On the Use of Customer Relationship Management (CRM) in the Banking Industry: A Qualitative Cross-Case Analysis between the Banks in Pakistan and the UK

A thesis submitted to The University of Manchester for the degree of

Doctor of Philosophy

In the Faculty of Humanities

2010

Shahzeb Ali Malik

Manchester Business School
Contents

LIST OF FIGURES AND TABLES 10
ABSTRACT 12
DECLARATION 13
COPYRIGHT STATEMENT 14
LIST OF ABBREVIATIONS 15
ACKNOWLEDGEMENTS 17
DEDICATIONS 18

CHAPTER 1: INTRODUCTION 19

1.1 General Introduction 19
1.2 Why the Banking Industry is selected for CRM Research 23
1.3 Research Aims and Objectives 24
1.4 Research Questions 26
1.5 Outline of the Research Approach and Data Analysis 26
1.6 Original Contributions 28
1.7 Structure of the Thesis 30
1.8 Research Design 33

CHAPTER 2: BACKGROUND 34

2.1 Customer 34
2.2 Customer Relationship Management (CRM) 35
2.3 The Origins of CRM (Relationship Marketing) 36
2.4 Evolution of CRM 38
2.5 Types of CRM 40
2.5.1 Operational CRM 40
2.5.2 Analytical CRM 41
2.5.3 Collaborative CRM 43
2.5.4 Strategic CRM 43
2.6 CRM in the Banking Industry

2.6.1 Objectives and Benefits

2.6.2 Types of Customers in Banks

2.6.3 Customer Touch points

2.7 CRM Operation in the Banking Industry of Developed and Developing Countries (UK and Pakistan): Problems

Based on the Initial Investigations

2.8 Multiple Contact Channels Offered by Banks

2.8.1 Branch Banking

2.8.2 Phone Banking

2.8.3 Automated Teller Machine (ATM)

2.8.4 Internet Banking

2.9 Major Components of CRM for the Banking Industry

2.9.1 Marketing

2.9.1.1 Customer Value

2.9.1.2 Customer Segmentation

2.9.1.3 Customer Behaviour Prediction

2.9.1.4 Customer Retention

2.9.1.5 Customer Loyalty

2.9.2 Sales

2.9.2.1 Account Management

2.9.2.2 Cross-Selling and Up-Selling

2.9.2.3 Sales Force Automation (SFA)

2.9.3 Service and Support

2.9.3.1 Contact Centre (also known as Call Centre)

2.9.3.2 Quality Management

2.9.3.3 Customer Satisfaction

2.9.4 IT and IS

2.9.4.1 Hardware and Software

2.9.4.2 Database Management

2.9.4.3 Data Warehousing

2.9.4.4 Web Data Mining

2.9.4.5 Security Systems
2.10 Major Software Vendors of CRM for Banking Industry
2.10.1 SAP 65
2.10.2 Oracle’s Siebel System 66
2.10.3 Salesforce.com 66
2.11 CRM Success Stories in the Banking Industry 67
2.11.1 The Royal Bank of Canada 67
2.11.2 Bank One of the United States 68
2.11.3 Standard Bank of South Africa 68
2.11.4 Union Bank (now merged with Standard Chartered Bank) 70
2.12 Conclusions 71

CHAPTER 3: THEORETICAL FRAMEWORK 73

3.1 Philosophy in Information Systems Discipline 73
3.1.1 Why Social Theory (Socio-technical Theory) is Useful for the Current Research 76

3.2 Socio-technical Theory 78
3.2.1 Historical Overview of Socio-technical Theory 78
3.2.2 Evolution of Socio-technical Concepts and its Design Principles 81
3.2.3 International Developments and Recognition of Socio-technical Theory 85

3.3 Consideration of Other Theories 89
3.3.1 Work Systems Theory 90
3.3.2 Actor Network Theory (ANT) 93

3.4 CRM: The Management Models 96
3.5 Proposed CRM Model used as a Frame of Reference 101
3.5.1 Contact Channel Management Strategy 103
3.5.2 Enterprise-wide Management Strategy 104
3.5.3 Customer Data Management Strategy 105
3.5.4 Information Technology (IT) Management Strategy 105

