

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



**THE EFFECT OF A CONTEXTUAL, ORGANIZATIONAL, INDIVIDUAL
AND SYSTEM FACTORS ON CUSTOMER SATISFACTION OF CRM
IMPLEMENTATION IN PUBLIC SECTOR IN OMAN**

AHMED SAID AL ARAFATI



DOCTOR OF PHILOSOPHY

UNIVERSITI UTARA MALAYSIA

OCTOBER 2020

**THE EFFECT OF A CONTEXTUAL, ORGANIZATIONAL, INDIVIDUAL
AND SYSTEM FACTORS ON CUSTOMER SATISFACTION OF CRM
IMPLEMENTATION IN PUBLIC SECTOR IN OMAN**

By



AHMED SAID AL ARAFATI

UUM
Universiti Utara Malaysia

Thesis Submitted to

Othman Yeop Abdullah Graduate School of Business,

Universiti Utara Malaysia,

in Fulfillment of the Requirement for the Degree of Doctor of Philosophy



Pusat Pengajian Pengurusan Perniagaan
(School of Business Management)

Kolej Perniagaan
(College of Business)

Universiti Utara Malaysia

PERAKUAN KERJA TESIS / DISERTASI
(Certification of thesis / dissertation)

Kami, yang bertandatangan, memperakukan bahawa
(We, the undersigned, certify that)

AHMED SAID SALIM AL-ARAFATI (901332)

calon untuk Ijazah _____ **DOCTOR OF PHILOSOPHY (MANAGEMENT)**
(candidate for the degree of)

telah mengemukakan tesis / disertasi yang bertajuk:
(has presented his/her thesis / dissertation of the following title):

**THE EFFECT OF CONTEXTUAL, ORGANIZATIONAL, INDIVIDUAL AND SYSTEM FACTORS
ON CUSTOMER SATISFACTION OF CRM IMPLEMENTATION
IN PUBLIC SECTOR IN OMAN**

seperti yang tercatat di muka surat tajuk dan kulit tesis / disertasi.
(as it appears on the title page and front cover of the thesis / dissertation).

Bahawa tesis/disertasi tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan, sebagaimana yang ditunjukkan oleh calon dalam ujian lisan yang diadakan pada:
23 Jun 2020

(That the said thesis/dissertation is acceptable in form and content and displays a satisfactory knowledge of the field of study as demonstrated by the candidate through an oral examination held on:
23rd June 2020

Pengerusi Viva : **Assoc. Prof. Dr. Selvan a/l Perumal**
(Chairman for Viva)

Tandatangan
(Signature)

Pemeriksa Luar : **Prof. Dr. Nek Kamal Yeop Yunus**
(External Examiner)

Tandatangan
(Signature)

Pemeriksa Dalam : **Assoc. Prof. Dr. Maria Bt. Abdul Rahman**
(Internal Examiner)

Tandatangan
(Signature)

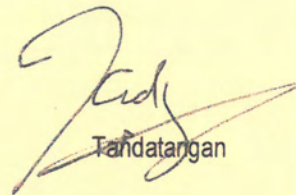
Tarikh: **23 Jun 2020**
(Date)

Nama Nama Pelajar
(Name of Student) : **Ahmed Said Salim Al-Arafati**

Tajuk Tesis / Disertasi
(Title of the Thesis /
Dissertation) : **THE EFFECT OF CONTEXTUAL, ORGANIZATIONAL, INDIVIDUAL AND
SYSTEM FACTORS ON CUSTOMER SATISFACTION OF CRM
IMPLEMENTATION IN PUBLIC SECTOR IN OMAN**

Program Pengajian
(Programme of Study) : **Doctor of Philosophy (Management)**

Nama Penyelia/Penyelia-
penyelia
(Name of
Supervisor/Supervisors) : **Assoc. Prof. Dr. Kadzrina Bt Abdul Kadir**


Tandatangan



UUM
Universiti Utara Malaysia

Permission to use

In presenting this thesis in fulfilment of the requirements for a postgraduate degree from Universiti Utara Malaysia, I agree that the University Library may make it freely available for inspection. I further agree that permission for the copying of this thesis in any manner, in whole or in part, for scholarly purpose may be granted by my supervisor(s) or, in their absence, by the Dean of Othman Yeop Abdullah Graduate School of Business. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to Universiti Utara Malaysia for any scholarly use which may be made of any material from my thesis.

Requests for permission to copy or to make other use of materials in this thesis, in whole or in part should be addressed to:

Dean of Othman Yeop Abdullah Graduate School of Business

Universiti Utara Malaysia

06010 UUM Sintok

Kedah Darul Aman

Abstract

A lot of benefits could be gained when implementing customer relationship management such as increased customer satisfaction, customer loyalty and often organizational benefits. Customer relationship management (CRM) refers to a system which manages the interactions of organizations with future customers as well as existing customers. The main purpose of this thesis was to develop an understanding of the effect of a contextual, organizational, individual and system factors on customer satisfaction of CRM implementation in public sector in Oman. The data collection measurement of this study is a survey questionnaire which is distributed to the employees who is working in organizations which implemented CRM system in the public sector. A total of 562 questionnaires were distributed to the respondents, 407 were returned and 356 cases were used for the analysis. The data collected is tested and analyzed by using the SPSS and Partial Least Squares (PLS). The study has presented empirical evidence for the influence and effect of variables on the implementation of CRM system in the public sector such as the significant effect of top management support, customer centered orientation, change management, end user training and data quality towards the Customer Satisfaction through the both mediators Output Quality and Perceived Quality.

This research provides a framework for studying the factors that affect CRM implementation through three previous theories and models (Expectation Disconfirmation Theory; An Integrated Model of CRM Implementation and a Model of Critical Success Factors for Public Sector CRM Implementation). Besides that, this research is one of very few CRM system implementation studies in the Middle East region. Also, there is a lack of research regarding the implementation of CRM in the Public Sector in Oman. Furthermore, the findings are also important for the Omani government if it seriously desires Oman to improve customer satisfaction with government services.

Keywords: Customer Relationship Management, Customer Satisfaction, Top Management Support, Customer Centered Orientation, and Change Management.

Abstrak

Banyak manfaat yang boleh didapati apabila pengurusan perhubungan pelanggan dilaksanakan antaranya mendorong peningkatan tahap kepuasan pelanggan, mendorong kesetiaan pelanggan dan memberi manfaat kepada organisasi. Pengurusan perhubungan pelanggan (CRM) merujuk kepada satu sistem yang menguruskan interaksi antara sesebuah organisasi dengan bakal pelanggan dan juga pelanggan sedia ada. Tujuan utama tesis ini adalah untuk memberi kefahaman tentang kesan faktor kontekstual, organisasi, individu dan sistem kepada tahap kepuasan pelanggan terhadap pelaksanaan CRM dalam sektor awam di Oman. Kaedah pengumpulan data bagi kajian ini adalah berbentuk soalan tinjauan yang telah diedarkan kepada pekerja-pekerja yang bekerja di dalam organisasi yang melaksanakan sistem CRM di sektor awam. Soalan tinjauan telah diedarkan sebanyak 562 kepada responden, 407 telah dikembalikan dan sebanyak 356 kes telah digunakan untuk analisis data. Data yang dikumpulkan telah diuji dan dianalisa menggunakan perisian SPSS dan Kuasa Dua Terkecil Separa (PLS). Hasil kajian menunjukkan terdapat bukti empirikal terhadap pengaruh dan kesan pembolehubah kepada pelaksanaan sistem CRM di sektor awam antaranya kesan signifikan terhadap sokongan pengurusan atasan, orientasi berpusatkan pelanggan, pengurusan perubahan, latihan pengguna dan kualiti data ke arah Kepuasan Pelanggan melalui kedua-dua perantaraan Kualiti Pengeluaran dan Kualiti Dampak hasil dari kepuasan pelanggan terhadap pelaksanaan CRM dalam sektor awam.

Kajian ini menyediakan rangka kerja untuk mengkaji faktor-faktor yang mempengaruhi pelaksanaan CRM melalui tiga teori dan model-model terdahulu (Teori Ketidaksahan Jangkaan; Sebuah Model Intergrasi Terhadap Pelaksanaan CRM dan Model Faktor Kejayaan Kritikal Terhadap Pelaksanaan CRM dalam Sektor Awam). Selain itu, kajian ini merupakan satu daripada beberapa kajian yang mengkaji tentang pelaksanaan sistem CRM di wilayah Timur Tengah ini. Malah, terdapat kekurangan kajian berkenaan pelaksanaan CRM dalam Sektor Awam di Oman. Tambahan lagi, dapatan kajian ini juga sangat penting kepada kerajaan Oman jika ia benar-benar mahu Oman menambahbaik tahap kepuasan pelanggan terhadap perkhidmatan kerajaan.

Kata Kunci: Pengurusan Perhubungan Pelanggan, Kepuasan Pelanggan, Sokongan Pengurusan Atasan, Orientasi Berpusatkan Pelanggan, dan Pengurusan Terhadap Perubahan

Acknowledgement

The completion of my Ph.D. was made possible by the assistance and support of a number of people. I will always be grateful to those individuals for helping me finish such a difficult task yet incredibly rewarding aspect of my education.

First of all, thanks to Almighty Allah for making this and everything possible. My deepest appreciation also goes to both of my supervisors, Prof. Madya Dr. Kadzrina binti Abdul Kadir and Dr. Sami Al Haderi, whose knowledge and advice have guided me throughout my research. Thank you for your continuing patience in reviewing my countless revisions. I have benefitted significantly from your guidance and will be totally indebted to both of you.

My profound gratitude is dedicated to my family for their unwavering support. I would like to express my heart felt “Thank You” to my father and mother, who have been there for me all my life. Thank you for your love and for believing in me. I would also wish to thank my brothers Qais and Salim for the support throughout the years.

Finally, I thank all my friends whom I have met over my years at Universiti Utara Malaysia (UUM) and also all the lecturers who have taught me throughout the years at the university. I have learnt a great deal from each of you and for that I am grateful.

