceit." *Journal of social issues* 59(2): 391-410

Diney, T., Bellotto, M., Hart, P., *et al.* (2006) "Internet users' privacy concerns and beliefs about government surveillance: An exploratory study of differences between Italy and the United States." *Journal of Global Information Management 14*(4): 57

Diney, T. and Hart, P. (2006) "An Extended Privacy Calculus Model for E-Commerce Transactions." *Information Systems Research 17*(1): 61-80

Dubai, P.D.-. "United Arab Emirates Map " [online] available from http://protocol.dubai.ae/media/9d8f725b-7803-4c59-9738-8cca0ee4d8fe/WIvPEA/uae-map-new1.jpg [10 March 2016]

Earp, J.B., Anton, A., Aiman-Smith, L., et al. (2005) "Examining Internet privacy policies within the context of user privacy values." Engineering Management, IEEE Transactions on 52(2): 227-237

Elashmawi, F. and Harris, P. (1998) "Multicultural Management Two Thousand." 2 ed. Houston, TX: Gulf Publishing Company

Ellison, N.B., Vitak, J., Steinfield, C., *et al.*, 2011 'Negotiating privacy concerns and social capital needs in a social media environment' In: "*Privacy online*." Springer: 19-32

Feghali, E. (1997) "Arab cultural communication patterns." *International Journal of Intercultural Relations* 21(3): 345-378

Fink, A. (1995) "How to sample in surveys." Thousand Oaks, CA: Sage Publications Fishbein, M. and Ajzen, I. (1975) "Belief, attitude, intention, and behavior: an introduction to theory and research." Reading, MA: Addison-Wesley Pub. Co.

Global , P.C., 2012 "What are the Bedouin values?" [online] available from http://www.gpccolorado.com/what-are-the-bedouin-values/ [23 July 2016]

Greenaway, K.E., Chan, Y.E. and Crossler, R.E. (2015) "Company information privacy orientation: a conceptual framework." *Information Systems Journal* 25(6): 579-606

Greene, J.C. (2007) "Mixed Methods in Social Inquiry." San Francisco , CA: John Wiley & Sons

Guba, E.G. and Lincoln, Y.S., 1994 'Competing paradigms in qualitative research' In: K. Denzin and Y. S. Lincoln (eds.): "Handbook of qualitative research" London: Sage: 105-117

Guo, K.H. (2013) "Security-related behavior in using information systems in the workplace: A review and synthesis." *Computers & Security 32*: 242-251

Henry, L. (2015) "Information Privacy and Data Security." Cardozo Law Review de Novo

Herath, T. and Rao, H.R. (2009) "Protection motivation and deterrence: a framework for security policy compliance in organisations." *European Journal of Information Systems* 18(2): 106-125

Herold, R. (2010) "Managing an information security and privacy awareness and training program." CRC press

Hofstede, G. (1980) "Culture's consequences: International differences in work-related values." Beverly Hills, CA: Sage Publications, Inc

Hofstede, G.H. (2001) "Culture's consequences: Comparing values, behaviors, institutions and organizations across nations." Thousand Oaks, CA: Sage

House, R.J., Hanges, P.J., Javidan, M., et al. (2004) "Culture, leadership, and organizations: The GLOBE study of 62 societies." Sage publications

Human Rights Review 2012 "Article 8." [online] available from http://www.equalityhumanrights.com/uploaded_files/humanrights/hrr_article_8.pdf [15 November 2013]

ICO, 2016a "Privacy by design " [online] available from https://ico.org.uk/for-organisations/guide-to-data-protection/privacy-by-design/ [24 July 2016]

ICO, 2016b "Privacy Notice." [online] available from https://ico.org.uk/media/for-organisations/documents/1610/privacy_notices_cop.pdf [24 July 2016]

Indeje, W.G. and Zheng, Q. 2010 "Organizational culture and information systems implementation: A structuration theory perspective." Conference Proceedings of InIEEE International Conference on Information and Financial Engineering Chongqing-China.

Johnson, B. and Christensen, L. (2010) "Educational Research: Quantitative, Qualitative, and Mixed Approaches." 4th ed. Thousand Oaks, CA: Sage

Kanungo, S. (1998) "An empirical study of organizational culture and network-based computer use." *Computers in Human Behavior 14*(1): 79-91

Kitzinger, J., 1994 'The Methodology Of Focus Groups: The Importance Of Interaction Between Research Participants' In: C. Seale (ed.) "Social Research Methods." London: Routledge: 269-272

Klopfer, P.H. and Rubenstein, D.I. (1977) "The Concept Privacy and Its Biological Basis." *Journal of social issues 33*(3): 52-65