3.6 Conclusions 106
CHAPTER 4: RESEARCH METHODOLOGY

4.1 What is a Research? 108

4.2 Research Approaches 109

4.2.1 Quantitative Research 110

4.2.1.1 Survey Method 110

4.2.1.2 Laboratory Experiments 111

4.2.2 Qualitative Research 111

4.2.3 Mixed Methods Research 112

4.2.4 Proposed Research Approach for Current Research 112

4.3 Research Paradigm 113

4.3.1 Positivist Research 114

4.3.2 Interpretive Research 114

4.3.3 Critical Research 115

4.4 Research Strategies 116

4.4.1 Action Research 116

4.4.2 Case Study Research 120

4.4.3 Ethnography 122

4.4.4 Grounded Theory 124

4.4.5 Proposed Research Strategy for Current Research 126

4.5 Data Collection Techniques for Qualitative Case Study Research 127

4.5.1 Documentation 128

4.5.2 Archival Records 129

4.5.3 Interviews 129

4.5.4 Direct Observations 132

4.5.5 Participant-Observation 132

4.5.6 Physical Artefacts 132

4.5.7 Questionnaire 133

4.5.8 Focus Groups 133

4.5.9 Proposed Data Collection Techniques for Current Research 134

4.6 Conclusions 134
CHAPTER 5: FIELD STUDY AND WITHIN-CASE DATA ANALYSIS

5.1 Data Analysis Techniques

5.1.1 Proposed Data Analysis Technique for Current Research

5.2 Case Study One: CRM Operation in the Banking Sector of Pakistan

5.2.1 Selected Banks for the Interviews

5.2.2 Interview Participants

5.2.3 Historical Overview of the Selected Banks

5.2.3.1 Allied Bank Limited (ABL)

5.2.3.2 Bank Alfalah Limited

5.2.3.3 Habib Bank Limited (HBL)

5.2.3.4 NIB Bank

5.2.3.5 Standard Chartered Bank (Pakistan)

5.2.4 Themes

5.2.4.1 CRM: Vision

5.2.4.2 CRM Operation at the Branch Banking

5.2.4.3 CRM Operation at the Call Centres (Customer Service Centres)

5.2.4.4 Query Response Time using the CRM System

5.2.4.5 Major Products and Services

5.2.4.6 Maintaining Relationships with Business Customers and Individual Customers

5.2.4.7 Customer Acquisition vs. Customer Retention

5.2.4.8 ATM Operations and its Issues

5.2.4.9 e-CRM Facilities (Internet Banking, Mobile Banking, Phone Banking and SMS Alerts)

5.2.4.10 Future of CRM in the Banking Industry of Pakistan

5.3 Case Study Two: CRM Operation in the Banking Sector of UK

5.3.1 Selected Banks for the Interviews

5.3.2 Interview Participants

5.3.3 Historical Overview of the Selected Banks

5.3.3.1 Barclays Bank PLC
5.3.3.2 Royal Bank of Scotland (RBS) 163
5.3.3.3 Santander UK PLC (formerly known as Abbey Bank) 163
5.3.3.4 Lloyds TSB Bank 164
5.3.4 Themes 164
5.3.4.1 CRM: Vision 164
5.3.4.2 CRM Operation at the Branch Banking 166
5.3.4.3 CRM Operation at the Call Centres (Customer Service Centres) 168
5.3.4.4 Query Response Time using the CRM System 170
5.3.4.5 Major Products and Services 173
5.3.4.6 Maintaining Relationships with Business Customers and Individual Customers 175
5.3.4.7 Customer Acquisition vs. Customer Retention 177
5.3.4.8 ATM Operations and its Issues 178
5.3.4.9 e-CRM Facilities (Internet Banking, Mobile Banking, Phone Banking and SMS Alerts) 179
5.3.4.10 Future of CRM in the Banking Industry of the UK 182
5.4 Conclusions 183

CHAPTER 6: CROSS-CASE DATA ANALYSIS 185

6.1 Cross-Case Data Analysis to Uncover the Similarities and Differences between the Two Case Studies 185
6.1.1 CRM: Vision 186
6.1.2 CRM Operation at the Branch Banking 187
6.1.3 CRM Operation at the Call Centres (Customer Service Centres) 188
6.1.4 Query Response Time using the CRM System 190
6.1.5 Major Products and Services 191
6.1.6 Maintaining Relationships with Business Customers and Individual Customers 192
6.1.7 Customer Acquisition vs. Customer Retention 193
6.1.8 ATM Operations and its Issues 194
6.1.9 e-CRM Facilities (Internet Banking, Mobile Banking, Phone Banking and SMS Alerts) 196
6.1.10 Future of CRM in the Banking Industry