Table of Contents

Permission to use -----	i
Abstract -----	ii
Abstrak -----	iii
Acknowledgement -----	ii
Table of Contents -----	v
List of Tables -----	xii
List of Figures -----	xv
CHAPTER ONE -----	1
INTRODUCTION -----	1
1.1 Introduction -----	1
1.2 Background of the study -----	6
1.3 Problem Statement -----	9
1.4 Research Objectives -----	15
1.5 Research Questions -----	16
1.6 Scope of the study -----	16
1.7 Significant of the study -----	19
1.8 Definition of Key Terms -----	21
1.9 Operational Definition of Variables -----	22
1.9.1 CRM implementation success: -----	22
1.9.2 Customers' satisfaction -----	23
1.9.3 Output quality: -----	24
1.9.4 Perceived quality: -----	25
1.9.5 Top management support: -----	26
1.9.6 Customer centered orientation: -----	27
1.9.7 Change management: -----	28
1.9.8 End user training: -----	29

1.9.9 CRM Data quality:-----	29
1.10 Organization of the thesis-----	30
CHAPTER TWO -----	32
LITERATURE REVIEW -----	32
2.1 Introduction-----	32
2.2 Background -----	33
2.2.1 Background of Oman-----	33
2.3 Customers Relationship Management (CRM)-----	35
2.4 Dependent variable-----	43
2.4.1 Customer satisfaction of CRM implementation-----	43
2.5 Mediating Variable (MV) -----	48
2.5.1 Output Quality -----	48
2.5.2 Perceived Quality-----	52
2.6 Independent variables (IV)-----	55
2.6.1 Top management support-----	55
2.6.2 Customer Centered Orientation-----	60
2.6.3 Change management-----	63
2.6.4 End User Training-----	69
2.6.5 Data Quality:-----	73
2.7 Theories and Frameworks -----	77
2.7.1 Expectation Disconfirmation Theory-----	77
2.7.2 Integrated model of CRM implementation-----	79
2.7.3 Model of Critical success factors for Public sector CRM implementation-----	81
2.7.4 Model of Organizational Capabilities for Successful CRM-----	85
2.7.5 Summary of Models-----	88
2.8 Proposed Framework -----	89
2.9 Hypotheses Development-----	92
2.9.1 The relationship between Output Quality and Customer Satisfaction-----	92
2.9.2 The relationship between Perceived Quality and Customer Satisfaction-----	92
2.9.3 The relationship of Top Management Support to Output Quality and Perceived Quality-----	93
2.9.4 The relationship of Customer Centered Orientation to Output Quality and Perceived Quality	94

2.9.5 The relationship of Change Management to Output Quality and Perceived Quality-----	96
2.9.6 The relationship of End User Training to Output Quality and Perceived Quality -----	98
2.9.7 The relationship of CRM Data Quality to Output Quality and Perceived Quality -----	99
2.9.8 The mediating role of Output Quality-----	101
2.9.9 The mediating role of Perceived Quality -----	103
2.10 Summary-----	105
CHAPTER THREE -----	106
METHODOLOGY -----	106
3.1 Introduction-----	106
3.2 Research Design-----	106
3.2.1 Purpose of the Study-----	106
3.2.2 Extent of Researcher Interference -----	108
3.2.3 Study setting (location) -----	108
3.2.4 Data Collection-----	108
3.2.5 Population and Sample-----	109
3.2.5.1 Sample and sample size to be studied -----	111
3.2.6 Time Horizon-----	113
3.3 Face Validity-----	113
3.4 Pilot Study-----	114
3.4.1 Data Reliability and Validity-----	115
3.4.2 Reliability-----	115
3.4.3 Validity (Factor analysis)-----	117
3.5 Data Collection Instrument and scales -----	121
3.5.1 Customer Satisfaction -----	121
3.5.2 Output Quality -----	121
3.5.3 Perceived Quality -----	123
3.5.4 Top Management Support -----	124
3.5.5 Customer Centered Orientation -----	125
3.5.6 Change Management -----	126
3.5.7 End User Training -----	127
3.5.8 CRM Data Quality-----	128

3.6 Data Collection Procedures	129
3.7 Data Analysis Method and Tool	129
3.8 Summary	131
CHAPTER FOUR	132
RESULTS AND DISCUSSION	132
4.1 Introduction	132
4.2 Response Rate	132
4.3 Demographic background of respondents	135
4.4 Descriptive Analysis and Normality	136
4.4.1 Customer Satisfaction	137
4.4.2 Output Quality	138
4.4.3 Perceived Quality	139
4.4.4 Top Management Support	140
4.4.5 Customer Centered Orientation	141
4.4.6 Change Management	142
4.4.7 Training	143
4.4.8 CRM Data Quality	144
4.5 Goodness of Measurement	145
4.5.1 Goodness of Measure for Customer Satisfaction	145
4.5.2 Goodness of Measure for Output Quality	146
4.5.3 Goodness of Measure for Perceived Quality	148
4.5.4 Goodness of Measure for Top Management Support	149
4.5.5 Goodness of Measure for Customer Centered Orientation	150
4.5.6 Goodness of Measure for Change Management	151
4.5.7 Goodness of Measure for Training	152
4.5.8 Goodness of Measure for CRM Data Quality	153
4.6 Assessment of Measurement model	154
4.7 Assessment of Structural model	162
4.7.1 Analysis of R square (R^2)	162
4.7.2 Analysis of effect size (F^2)	164
4.7.3 Blindfolding and predictive relevance (Q^2) analysis	165

4.7.4 Goodness-of-fit index (GoF) analysis-----	166
4.8 Testing of hypotheses-----	167
4.8.1 Output Quality and Customer Satisfaction -----	169
4.8.2 Perceived Quality and Customer Satisfaction-----	170
4.8.3 Top management support and Output Quality -----	172
4.8.4 Top management support and Perceived Quality-----	173
4.8.5 Customer Centered Orientation and Output Quality -----	174
4.8.6 Customer Centered Orientation and Perceived Quality-----	176
4.8.7 Change Management and Output Quality -----	177
4.8.8 Change Management and Perceived Quality-----	179
4.8.9 End User Training and Output Quality-----	180
4.8.10 End User Training and Perceived Quality-----	181
4.8.11 CRM Data Quality and Output Quality-----	183
4.8.12 CRM Data Quality and Perceived Quality -----	184
4.8.13 Result of mediating effect hypotheses-----	185
4.8.13.1 Output Quality mediates the relationship between Top Management Support and Customer Satisfaction.-----	186
4.8.13.2 Output Quality mediates the relationship between Customer Centered Orientation and Customer Satisfaction.-----	188
4.8.13.3 Output Quality mediates the relationship between Change Management and Customer Satisfaction.-----	190
4.8.13.4 Output Quality mediates the relationship between End User Training and Customer Satisfaction.-----	191
4.8.13.5 Output Quality mediates the relationship between CRM Data Quality and Customer Satisfaction.-----	192
4.8.13.6 Perceived Quality mediates the relationship between Top Management Support and Customer Satisfaction.-----	193
4.8.13.7 Perceived Quality mediates the relationship between Customer Centered Orientation and Customer Satisfaction.-----	194
4.8.13.8 Perceived Quality mediates the relationship between Change Management and Customer Satisfaction.-----	196
4.8.13.9 Perceived Quality mediates the relationship between End User Training and Customer Satisfaction.-----	198
4.8.13.10 Perceived Quality mediates the relationship between CRM Data Quality and Customer Satisfaction.-----	199
4.9 Summary -----	201
CHAPTER FIVE -----	204

CONCLUSION AND RECOMMENDATION -----	204
5.1 Introduction -----	204
5.2 Discussion of Findings -----	204
5.2.1 The relationship between Output Quality and Perceived Quality to Customer Satisfaction --	204
5.2.2 The relationship of Top Management Support to Output Quality and Perceived Quality: ----	207
5.2.3 The relationship of Customer Centered Oriented to Output Quality and Perceived Quality: -	209
5.2.4 The relationship of Change Management to Output Quality and Perceived Quality: -----	210
5.2.5 The relationship of End User Training to Output Quality and Perceived Quality: -----	212
5.2.6 The relationship of CRM Data Quality to Output Quality and Perceived Quality:-----	213
5.2.7 The mediating role of Output Quality: -----	215
5.2.8 The mediating role of Perceived Quality:-----	218
5.3 Summary of research findings: -----	222
5.3.1 To examine the effect of: -----	224
5.3.1.1 Output Quality and Perceived Quality on Customer Satisfaction of CRM implementation -----	224
5.3.1.2 Contextual factor (Top Management Support) on Output Quality and Perceived Quality toward CRM implementation-----	224
5.3.1.3 Organizational factor (Customer Centered Orientation and Change Management) on Output Quality and Perceived Quality toward CRM implementation -----	225
5.3.1.4 Individual factor (End User Training) on Output Quality and Perceived Quality toward CRM implementation-----	225
5.3.1.5 System factor (Data Quality) on Output Quality and Perceived Quality toward CRM implementation. -----	226
5.3.2 Formulate one integrated framework for CRM implementation: -----	226
5.4 Theoretical contribution -----	229
5.5 Practical Contribution -----	232
5.6 Limitations of the Study -----	235
5.7 Recommendations for Future Studies -----	236
5.8 Conclusion -----	238
REFERENCES -----	241
APPENDIX A -----	268
Pilot study analysis -----	268