- Lee, M. 2008 "Predicting behavioral intention to use online banking." Conference Proceedings of Proceedings of the 19th international conference on information management. Taiwan.
- Lee, S.K.J. and Yu, K. (2004) "Corporate culture and organizational performance." *Journal of Managerial Psychology* 19(4): 340-359
- Lee, Y. and Kozar, K.A. (2005) "Investigating Factors Affecting the Adoption of Anti-Spyware Systems." *Communications of the ACM 48*(8): 72-77
- Lee, Y. and Larsen, K.R. (2009) "Threat or coping appraisal: determinants of SMB executives' decision to adopt anti-malware software." *European Journal of Information Systems* 18(2): 177-187
- Legislation, "Data Protection Act 1998." [online] available from http://www.legislation.gov.uk/ukpga/1998/29/data.pdf [17 November 2013]
- Legislation, "Human Rights Act 1998." [online] available from http://www.legislation.gov.uk/ukpga/1998/42/data.pdf [17 November 2013]
- Legislation, "Regulation of Investigatory Powers Act 2000." [online] available from http://www.legislation.gov.uk/ukpga/2000/23/pdfs/ukpga_20000023_en.pdf [17 November 2013]
- Leonard, L.N.K., Cronan, T.P. and Kreie, J. (2004) "What influences IT ethical behavior intentions—planned behavior, reasoned action, perceived importance, or individual characteristics?", *Information & Management* 42(1): 143-158
- Li, X. and Chen, X. 2010 "Factors Affecting Privacy Disclosure on Social Network Sites: An Integrated Model." Conference Proceedings of Multimedia Information Networking and Security (MINES), 2010 International Conference on.
- Li, Y. (2011) "Empirical studies on online information privacy concerns: Literature review and an integrative framework." *Communications of the Association for Information Systems* 28(1): 453-496
- Li, Y. (2014) "A multi-level model of individual information privacy beliefs." *Electronic Commerce Research and Applications* 13(1): 32-44
- Mael, F.A. (1998) "Privacy and Personnel Selection: Reciprocal Rights and Responsibilities." *Employee Responsibilities & Rights Journal* 11(3): 187-214
- Malhotra, N.K., Sung, S.K. and Agarwal, J. (2004) "Internet Users' Information Privacy Concerns (IUIPC): The Construct, the Scale, and a Causal Model." *Information Systems Research* 15(4): 336-355
- Margulis, S.T. (2003) "Privacy as a Social Issue and Behavioral Concept." *Journal of social issues* 59(2): 243-261

May, T. (2011) "Social Research: Issues, Methods and Research." Maidenhead, Berkshire: McGraw-Hill Education

McQueen, R.A. and Knussen, C. (2002) "Research Methods for Social Science: A Practical Introduction." Harlow, England: Prentice Hall

McRobb, S. and Rogerson, S. (2004) "Are they really listening?: An investigation into published online privacy policies at the beginning of the third millennium." *Information Technology & People 17*(4): 442 - 461

Milberg, S.J., Smith, H.J. and Burke, S.J. (2000) "Information privacy: Corporate management and national regulation." *Organization science* 11(1): 35-57

Minkkinen, M. (2015) "Futures of privacy protection: A framework for creating scenarios of institutional change." *Futures* 73: 48-60

Naranjo-Valencia, J.C., Jiménez-Jiménez, D. and Sanz-Valle, R. (2011) "Innovation or imitation? The role of organizational culture." *Management Decision 49*(1): 55-72 National Bureau of Statistics, 2010 "*Population Estimates* (2006-2010)." United Arab Eimraties

Needle, D. (2010) "Business in Context: An Introduction to Business and Its Environment." 5th ed. South-Western Cengage Learning

Newell, P.B. (1995) "Perspectives on privacy." *Journal of Environmental Psychology* 15(2): 87-104

Nissenbaum, H. (2010) "Privacy in context: Technology, policy, and the integrity of social life." Stanford University Press

Norton Rose Fulbright, 2013 "Global data privacy Directory." [online] available from http://www.nortonrosefulbright.com/files/global-data-privacy-directory-52687.pdf [03 February 2014]

Nydell, M.K. (1987) "Understanding Arabs: A Guide for Westerners." Yarmouth, ME: Intercultural Press

Oppenheim, A.N. (2000) "Questionnaire Design, Interviewing and Attitude Measurement." Bloomsbury Academic

Pagnattaro, M.A. and Peirce, E.R. (2007) "Between a Rock and a Hard Place: The Conflict Between U.S. Corporate Codes of Conduct and European Privacy and Work Laws." *Berkeley Journal of Employment & Labor Law* 28(2): 375-428

Parsons, K., McCormac, A., Pattinson, M., et al. (2014) "A study of information security awareness in Australian government organisations." *Information management & computer security* 22(4): 334-345

Pavlou, P.A. (2011) "State of The Information Privacy Literature: Where Are We Now And Where Should We Go?", MIS Quarterly 35(4): 977-988

Pincus, L.B. and Trotter, C. (1995) "The Disparity Between Public And Private Sector Employee Privacy Protections: A Call For Legitimate Privacy Rights For Private Sector Workers", *American Business Law Journal* 33(1): 51-90

Practical Law, 2012 "Data protection in United Arab Emirates: overview." [online] available from http://uk.practicallaw.com/0-518-8836?q=uae [27 Novemeber 2013]

Raab, C. and Goold, B., 2011 "Protecting information privacy." Manchester: Equality and Human Rights Commission

Ravasi, D. and Schultz, M. (2006) "Responding to organizational identity threats: Exploring the role of organizational culture." *Academy of Management Journal* 49(3): 433-458

Ritchie, D. (2009) "Is it possible to define 'privacies' within the law? Reflections on the 'securitisation' debate and the interception of communications." *International Review of Law, Computers & Technology* 23(1/2): 25-34

Rogers, R.W. (1983) "Cognitive and physiological processes in fear appeals and attitude change: a revised theory of protection motivation."