6.2 Discussions and Suggestions Using the Components of an Ideal CRM Model

6.2.1 Contact Channel Management
6.2.2 Enterprise-Wide Management

6.2.2.1 Front-office system
6.2.2.2 Back-office system

6.2.3 Customer Data Management

6.2.3.1 Database
6.2.3.2 Customer Analysis

6.2.4 IT Management

6.3 Benefits of Socio-technical Theory for Banking Industry

6.3.1 Job Design/Redesign

6.3.2 Provide Training to the Employees in New Technologies
6.3.3 Employees’ Job Satisfaction would bring Customer Satisfaction
6.3.4 Health and Safety, and Employees’ Stress-Related Issues

6.4 Challenges and Issues from CRM Adoption in the Banking Industry

6.4.1 Political and Governmental Issues
6.4.2 Technological Issues
6.4.3 Cultural Issues

6.5 Conclusions

CHAPTER 7: CONCLUSIONS AND FUTURE WORK

7.1 Conclusions

7.2 Research Contributions

7.2.1 Theoretical Contributions
7.2.2 Methodological Contributions
7.2.3 Practical Contributions

7.3 Research Limitations

7.3.1 Limitations in terms of Information Access from Different Banks
7.3.2 Authenticity of the Collected Data from Different Interviewees 244
7.3.3 Limitations in terms of Selection of Different Banks in Pakistan and the UK 244

7.4 **Future Work** 245
7.4.1 Designing of a New CRM Model 245
7.4.2 Studying and Proposing Suitable Method for Banks to Acquire CRM Applications 245

7.4.2.1 *Buying the CRM Applications from Vendors* 246
7.4.2.2 *Lease (Rent) the CRM Applications* 246
7.4.2.3 *In-house Development (In-sourcing)* 247

REFERENCES 248

APPENDIX A: SAMPLE INTERVIEW USING THE INTERVIEW GUIDE 275

APPENDIX B: SAMPLE LETTER FOR THE INTERVIEWS 282

WORD COUNT: 67,852
List of Figures and Tables

Figures

Figure 1.1: Research Design: The Overall Plan for Conducting the Study 33
Figure 2.1: Operational CRM (Touching the Customer) 41
Figure 2.2: Analytical CRM (Understanding the Customer) 42
Figure 2.3: Customer’s Interaction with the Bank using Multiple Touch Points 47
Figure 2.4: Major Operational Areas of a Bank 54
Figure 2.5: A Typical Data Warehouse Containing Data from Several Applications 63
Figure 3.1: The Interacting Variable Classes within the Work System 79
Figure 3.2: A Work System Framework 91
Figure 3.3: Actor-Network Theory in Banking 95
Figure 3.4: CRM Strategy and Implementation Model 97
Figure 3.5: The Emerged Framework Investigation of CRM Activities in Iranian Banking Industry 100
Figure 3.6: The CRM Value Chain Model 101
Figure 3.7: CRM Architecture in the Banking Industry 103
Figure 4.1: Research Paradigm 114
Figure 4.2: The Action Research Cycle 119
Figure 5.1: Organizational Structure of Branch Banking in Pakistan 146
Figure 5.2: Organizational Structure of Branch Banking in the UK 167
Figure 6.1: The Service-Profit Chain at Westpac Bank 224

Tables

Table 2.1: A Taxonomy Containing Major CRM Components Used in the Four Operational Areas of a Bank 54
Table 2.2: Worldwide Vendor Revenue Estimates for Total CRM
Software (Millions of U.S. Dollars) 65

**Table 4.1:** Basic Methods for Data Collection 128

**Table 5.1:** Interview Participants for Case Study One 141

**Table 5.2:** Interview Participants for Case Study Two 162

**Table 6.1:** CRM Vision 186

**Table 6.2:** CRM Operation at the Branch Banking 187

**Table 6.3:** CRM Operation at the Call Centres 188

**Table 6.4:** Query Response Time using the CRM System 190

**Table 6.5:** Major Products and Services 191

**Table 6.6:** Maintaining Relationships with Business and Individual Customers 192

**Table 6.7:** Customer Acquisition vs. Customer Retention 193

**Table 6.8:** ATM Operations and its Issues 194

**Table 6.9:** e-CRM Facilities (Internet Banking, Mobile Banking, Phone Banking and SMS Alerts) 196

**Table 6.10:** Future of CRM in the Banking Industry 197

**Table 6.11:** Issues Concerning Multi-channels at Banks 202

**Table 6.12:** E-readiness Annual Rankings and Scores, 2009 228

**Table 6.13:** Overall Score of Developed and Developing Countries for E-readiness with Reference to Six Different Factors 229
Abstract