APPENDIX B-----288

Analysis Questionnaire-----288



List of Tables

<i>Table 1. 1 Six organization out of fifty implemented CRM system in Oman</i>	10
<i>Table 1. 2 Target population in the previous studies</i>	14
<i>Table 1. 3 Previous Studies Target Respondents</i>	18
<i>Table 2. 1 Summary of Models</i>	88
<i>Table 3. 1 Target population in the previous studies</i>	110
<i>Table 3. 2 Distribution percentage</i>	112
<i>Table 3. 3 Distribution Numbers</i>	112
<i>Table 3. 4 Reliability results</i>	116
<i>Table 3. 5 Validity summary (Factor Analysis)</i>	117
<i>Table 3. 6 Customer Satisfaction Data Collection Instruments</i>	121
<i>Table 3. 7 Output Quality Data Collection Instruments</i>	122
<i>Table 3. 8 Perceived Quality Data Collection Instruments</i>	123
<i>Table 3. 9 Top Management Support Data Collection Instruments</i>	124
<i>Table 3. 10 Customer Centered Orientation Data Collection Instruments</i>	125
<i>Table 3. 11 Change Management Data Collection Instruments</i>	126
<i>Table 3. 12 End User Training Data Collection Instruments</i>	127
<i>Table 3. 13 CRM Data Quality Data Collection Instruments</i>	128
<i>Table 4. 1 Some of previous study Response Rates in Oman</i>	133
<i>Table 4. 2 Summary of Response Rates</i>	134
<i>Table 4. 3 Frequency descriptive</i>	135
<i>Table 4. 4 Frequency descriptive</i>	135
<i>Table 4. 5 Mean Values and Normality for Customer Satisfaction Items</i>	137
<i>Table 4. 6 Mean Values and Normality for Output Quality Items</i>	138
<i>Table 4. 7 Mean Values and Normality for Perceived Quality Items</i>	139
<i>Table 4. 8 Mean Values and Normality for Top Management Support Items</i>	140
<i>Table 4. 9 Mean Values and Normality for Customer Centered Orientation Items</i>	141
<i>Table 4. 10 Mean Values and Normality for Change Management Items</i>	142

<i>Table 4. 11 Mean Values and Normality for Training Items</i>	143
<i>Table 4. 12 Mean Values and Normality for CRM Data Quality Items</i>	144
<i>Table 4. 13 Result of Factor Analysis for Customer Satisfaction</i>	146
<i>Table 4. 14 Result of Factor Analysis for Output Quality</i>	147
<i>Table 4. 15 Result of Factor Analysis for Perceived Quality</i>	148
<i>Table 4. 16 Result of Factor Analysis for Top Management Support</i>	149
<i>Table 4. 17 Result of Factor Analysis for Customer Centered Orientation</i>	150
<i>Table 4. 18 Result of Factor Analysis for Change Management</i>	151
<i>Table 4. 19 Result of Factor Analysis for Training</i>	152
<i>Table 4. 20 Result of Factor Analysis for CRM Data Quality</i>	153
<i>Table 4. 21 Convergent Validity Analysis</i>	155
<i>Table 4. 22 Correlation between latent variables and square roots of average variance extracted</i>	158
<i>Table 4. 23 Cross loading</i>	159
<i>Table 4. 24 R-squared of the Endogenous latent Variable</i>	163
<i>Table 4. 25 Effect size of latent variables</i>	164
<i>Table 4. 26 Prediction relevance of the model</i>	166
<i>Table 4. 27 Goodness-of-fit index (GoF)</i>	167
<i>Table 4. 28 Path coefficient for H1</i>	169
<i>Table 4. 29 Path coefficient for H2</i>	171
<i>Table 4. 30 Path coefficient for H3</i>	172
<i>Table 4. 31 Path coefficient for H4</i>	174
<i>Table 4. 32 Path coefficient for H5</i>	175
<i>Table 4. 33 Path coefficient for H6</i>	177
<i>Table 4. 34 Path coefficient for H7</i>	178
<i>Table 4. 35 Path coefficient for H8</i>	179
<i>Table 4. 36 Path coefficient for H9</i>	181
<i>Table 4. 37 Path coefficient for H10</i>	182
<i>Table 4. 38 Path coefficient for H11</i>	183
<i>Table 4. 39 Path coefficient for H12</i>	185
<i>Table 4. 40 Indirect effect Calculation for H13</i>	187
<i>Table 4. 41 Direct effect Calculation for H13</i>	187
<i>Table 4. 42 Indirect effect Calculation for H14</i>	189
<i>Table 4. 43 Direct effect Calculation for H14</i>	189
<i>Table 4. 44 Indirect effect Calculation for H15</i>	190

<i>Table 4. 45 Indirect effect Calculation for H16</i>	191
<i>Table 4. 46 Indirect effect Calculation for H17</i>	192
<i>Table 4. 47 Indirect effect Calculation for H18</i>	193
<i>Table 4. 48 Direct effect Calculation for H18</i>	194
<i>Table 4. 49 Indirect effect Calculation for H19</i>	195
<i>Table 4. 50 Direct effect Calculation for H19</i>	196
<i>Table 4. 51 Indirect effect Calculation for H20</i>	197
<i>Table 4. 52 Direct effect Calculation for H20</i>	197
<i>Table 4. 53 Indirect effect Calculation for H21</i>	199
<i>Table 4. 54 Indirect effect Calculation for H22</i>	200
<i>Table 4. 55 Direct effect Calculation for H22</i>	200
<i>Table 4. 56 Summary of all hypothesis's findings</i>	202
<i>Table 5. 1 Summary of all hypothesis's findings</i>	227



List of Figures

Figure 2. 1: <i>Expectation disconfirmation theory</i>	78
Figure 2. 2: <i>Integrated model of CRM implementation</i>	81
Figure 2. 3: <i>Model of Critical success factors for Public sector CRM implementation</i>	84
Figure 2. 4: <i>Model for successful implementation for the CRM system</i>	87
Figure 2. 5: <i>Proposed Framework</i>	91
Figure 4. 1: <i>Proposed Framework in PLS-SEM</i>	168

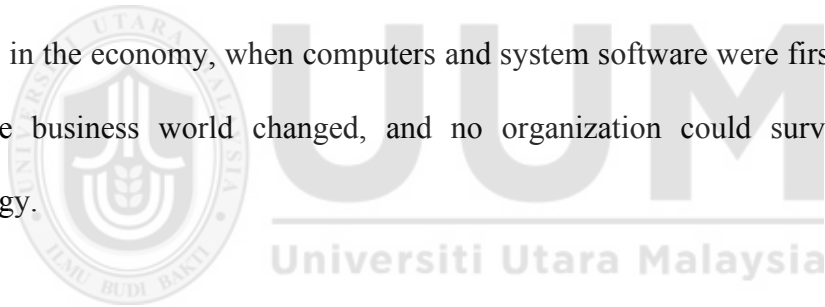


CHAPTER ONE

INTRODUCTION

1.1 Introduction

Information technology systems are very important for a country's development and growth. Also, it is important for every country as they affect both business and society. Almost all aspects of daily life have been influenced by information technology, such as: economy, health, education, communication and entertainment fields (Ramey, 2012). For instance, in the economy, when computers and system software were first introduced and used, the business world changed, and no organization could survive without the technology.



Oman has set plans in phases every five year since 1976. Every phase of five year plan focusses on different aspects of development. The 8th five-year plan (2011-2015), emphasizes “the establishment of knowledge pillars which in turn will improve overall productivity and competitiveness of the economy. The Government has given special adherence to speed the implementation of Oman Digital society and Scientific Research. The Eighth Plan also gave emphasis on the creation of efficient Government administration and up gradation of statistics” (GBCM, 2011, p.13).

REFERENCES

- Aaker, D. A., & Jacobson, R. (1994). The financial information content of perceived quality. *Journal of marketing research*, 191-201.
- Abdul Karim, M. (2010). *Project Management and Construction*. Retrieved from <https://www.coursehero.com/file/12457200/MANAGEMENT-FUNCTIONS-LEVELS-SKILLS/>.
- Ahimbisibwe, A. (2015). *Critical success factors for outsourced software development projects from a vendor's perspective: A structural equation modelling analysis of traditional plan-based and agile methodologies*. (Doctoral dissertation, Victoria University of Wellington).
- Akintoye, A., & Fitzgerald, E. (2000). A survey of current cost estimating practices in the UK. *Construction Management & Economics*, 18(2), 161-172.
- Al-Arafati, A., Abdulkadir, K. , & Al-Haderi, S. (2019). The mediating effect of output quality on the relationship between top management support and customer satisfaction on the implementation of customer relationship management system in public sector. *Academy of Strategic Management Journal*, 18(2).
- Al Ghassani, A. M., Al Lawati, A. M., & Ananda, S. (2017). *BANKING SECTOR IN OMAN STRATEGIC ISSUES, CHALLENGES AND FUTURE SCENARIOS*. College of Banking and Financial Studies. Sultanate of Oman.

Alhaderi S., (2014). The Influences of Government Support in Accepting the Information Technology in Public Organization Culture. *International Journal of Business and Social Science*. 5(5).

Alhaderi S., Ishak K., Fawzi D., Ishak M. & Mat R. (2017). Library's Resources and Librarian's Service Quality as Important Determinants for Students' Expectation Towards Students Academic Performance. *International Journal of Economic Research*, 14(20).

Al-Kalbani, S. (2017). CRM System Project in Muscat Municipality. *World Journal of Engineering Research and Technology*, 3(3), 69-77.

Al-Lawati, J. A., Mohammed, A. J., Al-Hinai, H. Q., & Jousilahti, P. (2003). Prevalence of the metabolic syndrome among Omani adults. *Diabetes care*, 26(6), 1781-1785.

Al-Mamary, Y. H., Shamsuddin, A., & Abdul Hamid, N. A. (2014). The relationship between system quality, information quality, and organizational performance. *International Journal of Knowledge and Research in Management & E-Commerce*, 4(3).

Al Qudah, N. F., Yang, Y., & Anjum, M. A. (2018). Transformational Training Programs and Quality Orientation of Employees: Does Employees' Loyalty Matter?. *Sustainability*, 10(2), 465.