Rose, E.A. (2006) "An examination of the concern for information privacy in the New Zealand regulatory context." *Information & Management 43*(3): 322-335

Rubin, H.J. and Rubin, I.S. (2012) "Qualitative Interviewing: The Art of Hearing Data." 3rd ed. Thousand Oaks, CA: SAGE Publications

Sarathy, R. and Robertson, C.J. (2003) "Strategic and Ethical Considerations in Managing Digital Privacy." *Journal of Business Ethics* 46(2): 111-126

Scad, 2010 "Demographic & Social Indicators." Abu Dhabi: Statistic Centre Abu Dhabi

Scad, 2014 "Preliminary Population Estimates - Mid-year 2012." Abu Dhabi: Statistics Centre Abu Dhabi

Schein, E.H. (1970) "Organizational psychology." 2nd ed. Englewood Cliffs, NJ: Prentice-Hall

Schein, E.H. (2004) "Organizational Culture and Leadership." 3rd ed. San Francisco, CA: Jossey-Bass

Schoeman, F.D. (1984) "Philosophical Dimensions of Privacy: An Anthology." Cambridge University Press

Sekaran, U. (2006) "Research Methods For Business: A Skill Building Approach, 4Th Ed." Wiley India Pvt. Limited

Shariff, A.F. and Norenzayan, A. (2007) "God Is Watching You: Priming God Concepts Increases Prosocial Behavior in an Anonymous Economic Game." *Psychological Science (Wiley-Blackwell)* 18(9): 803-809

Skinner, G., Han, S. and Chang, E. (2006) "An information privacy taxonomy for collaborative environments." *Information management & computer security 14*(4): 382-394

Smith, H.J., Dinev, T. and Xu, H. (2011) "Information Privacy Research: An Interdisciplinary Review." *MIS Quarterly 35*(4): 980-A927

Smith, H.J., Milberg, S.J. and Burke, S.J. (1996) "Information Privacy: Measuring Individuals' Concerns About Organizational Practices." *MIS Quarterly* 20(2): 167-196

Solove, D. (2008) "*Understanding privacy*." Cambridge, Massachusetts: Harvard University Press,

Solove, D.J. (2002) "Conceptualizing privacy." *California Law Review 90*(4): 1087-1155

Solove, D.J. (2006) "A Taxonomy of Privacy", *University of Pennsylvania Law Review 154*(3): 477-564

Straub, D.W. (1990) "Effective IS Security: An Empirical Study." *Information Systems Research* 1(3): 255-276

Stutzman, F., Vitak, J., Ellison, N.B., *et al.* 2012 "Privacy in Interaction: Exploring Disclosure and Social Capital in Facebook." Conference Proceedings of ICWSM.

Sundstrom, E., Burt, R.E. and Kamp, D. (1980) "Privacy at Work: Architectural Correlates of Job Satisfaction and Job Performance." *Academy of Management Journal* 23(1): 101-117

Svärd, P. (2014) "The impact of information culture on information/records management: A case study of a municipality in Belgium." *Records Management Journal* 24(1): 5-21

Swire, P.P. and Bermann, S., 2007 "Information privacy: official reference for the Certified Information Privacy Professional (CIPP)." York, ME: International Association of Privacy Professionals.

Tavani, H.T. (2008) "Floridi's ontological theory of informational privacy: Some implications and challenges." *Ethics and Information Technology* 10(2): 155-166

Taylor, G.S. and Davis, J.S. (1989) "Individual privacy and computer-based human resource information systems." *Journal of Business Ethics* 8(7): 569-576

U.A.E Interact, 2016 " Seven Emirates Map - UAE." [online] available from http://www.uaeinteract.com/images/map3.gif [20 January 2016]

United Nations Human Right "International Covenant on Civil and Political Rights." [online] available from http://www.ohchr.org/EN/ProfessionalInterest/Pages/CCPR.aspx [20 November 2013]

Vroom, C. and von Solms, R. (2004) "Towards information security behavioural compliance." *Computers & Security* 23(3): 191-198

Wang, D., Su, Z. and Yang, D. (2011) "Organizational culture and knowledge creation capability." *Journal of Knowledge Management 15*(3)

Wilson, D. and Valacich, J.S. (2012) "Unpacking the privacy paradox: Irrational decision-making within the privacy calculus."