The University of Manchester
Shahzeb Ali Malik
Doctor of Philosophy
On the Use of Customer Relationship Management (CRM) in the Banking Industry: A Qualitative Cross-Case Analysis between the Banks in Pakistan and the UK
September, 2010

Customer Relationship Management (CRM) came into the power when banking institutions started to become more and more competitive. The focus on CRM increased banks’ abilities to understand their customers’ current needs more precisely and also helped them to understand their customers’ behaviours, such as what they have done in the past, and what they plan to do in the future. Such practice further helped banks to design strategies based on each customer’s preferences in order to meet their customers’ demands (Xu, et al., 2002). The adoption of the CRM within the banking industry chiefly depends on the overall adoption of IT culture within the country. Today, developed countries like the UK are enjoying innovative technologies, tailored-made systems, and have a high level of IT maturity within their banking industry. On the other hand, developing countries such as Pakistan are still dealing with several technological issues and the biggest one is the lack of IT alignment within most of their organizations especially within their banking industry (Kundi and Nawaz, 2006). Therefore, it is essential for researchers to further investigate the major IT-related problems faced by the banking industry, especially problems with the current use of the CRM system within the banking industry of developing countries i.e. Pakistan compared to banks in developed countries i.e. UK.

This research has investigated and covered the overall operational issues of the CRM system within the banking industry of both developed and developing countries i.e. UK and Pakistan by using a qualitative case study research approach with two case studies, in which the Pakistani banking sector is selected as the developing country for case study one; for a developed country, the UK banking sector is selected as case study two. From the several existing UK and Pakistani banks, the researcher has selected some leading banks from the two countries and conducted several semi-structured interviews with different bank employees. Furthermore, the obtained interviews’ results from both case studies are analyzed, compared, and discussed using an in-depth cross-case analysis approach and uncovered the similarities, differences, and several CRM operational issues within the banking sectors of both Pakistan and the UK.
Declaration

I hereby declare that no portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.
Copyright Statement

I. The author of this thesis (including any appendices and/or schedules to this thesis) owns certain copyrights or related rights in it (the “Copyright”) and s/he has given The University of Manchester certain rights to use such Copyright, including for administrative purposes.

II. Copies of this thesis, either in full or in extracts and whether in hard or electronic copy, may be made only in accordance with the Copyright, Designs and Patents Act 1988 (as amended) and regulations issued under it or, where appropriate, in accordance with licensing agreements which the University has from time to time. This page must form part of any such copies made.

III. The ownership of certain Copyright, patents, designs, trade marks and other intellectual property (the “Intellectual Property Rights”) and any reproductions of copyright works in the thesis, for example graphs and tables (“Reproductions”), which may be described in this thesis, may not be owned by the author and may be owned by third parties. Such Intellectual Property Rights and Reproductions cannot and must not be made available for use without the prior written permission of the owner(s) of the relevant Intellectual Property and/or Reproductions.

IV. Further information on the conditions under which disclosures, publications and commercialisation of this thesis, the Copyright and any Intellectual Property and/or Reproductions described in it may take place is available in the University IP Policy (see http://www.campus.manchester.ac.uk/medialibrary/policies/intellectual-property.pdf), in any relevant Thesis restriction declarations deposited in the University Library, The University Library’s regulations (see http://www.manchester.ac.uk/library/aboutus/regulations) and in The University’s policy on presentation of Theses.
List of Abbreviations

ACD: Automatic Call Distribution
ANT: Actor-Network Theory
ATM: Automated Teller Machine
BI: Business Intelligence
CBT: Computer-Based Training
CDI: Customer Data Integration
CIF: Client Information File
CMS: Complaint Management System
CRM: Customer Relationship Management
CRO: Customer Relationship Officer
CSF: Critical Success Factors
CTI: Computer Telephony Integration
DWS: Democratic Work Structures
ERP: Enterprise Resource Planning
FSA: Financial Services Authority
HSM: Host Security Module
ISP: Internet Service Provider
IVR: Interactive Voice Response
KM: Knowledge Management
OCS: One Call Service
PBM: Personal Banking Manager
PBX: Private Branch Exchange
PDA: Personal Digital Assistant
PIN: Personal Identification Number
RM: Relationship Marketing
RMS: Request Management System
ROI: Return on Investment
RSI: Repetitive Strain Injury
SCM: Supply Chain Management
SFA: Sales Force Automation
**SOP:** Standard Operating Procedures  
**SPSS:** Statistical Package for Social Sciences  
**STS:** Socio-Technical Systems  
**STT:** Socio-Technical Theory  
**UAN:** Universal Access Number  
**VDU:** Visual Display Unit  
**WST:** Work Systems Theory
Acknowledgements