- Al-Ruzaiqi, S. (2012). *Oman - Dr. Salim Al Ruzaiqi, Chief Executive Officer of ...*
Retrieved May 23, 2016, from <http://www.theworldfolio.com/interviews/salim-al-ruzaiqi-information-technology-authority-ita-oman-n1129/1129/>
- Allen, B. (2004). *The Customer Centric Organization: From Pushing Products to Winning Customers. Booz Allen Hamilton Report.*
- Babakus, E., Bienstock, C. C., & Van Scotter, J. R. (2004). Linking perceived quality and customer satisfaction to store traffic and revenue growth. *Decision Sciences*, 35(4), 713-737.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94.
- Ballal, T., Elhag, T., & Ambusaidy, M. S. (2007). Project risk management in Oman: A survey of risk practices in the construction industry. In *CIB World Congress: Construction for Development* (pp. 549-557).
- Baran, R., Zerres, C., & Zerres, M. (2013). *Customer Relationship Management*. Bookboonn.com, pp 1-15 Retrieved from [http://www.modirbartar.com/Content/Asn/fd66062c-4ad2-4a22-99e7-84f794876d2c/library/en/customer-relationship-management\(www.modirbartar.com\).pdf](http://www.modirbartar.com/Content/Asn/fd66062c-4ad2-4a22-99e7-84f794876d2c/library/en/customer-relationship-management(www.modirbartar.com).pdf).
- Becker, U., Greve, G. & Albers, S. (2010). Left Behind Expectations: How to prevent CRM implementation from failing. *New Strategies*, 2 (34)

- Bendik, B. (2003). The implementation puzzle of CRM systems in knowledge-based organizations. *Information Resources Management Journal*; Oct-Dec 2003; 16, 4; ABI/INFORM Complete pg. 33.
- Benton, B. (2016). *Importance of Employee Training 6 Reasons Why You Need It*. Retrieved from <https://lineshapespace.com/importance-of-employee-training>.
- Bernhart, M. (2007). CRM success depends on implementation and training. *Employee Benefit Advisor*
- Bhattacharjee, A. (2012) *Social Science Research: Principles, Methods, and Practice (2nd ed.)*. Textbooks Collection. Book 3. http://scholarcommons.usf.edu/oa_textbooks/3
- Bian, Z. and Dong, H. (2012). Suggestions on the CRM Implementation of Small and Medium-sized Enterprises Based on Data Mining. *Contemporary Logistics*
- Bolin, M., & Bergquist, M. (2004). A Narrative Approach to Change Management. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.194.6666>
- Bourda, F. M. (2013). Change management theories and methodologies. *Tata Consultancy Services*, 4-11.

- Bracknell (2000). Ten steps to successful CRM implementation. *Customer Systems. England*. Retrieved from <http://www.elp.com/articles/print/volume- Ramey implementation.html>.
- Bradt Travel Guides (2014). *Oman Travel Information and Guide Bradt Travel Guides*. Retrieved from <http://www.bradtguides.com/destinations/middle-east/oman.html>.
- Brady, M. K., & Cronin Jr, J. J. (2001). Customer orientation: Effects on customer service perceptions and outcome behaviors. *Journal of service Research*, 3(3), 241-251.
- Bull, C. (2003). Strategic issues in customer relationship management (CRM) implementation. *Business Process Management Journal*, 9 (5), 592-602
- Business Dictionary [BD] (2016). *What is data definition and meaning*. Retrieved from <http://www.businessdictionary.com/definition/data.html>
- Butler, W. (2016). *CRM Training - How to plan CRM training & avoid these common mistakes*. Retrieved from <http://www.preact.co.uk/blog/how-to-plan-crm-training-avoid-these-common-mistakes>.
- Buttle, F. (2009). *Customer Relationship Management Concepts and Technologies* (2nd Ed.). Linacre House, Jordan Hill, Oxford. Published by Elsevier

- Byrne, B. M. (2010). *structural equation modeling with AMOS* (2 ed. Vol. 16). united state of america: taylor, francis group, 16(2), 1-230.
- Cerny, C.A., & Kaiser, H.F. (1977). A study of a measure of sampling adequacy for factor-analytic correlation matrices. *Multivariate Behavioral Research*, 12(1), 43-47.
- Cheng, L. Y., & Yang, C. W. (2013). Conceptual analysis and implementation of an integrated CRM system for service providers. *Service Business*, 1-22.
- Chin, W. W. (1998). The partial least squares approach for structural equation modelling. In *George A. Marcoulides* (Ed). *Modern Methods for Business Research*, Lawrence Erlbaum Associates, Mahwah, NJ. 295-336
- Cohen, J. (1988). *Statistical Power Analysis for the behavioral Sciences*. EE. UU.
- Creasey, T. (2007). Defining change management: helping others understand change management in relation to project management and organizational change. *Prosci. Change management learning center*. [online]. Available from <http://www.change-management.com/tutorials.htm>.
- Davey, N. (2011). *CRM training's most common calamities*. Retrieved from <http://www.mycustomer.com/selling/crm/crm-trainings-most-common-calamities>.
- Davis, J. (2000). Who is taking ownership of your company's CRM implementation strategy?. *InfoWorld*; Dec 18, 2000; 22, 51; ABI/INFORM Complete pg. 82.

- Duncan, W. R. (1996). *A guide to the project management body of knowledge*. Project Management Institute, 130 South State Road, Upper Darby, USA.
- Edmunds, S. (2016). *Ways to Increase Perceived Quality*. Retrieved from <http://smallbusiness.chron.com/ways-increase-perceived-quality-60414.html>.
- Eisingerich, A. B., Auh, S., & Merlo, O. (2014). Acta non verba? The role of customer participation and word of mouth in the relationship between service firms' customer satisfaction and sales performance. *Journal of Service Research*, 17(1), 40-53.
- Elkhani, N. & Bakri, A. (2012) Review On Expectancy Disconfirmation Theory (EDT) Model In B2C E-Commerce. *Journal of Information Systems Research and Innovation (JISRI)*, 2 . pp. 1-13
- Erjavec, H. S., Dmitrovic, T., & Povalej Brzan, P. (2016). Drivers of customer satisfaction and loyalty in service industries. *Journal of Business Economics and Management*, 17(5), 810-823.
- Esalestrack (2010). *CRM Definition, What is Customer Relationship Management*. Retrieved from http://www.esalestrack.com/crm_article/crm-definition.html.
- Falk, R. F., & Miller, N. B. (1992). *A primer for soft modeling*. University of Akron Press.

- Fazel, R., Ziglari, F. & Iravani, M. R. (2014). Review the Factors Supporting Senior Management Leadership, Strategic Planning and Quality Improvement and Productivity, Customer Satisfaction of Isfahan Pegah Dairy Company. *Review of Contemporary Business Research*, 3(2), 35-50.
- Finnegan, D. J., & Currie, W. L. (2010). A multi-layered approach to CRM implementation: An integration perspective. *European Management Journal*, 28(2), 153-167.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Fornell, C., Morgeson III, F. V., & Hult, G. T. M. (2016). Stock returns on customer satisfaction do beat the market: gauging the effect of a marketing intangible. *Journal of Marketing*, 80(5), 92-107.
- Galla, J. (1999). Team-building key to CRM implementation. *Technology and Communications Tools for Marketers*; pg.23.
- GBCM Research (2011). *Oman Economic Outlook Marching Towards Stability*. Retrieved May 21, 2016, from [http://www.gbcmoman.net/reports/GBCM%20Research %20- %20Oman%20Economic%20Outlook.pdf](http://www.gbcmoman.net/reports/GBCM%20Research%20-%20Oman%20Economic%20Outlook.pdf).

- Geiger, J. G. (2004). Data Quality Management, The Most Critical Initiative You Can Implement. *Data Warehousing, Management and Quality, Paper*, 098-29.
- Gelman, I. A. (2004). Simulations of the Relationship Between an Information System's Input Accuracy and Its Output Accuracy. In *IQ* (pp. 99-110).
- Giese, J. L., & Cote, J. A. (2000). Defining consumer satisfaction. *Academy of marketing science review*, 2000, 1.
- Gray, P., & Byun, J. (2001). *Customer relationship management*. University of California, Irvine.
- Green, C. E. (2006). Customer Relationship Management and Loyalty for Resorts: Technology, Process and The Human Touch. *Hospitality Upgrade* pp.148-152.
- Gundersen, M. G., Heide, M., & Olsson, U. H. (1996). Hotel guest satisfaction among business travelers: what are the important factors?. *The Cornell Hotel and Restaurant Administration Quarterly*, 37(2), 72-81.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis (6th ed.)*. New Jersey: Pearson Prentice Hall.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis, 7/E (7th ed.)*. upper saddle river, Prentice Hall, 7th, p.816.

Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.

Hannan, S., Suharj, B., Nurmalin, R. & Kirbrandoko (2014). The Influence of Perceived Quality, Perceived Value, And Customer Expectation on Customer Satisfaction: An Empirical Study on Independent Surveyor Industry in Indonesia. *Global Illuminators*, 1, 188 -196.

Hare, C. E., McLeod, J., & King, L.A. (1996). Continuing professional development for the information discipline of records management. Part 1: context and initial indications of current activities. *Librarian Career Development* ,4(2), 22-27.

Harrigan, P., Ramsey, E., & Ibbotson, P. (2011). Critical factors underpinning the e-CRM activities of SMEs. *Journal of Marketing Management*, 27(5-6), 503-529.

Heczko, M., & Stoklasa, M. (2014). Customer relationship management–theory and principles. *Karvina: Univerziti ní namestí*.

Hechtkopf, B. (2011). *Implementing and Measuring a Customer Centricity Framework*. Retrieved from <http://blog.kobie.com/2011/08/how-customer-centric-are-you/>.

Hendra, R., & Hill, A. (2019). Rethinking response rates: New evidence of little relationship between survey response rates and nonresponse bias. *Evaluation review*, 43(5), 307-330.

Henseler, J., Dijkstra, T. K., Sarstedt, M., Ringle, C. M., Diamantopoulos, A., Straub, D. W., et al. (2014). Common beliefs and reality about partial least squares: Comments on Rönkkö & Evermann (2013). *Organizational Research Methods*, 17, 182–209.