Wu, M. (2006) "Hofstede's cultural dimensions 30 years later: A study of Taiwan and the United States." *Intercultural Communication Studies 15*(1): 33

Xu, H. (2009) "Consumer Responses to the Introduction of Privacy Protection Measures: An Exploratory Research Framework." *International Journal of E-Business Research (IJEBR)* 5(2): 21-47

Yang, S. and Wang, K. (2009) "The influence of information sensitivity compensation on privacy concern and behavioral intention." *SIGMIS Database* 40(1): 38-51

Yousef, F. (1974) "Cross-cultural Communication: Aspects of Contrastive Social Values between North Americans and Middle Easterners." *Human Organization* 33(4): 383-387

Zuiderveen Borgesius, F.J. (2015) "Improving privacy protection in the area of behavioural targeting." *Available at SSRN 2654213*

Zureik, E., Stalker, L.L.H., Smith, E., et al. (2010) "Surveillance, Privacy, and the Globalization of Personal Information: International Comparisons." Montreal: McGill-Queen's University Press

Appendixes

Appendix A: Letter of introduction

School of Business and Economics

Loughborough University Leicestershire LE11 3TU UK Switchboard: +44 (0)1509 263171 www.lboro.ac.uk/sbe



28/10/2014

Dear Office of Research,

This letter is to inform you that Omar Al Dhaheri will be conducting his field work for his PhD, 'Factors Affecting Information Privacy in Abu Dhabi Public Sector' in November 2014. This will include distributing questionnaires, conducting interviews and focus group sessions with staff in the Abu Dhabi Education Council HQ and regional offices.

I would be very grateful if you can provide him with necessary authority, support and assistance to ensure he receives the necessary collaboration from staff and management to ensure effective data collection.

Yours Sincerely

De Mark Hepworth

PhD supervisor

Director of Postgraduate Research Programmes







Appendix B: Ethical Check Form

Ethics Approvals (Human Participants) Sub-Committee



Ethical Clearance Checklist

Has the Investigator read the 'Guidance for completion of Ethical Clearance	Yes
Checklist' before starting this form?	

Project Details

1. Project Title: Developing and Evaluation Privacy Framework for Abu Dhabi Public Sector

Applicant(s) Details

2. Name of Applicant 1:	10. Name of Applicant 2:
Omar AlDhaheri	Click here to enter text
3. Status: PGR student	11. Status: Choose an item
4. School/Department: Information Science	12. School/Department:
5. Programme (if applicable): Phd	13. Programme (if applicable): Click here to enter text.
6. Email address: o.aldhaheri@lboro.ac.uk	14. Email address: Click here to enter text.
7a. Contact address: Flat 39, 61 Watkin Road, Leicester, LE27HZ	15a. Contact address: Click here to enter text.
7b. Telephone number: 07585951312	15b. Telephone number: Click here to enter text.
8. Supervisor:	16. Supervisor:
Choose an item	Choose an item
9. Responsible Investigator: Yes	17. Responsible Investigator: Choose an item

Participants

Positions of Authority

18. Are researchers in a position of direct authority with regard to participants	
(e.g. academic staff using student participants, sports coaches using his/her	No
athletes in training)?	

Vulnerable groups

19. Will participants be knowingly recruited from one or more of the following v	ulnerable groups?
Children under 18 years of age	No
Persons incapable of making an informed decision for themselves	No
Pregnant women	No
Prisoners/Detained persons	No
Other vulnerable group	No
Please specify:	
Click here to enter text	
If you have selected No to all of Question 19, please go to Question 23.	
20. Will participants be chaperoned by more than one investigator at all times?	Choose an item
21. Will at least one investigator of the same sex as the participant(s) be present throughout the investigation?	Choose an item
22. Will participants be visited at home?	Choose an item

Researcher Safety

23. Will the researcher be alone with participants at any time?	Yes
If Yes, please answer the following questions:	
23a. Will the researcher inform anyone else of when they will be alone with participants?	Yes
23b. Has the researcher read the 'guidelines for lone working' and will abide by the recommendations within?	Yes

Methodology and Procedures

24. Please indicate whether the proposed study:

Involves taking bodily samples (please refer to published guidelines)	No
Involves using samples previously collected with consent for further research	No
Involves procedures which are likely to cause physical, psychological, social or emotional distress to participants	No
Is designed to be challenging physically or psychologically in any way (includes any study involving physical exercise)	No
Exposes participants to risks or distress greater than those encountered in their normal lifestyle	No
Involves collection of body secretions by invasive methods	No
Prescribes intake of compounds additional to daily diet or other dietary manipulation/supplementation	No
Involves pharmaceutical drugs	No
Involves use of radiation	No
Involves use of hazardous materials	No
Assists/alters the process of conception in any way	No
Involves methods of contraception	No
Involves genetic engineering	No

Involves testing new equipment	No

Observation/Recording

25a. Does the study involve observation and/or recording of participants?	Yes
If Yes:	
25b. Will those being observed and/or recorded be informed that the observation and/or recording will take place?	Yes

Consent and Deception

26. Will participants give informed consent freely?	Yes
20. Will participants give informed consent freely?	162

Informed consent

27. Will participants be fully informed of the objectives of the study and all details disclosed (preferably at the start of the study but, where this would interfere with the study, at the end)?	Yes
28. Will participants be fully informed of the use of the data collected (including, where applicable, any intellectual property arising from the research)?	Yes