Historyworld (2016). *History of Oman*. Retrieved from <http://www.historyworld.net/wrldhis/PlainTextHistories.asp?historyid=ad54#3388>.

Holzer, H. J., Block, R. N., Cheatham, M., & Knott, J. H. (1993). Are training subsidies for firms effective? The Michigan experience. *Industrial & Labor Relations Review*, 46(4), 625-636.

Hong-kit Yim, F., Anderson, R. E., & Swaminathan, S. (2004). Customer relationship management: Its dimensions and effect on customer outcomes. *Journal of Personal Selling & Sales Management*, 24(4), 263-278

Hsu, J., Huang, C., & Hsu, P. (2006, June). The exploration of top management support to the ERP project then influence user satisfaction–use the information, system, service quality, as the moderators. In *Proceedings of the Fourth Workshop on Knowledge Economy and Electronic Commerce* (pp. 142-154).

Hu, L.-T., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods*, 3, 424–453.

Im, S., Hussain, M., & Sengupta, S. (2008). Testing interaction effects of the dimensions of market orientation on marketing program creativity. *Journal of Business Research*, 61(8), 859-867.

Infoplease (2016). *Oman*. *Infoplease*. Retrieved from <http://www.infoplease.com/country/oman.html?pageno=1>

Information Technology Authority (ITA) (2016). *e Oman*. Retrieved from http://www.ita.gov.om/ITAPortal/Info/FAQ_eOman.aspx

Ioma (2008). CRM Budgets. *The controller's report*; Aug 2008; 8; ABI/INFORM Complete pg. 6

Jacobs, H. (2006). The Keys to CRM Implementation. *Credit Union Management*. pg. 82.

Jayawardhena, C., Farrell, A. M., & Sharma, A. (2008). The Impact of Employees' Customer Orientation and Service Orientation Behaviors on Customers' Service Evaluation. In *Academy of Marketing Science Conference (AMS), Vancouver*.

Jitpaiboon, T., & Kalaian, S. A. (2005). Analyzing the effect of top management support on Information System (IS) performance across organizations and industries using hierarchical linear modeling. *Journal of International Information Management*, 14(2), 5.

- Jose, J., Al Shukili, M. N., & Jimmy, B. (2015). Public's perception and satisfaction on the roles and services provided by pharmacists—Cross sectional survey in Sultanate of Oman. *Saudi Pharmaceutical Journal*, 23(6), 635-641.
- Kamakura, W., Mela, C. F., Ansari, A., Bodapati, A., Fader, P., Iyengar, R., ... & Wedel, M. (2005). Choice models and customer relationship management. *Marketing Letters*, 16(3), 279-291.
- Kasemsap, K. (2019). Facilitating customer relationship management in modern business. In *Advanced Methodologies and Technologies in Digital Marketing and Entrepreneurship* (pp. 44-56). IGI Global.
- Komarova, V. V., Nekrasova, O. I., Zlobina, O. G., & Milaia, A. V. (2020, March). Principles and Methods of Project Management in Organization. In *International Scientific Conference "Far East Con"(ISCFEC 2020)* (pp. 2190-2196). Atlantis Press.
- Kotler, P. (2000). *Marketing Management*. International Edition, Prentice-Hall, Englewood Cliffs, NJ.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610.
- Krigsman, M. (2009). *CRM failure rates: 2001-2009. Beyond IT Failure*. Retrieved from <http://www.zdnet.com/article/crm-failure-rates-2001-2009/>

- Ladewi, Y. (2014). Influence of Change Management and management commitment on implementation of ERP system & its impact on quality of accounting information - A survey of Bumnn companies in Bandung. *International Journal of Economics, Commerce and Management*, 2(9).
- Lai, Y. H. R., Chu, J. Y., & Petrick, J. F. (2016). Examining the relationships between perceived value, service quality, satisfaction, and willingness to revisit a theme park. *Tourism Travel and Research Association: Advancing Tourism Research Globally*. 52. <http://scholarworks.umass.edu/ttra/2011/Oral/52>
- Lawson, A., Willoughby, L., Mukankusi, L., & Logossah, K. (2011). The critical success factors for public sector CRM implementation. *Journal of Computer Information Systems*, 52(2), 42-50.
- Lee, W. I., Chen, C. W., Chen, T. H., & Chen, C. Y. (2010). The relationship between consumer orientation, service value, medical care service quality and patient satisfaction: The case of a medical center in Southern Taiwan. *African Journal of Business Management*, 4(4), 448.
- Leonidio, U. D. C., Montezano, R. M. D. S., & Carvalho, F. A. D. (2011). Evaluation of perceived quality of the website of an online bookstore: an empirical application of the Barnes and Vidgen Model. *JISTEM-Journal of Information Systems and Technology Management*, 8(1), 109-130.
- Li, S., & Lin, B. (2006). Accessing information sharing and information quality in supply chain management. *Decision support systems*, 42(3), 1641-1656.

- Malmksold, L., Ortengren, R., & Svensson, L. (2015). Improved Quality Output through Computer-Based Training: An Automotive Assembly Field Study. *Human Factors and Ergonomics in Manufacturing & Service Industries*, 25(3), 304-318.
- Matamoros, D. (2012). An Overview to Customer Relationship Management. *Advances in Customer Relationship Management*, 1.
- Matheson, J. (2013). Guidelines for Measuring Statistical Output Quality. *Office for national statistics*, Sep 2013. Kew, London.
- Meiryani (2014). Influence of Top Management Support on the Quality of Accounting Information System and Its Impact on the Quality of Accounting Information. *Research Journal of Finance and Accounting*, 5(11).
- Migdadi, M. M., Awartany, A. I., & Khayata, M. Y. (2010). An Empirical Study of the Role of CRM Critical Success Factors in the Successful Implementation of CRM. *Scientific Journal of King Faisal University (Humanities and Management Sciences)*, 11(2), 1431.
- Milfelner, B., Snoj, B., & Korda, A. P. (2011). Measurement of Percieved Quality, Percieved Value, Image, and Satisfaction Interrelations of Hotel Services. *Drustvena Istrazivanja*, (113).
- Mitra, D., & Golder, P. N. (2006). How does objective quality affect perceived quality? Short-term effects, long-term effects, and asymmetries. *Marketing Science*, 25(3), 230-247.

- Nathan, B. S., Apigian, C. H., Ragu-Nathan, T. S., & Tu, Q. (2004). A path analytic study of the effect of top management support for information systems performance. *Omega*, 32(6), 459-471.
- National Center for Statistics and Information [NCFSI] (2017). *Statistical year book 2016 (Issue 44) Aug 2016*. Retrieved April 21, 2017, from the Oman National Center for Statistics and Information Web site: <https://www.ncsi.gov.om/Elibrary/Pages/LibraryContentView.aspx>
- National Center for Statistics and Information [NCFSI] (2020). Population - DATA PORTAL. Retrieved April 15, 2020, from the Oman National Center for Statistics and Information Web site: <https://data.gov.om/search?query=Population>
- Nejatian, H., Sentosa, I., Piaralal, S. K., & Bohari, A. M. (2011). The influence of customer knowledge on CRM performance of Malaysian ICT companies: a structural equation modeling approach. *International Journal of Business and Management*, 6(7), 181.
- Nguyen, T. H., Sherif, J. S., & Newby, M. (2007). Strategies for successful CRM implementation. *Information Management & Computer Security*, 15(2), 102-115.
- Nilsson, L., Johnson, M. D., & Gustafsson, A. (2001). The impact of quality practices on customer satisfaction and business results: product versus service organizations. *Journal of Quality Management*, 6(1), 5-27.

- Norman, G., & Streiner, D. (2008). *Biostatistics: The Bare Essentials (3rd ed)*. London: B.C. Decker.
- Nunnally, J. C. (1978). *Psychometric theory (2nd ed.)*. New York: McGraw-Hill.
- Oliver R., (2014). *Satisfaction behavioral prospective on the consumer*. Second edition. Routhledge. London 2015. p.8
- Osman, Z., & Sentosa, I. (2013). Influence of customer satisfaction on service quality and trust relationship in Malaysian rural tourism. *Business and Management Quarterly Review*, 4(2), 12-25.
- Palladan, A., Abdulkadir, k. & Chong, Y. (2016). The Effect of Strategic Leadership, Organization Innovativeness, Information Technology Capability on Effective Strategy Implementation: A Study of Tertiary Institutions in Nigeria. *IOSR Journal of Business and Management (IOSR-JBM)*. 18(9), 109 - 115.
- Parvatiyar, A. & Sheth, J. N. (2001). Customer relationship management: Emerging practice, process, and discipline. *Journal of Economic and Social Research*, 3(2),1-34.
- Payne, A. and Frow, P. (2005). A Strategic Framework for Customer Relationship Management. *Journal of Marketing*, 69 (4), 167–176.

People not happy with govt services: MoCS survey (2012, September 17). *Muscat Daily*. Retrieved from <http://www.muscatdaily.com/Archive/Oman/People-not-happy-with-govt-services-MoCS-survey-1pag>

Picot-Coupey, K., & Troiville, J. (2104). The Use of PLS-SEM in Marketing Research: Advantages, Limits and Recommendations for Rigorous Applications. *8th International Symposium on PLS and Related Methods (PLS'14)*

Preact (2016). *The Importance of CRM Training*. Retrieved from <http://www.preact.co.uk/blog/the-importance-of-crm-training>.

Prezant, J. (2013). *63% of CRM Initiatives Fail*. Retrieved June 22, 2016, from <http://blog.scribesoft.com/crm-daily-recap-july-22/>

Rababah, K., Mohd, H. & Ibrahim H. (2011). Customer Relationship Management (CRM) Processes from Theory to Practice: The Pre-implementation Plan of CRM System. *International Journal of e-Education, e-Business, e-Management and e-Learning*, 1(1).