29. For children under the age of 18 or participants who are incapable of makin decision for themselves:	ng an informed
a. Will consent be obtained (either in writing or by some other means)?	Choose an item
b. Will consent be obtained from parents or other suitable person?	Choose an item
c. Will they be informed that they have the right to withdraw regardless of parental/guardian consent?	Choose an item
d. For studies conducted in schools, will approval be gained in advance from the Head-teacher and/or the Director of Education of the appropriate Local Education Authority?	Choose an item
e. For detained persons, members of the armed forces, employees, students and other persons judged to be under duress, will care be taken over gaining freely informed consent?	Choose an item

freely informe Deception

30. Does the study involve deception of participants (i.e. withholding of information or the misleading of participants) which could potentially harm or exploit participants?	No
If Yes:	
31. Is deception an unavoidable part of the study?	Choose an item
32. Will participants be de-briefed and the true object of the research revealed at the earliest stage upon completion of the study?	Choose an item

33. Has consideration been given on the way that participants will react to the withholding of information or deliberate deception?	Yes

Withdrawal

34. Will participants be informed of their right to withdraw from the	
investigation at any time and to require their own data to be	Yes
destroyed?	

Storage of Data and Confidentiality

35. Will all information on participants be treated as confidential and not identifiable unless agreed otherwise in advance, and subject to the requirements of law?	Yes
36. Will storage of data comply with the Data Protection Act 1998?	Yes
37. Will any video/audio recording of participants be kept in a secure place and not released for any use by third parties?	Yes
38. Will video/audio recordings be destroyed within ten years of the completion of the investigation?	Yes
39. Will full details regarding the storage and disposal of any human tissue samples be communicated to the participants?	N/A
40. Will research involve the sharing of data or confidential information beyond the initial consent given?	No
41. Will the research involve administrative or secure data that requires permission from the appropriate authorities before use?	No

Incentives

42. Will incentives be offered to the investigator to conduct the study?	No	
43. Will incentives by offered to potential participants as an	No	
inducement to participate in the study?		

Work Outside of the United Kingdom

44. Is your research being conducted outside of the United Kingdom?	Yes
If Yes:	
45. Has a risk assessment been carried out to ensure the safety of the researcher whilst working outside of the United Kingdom?	Yes
46. Have you considered the appropriateness of your research in the country you are travelling to?	Yes
47. Is there an increased risk to yourself or the participants in your research study?	No
48. Have you obtained any necessary ethical permission needed in the country you are travelling to?	Yes

4

Ethical Clearance Checklist February 2013

Information and Declarations

Checklist Application Only:

If you have completed the checklist to the best of your knowledge, and not selected any answers marked with an * or †, your investigation is deemed to conform with the ethical checkpoints. Please sign the declaration and lodge the completed checklist with your Head of Department/School or his/her nominee.

Checklist with Additional Information to the Secretary:

If you have completed the checklist and have only selected answers which require additional information to be submitted with the checklist (indicated by a $^+$), please ensure that all the information is provided in detail below and send this signed checklist to the Secretary of the Sub-Committee.

Checklist with Generic Protocols Included:

If you have completed the checklist and you have selected one or more answers in which you wish to use a Generic Protocol (indicated by #), please include the Generic Protocol reference number in the space below, along with a brief summary of how it will be used. Please ensure you are on the list of approved investigators for the Generic Protocol before including it on the checklist. The completed checklist should be lodged with your Head of Department/School or his/her nominee.

Full Application needed:

If on completion of the checklist you have selected one or more answers which require the submission of a full proposal (indicated by a *), please download the relevant form from the Sub-Committee's web page. A signed copy of this Checklist should accompany the full submission to the Sub-Committee.

Space for Information on Generic Proposals and/or Additional Information as requested:

Click here to enter text.

For completion by Supervisor

Please tick the appropriate boxes. The study should not begin until all boxes are ticked.

The student has read the University's Code of Practice on investigations involving human participants

5

Ethical Clearance Checklist February 2013

The topic merits further research
The student has the skills to carry out the research or are being trained in the requires skills by the Supervisor
The participant information sheet or leaflet is appropriate
The procedures for recruitment and obtaining informed consent are appropriate
Comments from supervisor:
Click here to enter text.
Signature of Applicant: Click here to enter text
Signature of Supervisor (if applicable): Click here to enter text.
Signature of Head of School/Department or his/her nominee: Click here to enter text.
Date: Click here to enter text. 39 6 2014

Factors Affecting Privacy in the Abu Dhabi **Public Sector**

Student Name: Omar AlDhaheri

Supervisors: Dr Mark Hepworth & Mrs Wendy Olphert

Course: PhD Information Science

Introduction

mplying with International Laws and Regulations up Expansion in Information and Data in the UAE areness of National and Expatriate Privacy Right olding Legal Disputes with Individuals and

Privacy Concern

Previous research abow a rise in provery commany be due to:
*Increase in people and organisation awareness towards their privacy rights
*Increase in the use of technology that may abuse privacy

rights
*Ease of transmission and storing of personal inform

Identifying privacy is one of the main challenges to policy makers and research. Six (6) concepts of privacy were

Research Aim

The main aim of this research is to enhance and promote employees perception and behaviour towards privacy in the Abu Dhabi public sector, as well as to assess employees' privacy-policy compliance.