Raman, P., Wittmann, C. M., & Rauseo, N. A. (2006). Leveraging CRM for sales: the role of organizational capabilities in successful CRM implementation. *Journal of Personal Selling & Sales Management*, 26(1), 39-53.

Ramey, K. (2012). *Advantages and Disadvantages of Information Technology - Use of Technology*. Retrieved from <http://www.useoftechnology.com/advantages-disadvantages-information-technology/>

Reid, A., & Catterall, M. (2005). Invisible data quality issues in a CRM implementation. *Journal of Database Marketing & Customer Strategy Management*, 12(4), 305-314.

Rexhepi, G., Nuredini, A., Ibraimi, S., & Mulyaningsih, H. D. (2019). THE EFFECT OF CRM AND ITS IMPLEMENTATION IN CUSTOMER SATISFACTION: THE CASE OF REPUBLIC OF NORTH MACEDONIA. *ISCBE 2019*, 648.

Ringle, C., Sarstedt, M., & Straub, D. (2012). A critical look at the use of PLS-SEM in MIS quarterly. *Manag. Inf. Syst. Q.*, 36.

ROP's eServices most popular among users (2017, August 20). *Muscat Daily*. Retrieved from <http://www.muscatdaily.com/Archive/Oman/ROP-s-eServices-most-popular-among-users-52y5>

Project Management Informed Solution [PMIS] (2005). *Change Management Principles, Strategies and Tactics*. Retrieved from http://www.pmis.co.uk/change_management.htm.

Project Management for Development organizations [Pm4dev] (2008). *A methodology to manage development projects for international humanitarian assistance and relief organizations*. Retrieved from <https://www.pm4dev.com/resources/free-e-books/130-development-project-management/file.html>.

Robbins, S. P. (2003). *Organizational Behavior* (10th Ed). Jay Print Pack Private Limited: New Delhi.

Rubin, J., Samek, A. S., & Sheremeta, R. M. (2016). *Loss aversion and the quantity-quality tradeoff*. USA.

SaadAndaleeb, S., & Conway, C. (2006). Customer satisfaction in the restaurant industry: an examination of the transaction-specific model. *Journal of services marketing*, 20(1), 3-11.

Sabri, M. (2014). *Service Quality, Customer Loyalty and the Mediating Effects of Customer Satisfaction Towards Audit Firms: Perspective of Small-Medium Enterprise (SMEs) Companies in Malaysia* (Doctoral dissertation, Universiti Utara Malaysia).

Saeidi, S. P., Sofian, S., Saeidi, P., Saeidi, S. P., & Saeidi, S. A. (2015). How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of Business Research*, 68(2), 341-350.

Sarlak, M. A., & Fard, R. S. (2009). The impact of CRM on the customer satisfaction in agricultural bank. *American Journal of Economics and Business Administration*, 1(2), 167.

Schaeffer, C. (2017). *The Top Reasons CRM Fails*. Retrieved from <http://customerthink.com/the-top-reasons-crm-fails/>.

- Scharitzer, D., Korunka, C., & Sonnek, A. (2002). *Evaluating Change-Management in Hospitals from the Employee's and Customer's Perspective*. Retrieved from https://arbeitswandel.univie.ac.at/fileadmin/user_upload/p_arbeitswandel/Workshop-Posters/Poster_Change-Management.pdf
- Scott, G. (2004, July). Change matters: Making a difference in higher education. In *Proceedings of the Australian Universities Quality Forum* (pp. 35-51).
- Shum, P., Bove, L., & Auh, S. (2008). Employees' affective commitment to change: The key to successful CRM implementation. *European journal of marketing*, 42(11/12), 1346-1371.
- Simester, D. I., Hauser, J. R., Wernerfelt, B., & Rust, R. T. (2000). Implementing quality improvement programs designed to enhance customer satisfaction: Quasi-experiments in the United States and Spain. *Journal of Marketing Research*, 37(1), 102-112.
- Sitzia, J., & Wood, N. (1998). Response rate in patient satisfaction research: an analysis of 210 published studies. *International Journal for Quality in Health Care*, 10(4), 311-317.
- Sloman, M. (2005). *Training to learning*. Retrieved from <http://www.cipd.co.uk/NR/ronlyres/52AF1484-AA29-4325-8964-0A7A1AEE0B8B/0/train2lrn0405.pdf>

- Soliman, H. S. (2011). Customer Relationship Management and Its Relationship to the Marketing Performance. *International Journal of Business and Social Science* 2(10).
- Sreejesh, S., Mohapatra, S., & Anusree, M. R. (2014). *Business research methods*. Springer International Publishing AG.
- Stylidis, K., Wickman, C., & Soderberg, R. (2015). Defining perceived quality in the automotive industry: An engineering approach. *Procedia CIRP*, 36, 165-170.
- Suresh, H. (2001). Change Management Must for today's Organization. *Think Business Networks Pvt. Ltd, July I, 200*.
- Swift, R. (2001). *Accelerating Customer Relationship Management: Using CRM and Relationship Technologies*. Prentice-Hall PTR
- Tan, C. K., & Abdul-Rahman, H. (2008, November). Top management commitment towards quality management in the context of Malaysian construction organizations. In *international conference on multi-national construction projects, shanghai, china*.
- Tarka, P. (2017). An overview of structural equation modeling: its beginnings, historical development, usefulness and controversies in the social sciences. *Quality & Quantity*, 1-42.

- Tenenhaus, M., Esposito, Vinzi V., Chatelin, Y.-M., & Lauro, C. (2005). PLS path modeling. *Computational Statistics & Data Analysis*, 48, 159–205.
- The Heritage Foundation [THF] (2016). *Oman Economy Population, GDP, Inflation, Business, Trade, FDI, Corruption*. Retrieved from <http://www.heritage.org/index/country/oman>.
- The World Folio (2012). *Oman - Dr. Salim Al Ruzaiqi, Chief Executive Officer of ...* Retrieved May 23, 2016, from <http://www.theworldfolio.com/interviews/salim-al-ruzaiqi-information-technology-authority-ita-oman-n1129/1129/>
- Thompson, B. (2004). Successful CRM: Turning customer loyalty into profitability. *Right Now Technologies Publication*.
- Triplett, J. E. (1982). Concepts of quality in input and output price measures: A resolution of the user-value resource-cost debate. In *The US National Income and Product Accounts: Selected Topics* (pp. 269-312). University of Chicago Press.
- Tse, D. K., & Wilton, P. C. (1988). Models of consumer satisfaction formation: An extension. *Journal of marketing research*, 204-212.
- Tsiotsou, R. (2005). Perceived quality levels and their relation to involvement, satisfaction, and purchase intentions. *Marketing Bulletin*, 16(4), 1-10.

- Tuomi, I. (1999, January). Data is more than knowledge: Implications of the reversed knowledge hierarchy for knowledge management and organizational memory. In *Systems Sciences, 1999. HICSS-32. Proceedings of the 32nd Annual Hawaii International Conference on* (pp. 12-pp). IEEE.
- Vantamay, S. (2007). Understanding of perceived product quality: Reviews and recommendations. *BU Academic Review*, 6(1), 110-117.
- Varshney, N. (2016). Investigating Relationship among Customer Trust, Relational Marketing Tactics and Customer Loyalty: With Relational Marketing Tactics as Mediator. *International Research Journal of Marketing and Economics*, 3(2), 7-15.
- Verma, S., & Chaundhuri, R. (2009). Effect of CRM on customer satisfaction in service sector in India. *Journal of marketing and communication*, 5(2), 55-69.
- Wang, E. S. T., & Lin, R. L. (2017). Perceived quality factors of location-based apps on trust, perceived privacy risk, and continuous usage intention. *Behaviour & Information Technology*, 36(1), 2-10.
- Webster Jr. F E (1994). *Market-Driven Management: Using the New Marketing Concept to Create a Customer-Oriented Company*. John Wiley & Sons, Inc., New York.
- Weinberger, J. (July 2010). CRM: Then and Now. *CRM Magazine*

- Wills, M. (1994). Managing the Training Process: Putting the Basics into Practice. *Journal of European Industrial Training*, 18(6), 4-28.
- Winer, R. S. (2001). A framework for customer relationship management. *California management review*, 43(4), 89-105.
- Wisnalmawati, Idrus, M. S., Surachman & Rahayu, M. (2014). Effect of Store Image on Store Loyalty and Perceived Quality as Mediation (Customers of Batik Tulis Village Store at Yogyakarta Special Region). *International Journal of Business and Management Invention ISSN*, 3(11), 20-30.
- Worldatlas (2015). *Where is Oman - Where is Oman Located in The World - Oman Map - WorldAtlas_com*. Retrieved from <http://www.worldatlas.com/as/om/where-is-oman.html>
- Wurth Phoenix (2015). *Microsoft Dynamics CRM the features of Microsoft Dynamics CRM*. Retrieved from <http://www.wuerth-phoenix.com/en/solutions/crm/microsoft-dynamics-crm/overview/>.
- Wynne, K. (2015). *Customer relationship management Ontario_ca*. Retrieved from <https://www.ontario.ca/page/customer-relationship-management/>.
- Yamaqupta, N. (2014). *Relationship between service quality, academic quality and satisfaction among students of Southern Thailand government universities: The moderating effect of value* (Doctoral dissertation, Universiti Utara Malaysia).

- Yousaf, N. (2006, November). Top management commitment for TQM-a process model. In *Pakistan's 10th International Convention on Quality Improvement*.
- Yu, L., Andre, P., Kittur, A., & Kraut, R. (2014). A comparison of social, learning, and financial strategies on crowd engagement and output quality. In *Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing* (pp. 967-978). ACM.
- Zebal, M. A. (2003). *A synthesis model of market orientation for a developing country-The case of Bangladesh* (Doctoral dissertation, Victoria University).
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *The Journal of marketing*, 2-22.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (2012). Customer Relationship Management: Concepts and Cases. *Customer Relationship Management: Concepts and Cases*, 130.
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37, 197–206.
- Zubrow, D., Hayes, W., Siegel, J., & Goldenson, D. (1994). *Maturity questionnaire* (No. CMU/SEI-94-SR-7). CARNEGIE-MELLON UNIV PITTSBURGH PA SOFTWARE ENGINEERING INST.