Research Objectives The proposed research aim will be achieved by achieving

one on meeting types of mormation, ify the main constructs for employees' attitudes and our towards privacy. lop and design a framework model for employees'

trace and test the developed the model to assess its ity, reliability and practically to Abu Dhabi public amend the developed model to Abu Dhabi public authority to be used as part of their human resources contained a file.

Research Questions

The research aim to answer the following questions:

The research aim to answer the following questions:

treated principal and Volk supply year attribute
treated principal and t

ganisation's privacy practices?
What is the influence of the organisation's culture es and norms towards privacy) on organisation's current organisation's culture.

Research Method

This research seeks to use a mixed-method approach for its design, which incorporates elements of both qualitative and quantitative research. Two approaches will be used:

- (i) Positivism approach is needed to collect the appropriate measurable and objective quantitative data, to investigate and analyse employees' main factors that influencing their privacy behaviour at their workplace. This can be achieved through designing quantitative survey to Alm Dahie deactions setter.
 (ii) Interpretablesis is needed in this research to provide in depth data and information regarding employees' perceptions, understandings and antimates towards privacy. It explores privacy issues not included in the quantitative survey and provides evidence explaining the main outcomes of the quantitative survey.

Quantitative Data: Questionnaire will be designed to collect data and information from the Abu Dhabi Education Council, which consists of a set of questions that reflects the main topics of the research, Qualitative Data: necessaries and produce the provide in depth information and enhance the main concenses of the quantitative data. This data will be collected through face-to face interviews and focus groups with key personnel of the expansion.

The model is based on the Theory of Reasoned Action (TRA), which emphasises that the human behavioural intention, protecting privacy, is influenced by the individual attitude and subjective norms. The model also introduces (a) autional culture and (b) organisation culture acconstruct contributing to the individual attitude. Perceived benefit is abled construct that committee directly to the employees' intention to privacy. The behavioural intension leads to examile abstraces.

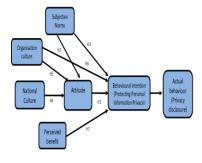


Figure 1: Proposed Research Model

Research Hypothesis

- H2: Subjective norms are related to the employees' attitude toward privacy.

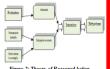
Sample Size

The research is focusing on the Also Dhahi public sector, and the education sector has been selected by the Also Dhahis education submire; The survey simileds these regional effects. Also Dhahis headquarters and Also Dhahis education submired the regional effects. Also Dhahis headquarters and Also Dhahis education of the Also Dhahis Education Council, and is shown in Table 1 below.

Table 1: Sample Size

	Face-to-Face Interviews	Focus Group	Questionnaire
Abu Dhabi Headquarter & Abu Dhabi Regional Office	6 1 Senior Manager 2 Manager 3 Administrator 5	1 (4–8 key employees)	100% of the population
Al-Ain Regional Office	6 1 Senior Manager 2 Manager 3 Administrator	(4–8 key employees)	100% of the population
Western Region Regional Office	6 1 Senior Manager 2 Manager 3 Administrator 8	1 (4–8 key employees)	100% of the population
Total	18	3 focus groups 12-24	

Theory of Reasoned Action (TRA)



Conclusions



Centre for Information Management

Appendix D: Questionnaire Design

Dear Participants,

I am currently pursuing PhD research entitled factors affecting information privacy in the Abu Dhabi public sector at Loughborough University, United Kingdom. A key aim of my research is to explore and identify the main issues of privacy and the main factors that drive employees' behaviour towards privacy. I would like your kind participation in the project process by completing and returning the attached questionnaire. The data derived from the questionnaires will be used only in analysis part of the research. I would also like to stress ensuring you that all your responses will be treated confidentially and will be anonymous and you have right to withdraw from the survey at any time you wish.

Please do not hesitate to contact me if you need any clarification or question.

Your contribution is highly appreciated and critical to the success of this research.

Omar AlDhaheri

PhD Student

Department of Information Science

Loughborough University, United Kingdom

Email: o.aldhaheri@lboro.ac.uk

Q1 Participant's Information	Work Place:
O Abu Dhabi (1)	
O Al Ain (2)	
O Western Region (3)	
Q2 Gender	
O Male (1)	
• Female (2)	
Q3 Nationality	
O UAE National (1)	
O Non-National (2)	
· · ·	
Q4 Age	
O Less than 25 years (1)	
O 25-30 years (2)	
O 31-35 years (3)	
O 36-40 years (4)	
O 41-45 years (5)	
46-50 years (6)51-55 years (7)	
O Over 55 years (8)	
2 · J (0)	
Q5 Please specify your working	experience
O Less than 5 years (1)	
O 5-10 years (2)	
O 11-15 years (3)	
O 16-20 years (4)	
O 21-25 years (5)	
O Over 25 years (6)	