Zwikael, O. (2008). Top management involvement in project management: Exclusive support practices for different project scenarios. *International Journal of Managing Projects in Business*, 1(3), 387-403.



APPENDIX A

Pilot study analysis

1- Factor analysis: Customer Satisfaction

Component Matrix^a	
	Component
	1
CS1	.820
CS2	.917
CS3	.927
CS4	.817
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	

Reliability: Customer Satisfaction

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded ^a	0	.0
	Total	91	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics	
Cronbach's Alpha	N of Items
.890	4

2- Factor analysis: Output Quality

Component Matrix ^a			
	Component		
	1	2	3
OQ1	.206	.619	.577
OQ2	.566	.449	.337
OQ3	.563	.480	-.034
OQ4	.595	.162	-.542
OQ5	.609	.306	-.346
OQ6	.689	-.114	.257
OQ7	.540	.228	-.471
OQ8	.726	-.406	.161
OQ9	.817	-.196	-.045
OQ10	.793	-.376	.185
OQ11	.770	-.295	.121
Extraction Method: Principal Component Analysis.			
a. 3 components extracted.			

Component Matrix^a		
	Component	
	1	2
OQ2	.549	.198
OQ3	.555	.443
OQ4	.600	.436
OQ5	.606	.436
OQ6	.684	-.246
OQ7	.545	.467
OQ8	.734	-.409
OQ9	.823	-.122
OQ10	.797	-.413
OQ11	.774	-.306
Extraction Method: Principal Component Analysis.		
a. 2 components extracted.		

Component Matrix^a		
	Component	
	1	2
OQ2	.548	.309
OQ3	.541	.540
OQ4	.580	.466
OQ5	.588	.476



OQ6	.694	-.220
OQ8	.759	-.347
OQ9	.825	-.096
OQ10	.819	-.372
OQ11	.789	-.268
Extraction Method: Principal Component Analysis.		
a. 2 components extracted.		

Component Matrix^a		
	Component	
	1	2
OQ2	.515	.093
OQ4	.567	.658
OQ5	.576	.644
OQ6	.702	-.200
OQ8	.771	-.335
OQ9	.823	-.076
OQ10	.850	-.249
OQ11	.814	-.146
Extraction Method: Principal Component Analysis.		
a. 2 components extracted.		



Component Matrix^a	
	Component
	1
OQ2	.521
OQ5	.529
OQ6	.729
OQ8	.795
OQ9	.820
OQ10	.867
OQ11	.819
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	



Reliability: Output Quality

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded ^a	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.858	7

3- Factor analysis: Perceived Quality

Component Matrix ^a		
	Component	
	1	2
PQ1	.752	-.170
PQ2	.694	-.232
PQ3	.681	-.347
PQ4	.703	-.484
PQ5	.775	-.461
PQ6	.783	-.044
PQ7	.719	.179
PQ8	.600	.311
PQ9	.603	.144
PQ10	.357	.541
PQ11	.646	.587
PQ12	.659	.429



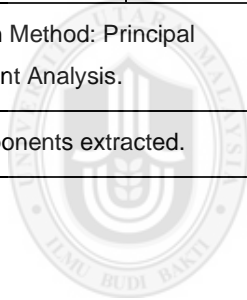
Extraction Method: Principal Component Analysis.
a. 2 components extracted.

Component Matrix^a		
	Component	
	1	2
PQ1	.761	-.134
PQ2	.715	-.118
PQ3	.704	-.317
PQ4	.741	-.438
PQ5	.810	-.397
PQ6	.788	.031
PQ7	.707	.296
PQ8	.565	.261
PQ9	.603	.326
PQ10	.314	.613
PQ12	.619	.461
Extraction Method: Principal Component Analysis.		
a. 2 components extracted.		

Component Matrix^a	
	Component



	1	2
PQ1	.760	-.180
PQ2	.715	-.146
PQ3	.714	-.283
PQ4	.754	-.398
PQ5	.822	-.364
PQ6	.783	-.002
PQ7	.705	.413
PQ8	.560	.325
PQ9	.594	.334
PQ12	.614	.608
Extraction Method: Principal Component Analysis.		
a. 2 components extracted.		



UUM
Universiti Utara Malaysia

Component Matrix^a	
	Component
	1
PQ1	.776
PQ2	.724
PQ3	.734
PQ4	.778
PQ5	.844
PQ6	.781

PQ7	.674
PQ8	.535
PQ9	.582
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	

Reliability: Perceived Quality

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded ^a	0	.0
	Total	91	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics	
Cronbach's Alpha	N of Items
.877	9

4- Factor analysis: Change management

Component Matrix^a		
	Component	
	1	2
CM1	.371	.693
CM2	.767	.458
CM3	.817	.293
CM4	.843	.162
CM5	.879	-.118
CM6	.834	-.340
CM7	.793	-.423
CM8	.771	-.340
Extraction Method: Principal Component Analysis.		
a. 2 components extracted.		



Component Matrix^a		
	Component	
	1	2
CM2	.747	.490
CM3	.813	.458
CM4	.842	.300
CM5	.886	-.036
CM6	.844	-.368
CM7	.808	-.432
CM8	.780	-.384

Extraction Method: Principal Component Analysis.
a. 2 components extracted.

Component Matrix^a	
	Component
	1
CM3	.775
CM4	.823
CM5	.890
CM6	.871
CM7	.843
CM8	.806
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	



Reliability: Change management

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded ^a	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.912	6



5- Factor analysis: CRM Data

Component Matrix ^a	
	Component
	1
DATA1	.767
DATA2	.560
DATA3	.806

DATA4	.831
DATA5	.580
DATA6	.763
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	

Reliability: CRM Data

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded ^a	0	.0
	Total	91	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics	
Cronbach's Alpha	N of Items
.817	6

6- Factor analysis: Customer centered orientation

Component Matrix^a		
	Component	
	1	2
CCO1	.801	-.196
CCO2	.855	-.277
CCO3	.879	-.131
CCO4	.889	-.082
CCO5	.783	.308
CCO6	.388	.877
Extraction Method: Principal Component Analysis.		
a. 2 components extracted.		

Component Matrix^a	
	Component
	1
CCO1	.812
CCO2	.872
CCO3	.886
CCO4	.894
CCO5	.762
Extraction Method: Principal Component Analysis.	



a. 1 components
extracted.

Reliability: Customer centered orientation

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded ^a	0	.0
	Total	91	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.899	5



7- Factor analysis: Top management support

Component Matrix^a	
	Component
	1
TMS1	.738
TMS2	.913
TMS3	.847
TMS4	.918
TMS5	.862
TMS6	.850
TMS7	.735
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	

Reliability: Top management support

Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded ^a	0	.0
	Total	91	100.0

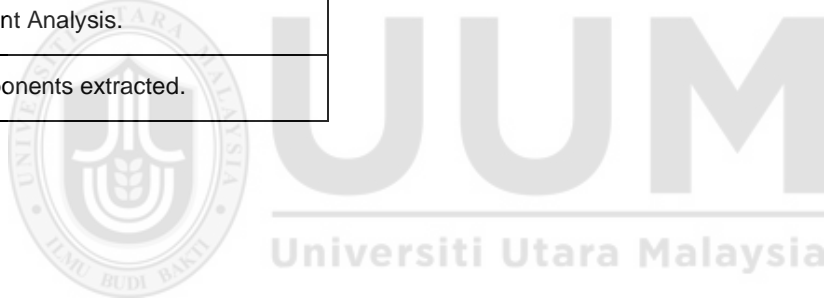
a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.928	7

8- Factor analysis: Training

Component Matrix^a		
	Component	
	1	2
TRAINING1	.800	-.187
TRAINING2	.820	-.145
TRAINING3	.397	.759
TRAINING4	.688	.147
TRAINING5	.306	.802
TRAINING6	.774	-.192
TRAINING7	.810	-.285
Extraction Method: Principal Component Analysis.		
a. 2 components extracted.		

Component Matrix^a		
	Component	
	1	2
TRAINING1	.815	-.002
TRAINING2	.835	.102
TRAINING3	.342	.855
TRAINING4	.677	.234
TRAINING6	.782	-.293
TRAINING7	.824	-.372
Extraction Method: Principal Component Analysis.		
a. 2 components extracted.		



Component Matrix^a	
	Component
	1
TRAINING1	.816
TRAINING2	.832
TRAINING4	.665
TRAINING6	.792
TRAINING7	.845
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	

Reliability: Training



Case Processing Summary			
		N	%
Cases	Valid	91	100.0
	Excluded ^a	0	.0
	Total	91	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics	
Cronbach's Alpha	N of Items
.850	5



APPENDIX B

Analysis Questionnaire

You are invited to participate in this questionnaire, about the implementation of Customer Relationship Management system in Public Sector in Oman. I will be appreciated for your cooperation and answering the questionnaire. In this questionnaire, I would like to ask about the factors that affect the implementation of Customer relationship management system in Public Sector. With your cooperation, I can generate report regarding the best way to implement customer relationship management system in public sector which will enhance the society satisfaction regarding the government services.

The information you provided will be strictly confidential and the result of this research will be used for academic purposes.

The time expected for this questionnaire is 10 minutes, and your answer is important for my study, thank you very much for your cooperation. If you have any comment or question regarding this research, please let me know:

Name: Ahmed Said Al Arafati

University: University Utara Malaysia

E-mail: ahmed.arafati@hotmail.com

ي طي بلي دعوتكم لمشاركة في الفسالت بي ان حوتلطب يق نظام إدارة القات علم الاء في لاق طاع لاء افه ييل لطنة
عم ان ساين ممتزلات عن كم ول مشاركة في ال جبة على هذال سبتي ان في هذال سبتي ان، أود أنهن تخرج لاء واملل لتي توتر
لج نغني ذن نظام إدارة للاق اتلاع ام الاء في لاق طاع لاء ام مع مشكوتكم حين ن ييلت خطى أفضل طوق قنغني نظام إدارة القات
علم الاء في لاق طاع لاء ام المص ي عز زرضا لمج نغني في يتلقى بل خدم اتال حكومي.

ستكون لم غوحت سر وبيق يتم است خواتم ي ج هذال بحش ل غراض أليكم ية فقط.

لوق تلام بتوق عل الفسالت بي ان هو 10 دقائق، وإجهتكم م ه مة لسلواتي وشكرا جني ال تعان كم. إذا كان لك أي تي تع لي ق أو
لتفسسار حول هذال بحش يرفن يتواصلك:

الاسم: أحمد سعيد أرافاتي

لجامعة: جامعة أوتارا لماييا

بلي دي دالكوتوني: ahmed.arafati@hotmail.com

Demographic Information

Gender

() Male
ذكر

() Female
انثى

Age لعمر

() 20-30

() 31-40

() 41-50

() 51 & more

Level of education المستوى التعليمي

() High school
ثانوية عامة

() College
دبلوم

() Bachelor's degree
بكالوريوس

() Master degree
ماجستير

() PhD
دكتوراه



UUM
Universiti Utara Malaysia

Experience التجربة

() Less than five years
اقل من خمس سنوات

() 5-10 years
5-10 سنوات

() 11-15 years
11-15 سنة

() 16 years or more
الكثر من 16 سنة

Your position المنصب

() General Manager
مدير عام

() Vice of General Manager
نائب مدير عام

() Department Manager
مدير ادارة

() Employee
موظف

	Customer Satisfaction	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
		ال أوفلق بشدة	ال اوفلق	تبعادل	وأفلق	وأفلق بشدة
		1	2	3	4	5
1.	Overall, I am satisfied with government services experience. بش كل عام ان اراضي عنيتي بل خدمت الحكومي					
2.	I will be happy to have the government services again. سأكون سعيداً بالخدمات الحكومي مرة أخرى					
3.	You would recommend the government service to others. انصح بالخدمات الحكومي مرة أخرى					
4.	Considering the type of government unit, the quality of service was excellent. بالحظر له نوع لوحدة الحكومي، جودة الخدمة كانت ممتازة					

	Output Quality	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
		ال أوفلق بشدة	ال اوفلق	تبعادل	وأفلق	وأفلق بشدة
		1	2	3	4	5
5.	My organization employees are well dressed and appear neat. للعالمين لدى لوحدة لتي اعلم بما يظهرون بالمهذبين في قوطني					
6.	My organization is dependable. لوحدة لتي اعلم باه يمكن الاعتماد على ها					
7.	When implementing CRM system, the organization provide the service at the time it promises to do so. يؤدي لتي فيم لخدم في لوقت لم حددل ان نظام إدارق الات لعمالء					
8.	Employees of my organization tell customers exactly when service will be performed. موظفي لوحدة لتي اعلم به ليخبرون ال عمل على طبقه ي تم نهسي ذل خدمة					

9.	Employees of my organization give prompt service to customers. موظفي لوحيدتي اعلم بما يفرون خدمة سريعة لعملاء					
10.	Employees of my organization are always willing to help customers. موظفي لوحيدتي اعلم بما هم دائما مستعدون لمساعدة العملاء					
11.	Employees of my organization are never too busy to respond to customer requests promptly. بدا للرد على طلبات موظفي لوحيدتي اعلم بما هم دائما يترددوا للعملاء					

Perceived Quality		Strongly disagree ال اؤفلق بشدة	Disagree ال اؤفلق	Neutral تعم ادل	Agree وافق	Strongly Agree وافق بشدة
When implementing CRM system: عند تنفيذ نظام إدارة للعملاء		1	2	3	4	5
12.	The organization is dependable when providing services المنظمة يمكن الاعتماد عليها في تقديم الخدمات					
13.	The organization has staff who are technically able to perform the service. للمنظمة موظفون قادرين تقنيا على أداء الخدمة					
14.	Reports prepared by the organization are easily to understand معلومات المنظمة سهلة الفهم					
15.	The organization provides prompt service المنظمة توفر خدمة سريعة					
16.	The organization provides timely service توفر للمنظمة لخدمة في الوقت المحدد					
17.	The customers experienced confidentially in transactions with the employees of the organization يظهر على عملاء لوحيدتي لراحة مع موظفي للمنظمة					

18.	The employees of the organization received enough support from their organization to perform their task well يُلقى موظفو المنظمة دعمًا كافيًا من لدن المنظمة من أجل أداء مهامهم بشكل جيد					
19.	The service offered by the organization is appropriate with the fees charged الخدمات المقدمة من قبل المنظمة مناسبة مع الرسوم والفواتير					
20.	The organization has modern equipment with latest information technology تمتلك المنظمة معدات حديثة مزودة بأحدث تقنيات					

Change management		Strongly disagree الوأفق بشدة	Disagree الوأفق	Neutral متعادلاً	Agree وأفق	Strongly Agree وأفق بشدة
When implementing CRM system: عند تنفيذ نظام إدارة العملاء		1	2	3	4	5
21.	There is a commitment to change-perseverance and determination. هناك التزام واستمرار في التغيير					
22.	There is Business process re-engineering to match the new software. هناك عملية إعادة هندسة العمليات التجارية لتتناسب مع البرنامج الجديد					
23.	There is an Analysis of user feedback هناك تحليل لتعليقات المستخدمين					
24.	There is User education and training. هناك تدريب وتعليم للمستخدمين					
25.	There is User support and involvement. هناك دعم وإشراك للمستخدمين					
26.	There is IT workforce re-skilling. هناك تعزيز مهارات القوى العاملة في تكنولوجيا المعلومات					

	CRM Data	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
		ال أوفلق بشدة	ال اوفلق	تعادل	أوفلق	وأفلق بشدة
		1	2	3	4	5
27.	The CRM system provides accurate information about customers يفر النظام مغل وم اتق يقة عن لعمالء					
28.	Information on the CRM system should be completed ينبغي اس تكمال لم غل وم ات لوج وتب نظام إدارة الق ات لعمالء					
29.	Information about customers on the CRM system is a be up to date لم غل وم اتق يقة عن لعمالء لوج ودة غل نظام إدارة الق ات العمالء تحث بشك لسبب تمر					
30.	The Information provided by the CRM system is understandable لم غل وم ات لقدم قنم قبلن نظام إدارة الق ات لعمالء عمف ومة					
31.	The CRM system should provide information whose content meets customers need يجب أن يفر النظام مغل وم اتق يتي احتياج ات لعمالء					
32.	The CRM system provides the target reports يفر النظام الق اير لم طوبة					

Customer centered orientation When implementing CRM system: عن يتفني ذن نظام إدارة لعمالء		Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
		ال أوفلق بشدة	ال اوفلق	نم عادل	وأفلق	وأفلق بشدة
		1	2	3	4	5
33.	We encourage customer comments and complaints because they help us to do a better job نحن نشجع مال حظات لعمالء ولشرك او أولنا متساعنا على قلي ام بولهم أفضل					
34.	We have a strong commitment to our customers لدي نلنا التزام قوي لعمالءنا					
35.	We are always looking at ways to create customer value in our services نحن دائما نبحث عن طرق لخلق قيمة لعمالءنا					
36.	We are fast to detect changes in our customers' service preferences. نحن سريعون بلالشفاء عن التغيرات في تفضيلات لعمالءنا					
37.	Data on customer satisfaction is disseminated at all levels in this organization on a regular basis يتفشل لبيانات عن رضال لعمالء على جميع مستويات اتفني هذه المنظمة كل دوري					

Top management support		Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
		ال أوفلق بشدة	ال اوفلق	نم عادل	أوفلق	أوفلق بشدة
		1	2	3	4	5
38.	When implementing the system, top level management involvement is strong عن تطبيق لالنظام فإن مشركة الإدارة اللعي حاضر توقعوية					
39.	Top management is interested in CRM implementation الإدارة اللعي اهتمت في ذ إدارة لبقات لعمالء					

40.	Top management understand the importance of CRM إدارة الأعمال تدرك أهمية إدارة علاقات العملاء					
41.	Top management support the CRM implementation تدعم إدارة الأعمال تنفيذ إدارة علاقات العملاء					
42.	Top management consider CRM as a strategic resource تعتبر إدارة الأعمال بأن إدارة علاقات العملاء مورساتراتيجي					
43.	Top management understand CRM opportunities تفهم الإدارة الأعمال الفرص المتاحة لإدارة علاقات العملاء					
44.	Top management keep the pressure on operating units to work with CRM الإدارة الأعمال تتقووم بوضع ضغط على وحدات التشغيل للعمل مع إدارة علاقات العملاء					

Training		Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
When implementing CRM system:		الواافق بشدة	الواافق	متعادل	أوافق	أوافق بشدة
عن تنفيذ نظام إدارة العملاء		1	2	3	4	5
45.	The training activities should be planned from the beginning ينبغي أن يخطط للتدريب من البداية					
46.	The training is provided for developing the skills and knowledge needed to perform software managerial and technical roles يتم توفير التدريب لتطوير المهارات والمعارف اللازمة لأداء الأدوار الإدارية والفنية للبرمجيات					
47.	The organization should follow a written organizational policy to meet its training needs ينبغي أن يتبع المنظمة سياسة تنظيمية مكتوبة لتلبية احتياجاتها للتدريب					

48.	<p>There Should be a measurement used to determine the quality of the training program</p> <p>ينبغي أن يكون هنالك مقياس لقياس جودة البرامج التدريبية</p>					
49.	<p>The training program activities should be reviewed with senior management on a periodic basis</p> <p>يجب استعراض أنشطة برنامج التدريب مع الإدارة العليا بشكل دوري</p>					