• Executive Director (1)	
O Division Manager (2)	
Section Manager (3)	
Team Leader / Senior Specialist (4)	
O Specialist / Administrator (5)	
Assistant (6)	
Other (Specify the discipline) (7)	

Q6 Please specify your job-role at your organization

Q7 Do you agree that the following actions are issues and problems in privacy at your work place:

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Passing personal information to third party without consent of the information owner. (1)	0	0	O	O	0
Sharing information culture among the employees. (2)	O	O	0	0	0
Process of printing personal information in an open area. (3)	•	•	•	•	0
Recording and storing personal information at your working place. (4)	0	0	•	•	0
Transmitting/sending personal information without consent of the owner. (5)	0	•	•	O	0
Employees working culture towards private information . (6)	•	0	•	O	0

Q8 Do you agree that the following statements regarding employees' perceptions towards privacy

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Privacy is human right. (1)	0	•	O	0	O
Privacy is important to the organization image. (2)	O	O	O	O	O
The Individual should have control of his/her personal information. (3)	0	0	O	O	•
The organization is the owner of the employees' personal electronic records. (4)	•	•	•	•	0
Employees' are the owner of the personal electronic records in the organization. (5)	•	•	0	0	•

Q9 Do you agree that the following statements in regard of private information.

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I consider my personal					
wage is private information. (1)	•	•	O	O	0
My Spouse name is private information. (2)	•	•	•	O	0
Any of my family females' details are private information. (3)	O	O	O	O	O
My annual performance appraisal is private information. (4)	•	O	0	O	O
I consider my personal mobile number is private information. (5)	O	O	O	0	O
I consider any of my family pictures are private information. (6)	•	O	0	•	0

Q10 Do you agree that the following statements in regard of the role of organization culture on privacy

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
It is normal to share private information among the organization employees. (1)	0	O	0	O	0
It is normal to print personal information in an open area. (2)	O	O	0	0	0
There is no privacy policy in the organization. (3)	O	O	O	O	O
The organization value's personal information. (4)	O	O	0	O	O
The organization considered each document in the organization is private information. (5)	O	O	O	O	0

Q11 Do you agree that the following statements regarding the role of UAE national culture on privacy

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
UAE society encourages sharing personal information. (1)	0	0	0	•	O
National Culture has influence employees privacy practices. (2)	O	O	0	0	0
It is normal in UAE culture to pass personal information. (3)	O	O	•	•	0

Q12 Do you agree that the following statements regarding perceived benefit?

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I am happy to pass employees personal information to other organizations for financial benefit. (1)	•	•	•	O	•
I am willing to pass employees personal information to other organizations for moral benefit. (2)	O	0	0	O	•
I am happy to pass employees personal information for future benefit. (3)	•	O	0	O	0
I am happy to pass employees personal information for promotion benefit. (4)	O	O	O	O	O
I am happy to pass employees personal information to public media. (5)	•	O	•	O	•

Q13 Do you agree that the following statements of sharing practices?

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I share employees personal information with my family. (1)	0	O	0	•	0
I share employees personal information with my colleagues. (2)	O	O	0	•	O
I share employees' personal information with my line manager. (3)	•	O	0	•	•
I share employees' personal information with my tribe/national member. (4)	•	O	0	O	•

Q14 Do you agree that the following statements regarding employees' attitude towards Privacy?

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Employees' value of privacy has influence their behaviors towards privacy. (1)	O	•	O	O	0
Employees' behavior towards privacy is influenced by their personal understanding of privacy. (2)	O	0	0	O	•
Employees' behavior towards privacy is influenced by the awareness of the important of private information on the organization image. (3)	O	•	O	O	0

Q15 Do you agree that the following statements regarding sharing expectation?

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I intend to share employees' personal					
information with my family. (1)	O	O	0	0	0
I intend to share employees' personal information with my colleague. (2)	O	O	O	0	O
I intend to share employees' personal information with my line manager. (3)	O	O	O	O	•

Q16 Do you agree that the following statements regarding organizational working practices and employees working behaviour?

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Organization normal working practices has influenced employees' privacy behavioral intention towards private information . (1)	•	•	O	•	•
Organization communication system has influenced employees' privacy behavioral intention private information. (2)	•	0	O	O	O
Trust between the employees and the management has influenced employees' privacy behavioral intention private information. (3)	•	0	O	•	0
Trust between the employees has influenced employees' privacy behavioral intention. (4)	•	0	0	0	0

Q17 Please add any additional views if found regarding privacy in the workplace

Appendix E: Interview Design

Intervie	w Details:	
Intervie	w Location:	
1	Abu Dhabi regional area	
2	Al-Ain Regional Office	
3	Western Region Office	
Intervie	wee Job role/department	
1	Section Manager	
2	Team Leader / Senior Specialist	
3	Specialist /Administrator	
4	Administrators	
5	Other	
Intervie	ewee Nationality:	
1	UAE National	
2	Non-national	
Intervie	wee Gender:	
1	Male	
2	Female	

Interviewee Age:

1	Young Employee, under 30 years old	
2	Older Employee,Over 50	

Section A: Main Issues and Problems of Privacy in UAE

Q1:	Based on your personal experience, what are the main privacy issues in your
Org	anisation?
Q2:	What are the main problems facing privacy in your organisation?

Q3: Based on your personal experience, can you describe a case where private information was disclosed?
Section B: Employees' Perception towards Privacy
Q4: How does your employees' perceive privacy?

Q5: what value do your employees place on private information?
Section C: Employees' Perception towards Different Types of Information
Q6: what information is considered by you and the employees' as private information?
considered private ?
Q7: What information is considered as private or not private in your organisation?

Section D: Definitions and Understanding of Privacy from UAE Perspective
Q8: How do you define privacy?
Q9: How does your organisation define privacy?
Q10: what is privacy in the eyes of the employees'?

	•
Q11: To what extent you see privacy is important?	
	•
	-
	-
Section E: Main Constructs for Employees' Attitudes and Behaviour towards Privac	у
Q12: What are the main factors that contribute to the employees' attitude towards	
privacy of information?	
	-

Q13: Does family/friend/tribe member influence employees' attitudes towards
privacy?
Q14: How UAE Culture (tribe values and norms) influencing employees' attitude
towards privacy?
Q15: How UAE Culture (religion) influencing employees' attitude towards privacy?

Q16: What is the role of employees" perceived benefit on disclosing private information?
Q17: How does your organisation working culture (working values and norms) influence employees' attitude towards privacy?
influence employees attitude towards privacy:

Would like to add any other issues of privacy not covered in the interview.

Many thanks for participating in the interview

Appendix F: Focus Group Design

Focus Group Details:

Focus		Group
Numbe	er:	
Focus '	Гуре:	
1	UAE National	
2	Non-national	
3	Mix nationality	
4	Males	
5	Females	
6	Senior Employees	
7	Junior Employees	
Focus 1	Location:	l
1	Abu Dhabi regional area	
2	Al-Ain Regional Office	
3	Western Region Office	
Focus A	Age:	
1	Young Employees, under 30 years old	
2	Older Employees-Over 50	
_	1 7	

Focus Group Participates Job role/department

1	Section Manager	
2	Team Leader / Senior Specialist	
3	Specialist /Administrator	
4	Administrators	
5	Mix	

Activity One: Definition of privacy

Individually

Write a definition of privacy based on your personal view and understanding of the term.

As group

Write a list of all definitions explored individually on flip chart Re-arrange/group the definition based on the contains of the definitions Let us agree in general definition based on the definitions explored by the group.

Activity Two: The Current Main Issues and Problems in Privacy

In group of two to three

Can you please write down three main current privacy issues/problems you consider at your wok please you have experienced/observed?

- 1. Why do you considered an issue?
- 2. What is the impact of such issue at your work place?
- 3. How can your organisation/department deals with such issue?

As group

Let us list all the issues explored Let us list these issues based on their severity/importance

Activity Three: Scenarios

In group of two to three

What would you do in the following situations?

- A member of your family/tribe asking you for a personal mobile number of one of your employees.
- A company in the market asking you for the employees email addresses and happy to pay for the service.
- A colleague printing employee's personal details in open area.
- One of your colleagues asked you for the photo of one of your female colleague, he is planning to marry her.
- Your line manager/senior manager asked you to provide him with private information of one of the employees.

Activity Four: Employees perceptions towards privacy

In group of two to three

Write down with your colleague in two sentences your perception of privacy, your answer should include?

- 1. Importance of privacy.
- 2. Right of the individual/ human right
- 3. Who is the owner of the information at your organisation

As group

Let us discuss each group perception of privacy Let us discuss the impact of employees' perception of privacy on the organisation performance, image and cost.

Activity Five: Types of information you considered as private

In group of two to three

Can you please list ten of information you considered them is private information

As group

Write a list of all the types of information explored. Re-arrange the list based on the importance of the information

Activity Six: Role of organisation culture on privacy at your organisation

In group of two to three

In your group provide list of five organisation culture practices you considered has an impact positively or negatively on the employees' privacy behaviour?

As group

Write a list of all the organisation culture practices explored. Re-arrange the list based on the importance of the practices Let us discuss each practice briefly

Activity Seven: Role of UAE national culture on privacy at your organisation

In group of two to three

Can you please list five national culture that you considered influencing employees' privacy behaviour at your organisation?

As group

Write a list of all the national culture that you considered influencing employees' privacy behaviour

Re-arrange the list based on the importance of each national culture.

Let us discuss each culture briefly

Activity Eight: Employees attitude towards privacy

In group of two to three

Can you please list five main factors in your opinion influencing employees' attitude towards privacy?

As group

Write a list of all the main factors influencing employees' attitude towards privacy explored by each sub-group in a large board.

Re-arrange the list based on the importance of each factor. Discuss each factor briefly

Many thanks for participating in the focus group