This research work would not have been possible without the support and encouragement of my supervisor Prof. Dr. Trevor Wood-Harper, who gave me the opportunity to work with him and also introducing me to the area of CRM. I would also like to thank him for being patient with me throughout my PhD studies and arranging several discussion based sessions in the “Doctoral School” which guided me to pursue my PhD studies in a right direction.

Deep thanks to Prof. Dr. Hanifa Shah, for giving me proper guidance and motivation. I would also like to thank her for encouraging me to work hard. I am always thankful and I feel honoured to have been guided by such a talented, dedicated, and supportive people throughout my PhD studies.

I would also like to thank all the participants (interviewees) who were involved in this study and who were engaged in the discussions about the area of CRM in the banking industry.

I can not end without thanking my family especially my father Prof. Dr. Abdul Rahim Malik for encouraging and supporting me throughout my studies. He has been an inspiration to me. I am forever indebted to my parents for their understanding, endless patience, constant encouragement and love when it was most required. I am also grateful to my brothers and sisters for their love and support. Lastly, thanks to everyone else who gave me the determination to achieve this particular dream.
This thesis is dedicated to my beloved parents, my brothers, and sisters for their encouragement, guidance, and support. A very special dedication to my wife and best friend Fiona, and my son Shahzaman for their unconditional love, support, and patience.
Chapter 1

Introduction

1.1 General Introduction

Today, banks and other financial institutions are dealing with several challenges including global competition for deposits, loans, and underwriting fees; increasing customer demands; shrinking profit margins; and the need to keep up with the new technologies (Gade, 2005). According to Onut et al., (2006), banks and several other financial service providers have realized the importance of Customer Relationship Management (CRM) and its potential to help them to acquire new customers, retain existing ones, and maximize their lifetime value. Banks have also realized that CRM is the only solution to help them to maintain a long-term relationship with their customers. On the other hand, maintaining relationships with customers also requires strong co-ordination between different departments at the bank (such as: IT, sales, service and support, and marketing departments).

CRM came from the origins and is based on the principles of Relationship Marketing (RM) which is considered one of the key developmental areas of modern marketing and the one which has generated great research interest over several years (Sheth and Parvatiyar, 2000). CRM came into the favour in the late 1990’s when banking institutions started to become more and more competitive. The focus on CRM increased banks’ abilities to understand their customers’ current needs more precisely and also helped them to understand their customers’ behaviours, such as what they have done in the past, and what they plan to do in the future. Such practice further
helped banks to design strategies based on each customer’s preferences in order to meet their customers’ demands (Xu, et al., 2002). Crosby (2002) explained that customers’ information is important for banks and the intelligent use of such information would create long-term, two-way relationships with customers. Such relationships would bring several advantages to the banks because long-term customers are less costly to serve and smooth running relationships are less resource intensive. In general, CRM for banks consists of two primary tasks, acquisition of customers, and increased sales to the existing customers. It is often justified by the phrase; Make the right offer at the right time to the right customer (Hughes, 2010).

Similarly, Karakostas, et al., (2005) believed that the successful adoption of an IT-enabled CRM system in the banking industry redefines the bank’s interaction with its customers both nationally and globally. The authors further argued that CRM is regarded as a source of competitive advantage because it enables banks to further explore and use the obtained knowledge about their customers and to foster profitable and long lasting one-to-one relationships with them.

However, Bhaduri (2005) talked about the misconceptions about CRM. She argued that for some banks:

CRM is misunderstood as a fancy sales strategy, an expensive software product, and even a new method of data collection. CRM is none of these; it is a simple philosophy that places the customers at the heart of banks’ business processes, activities, and culture to improve customers’ satisfaction of service and, in turn, it maximizes the profits for the banks.

She further suggested that:

A successful CRM strategy aims at understanding the needs of customers and integrating them with the bank’s strategy, people, technology, and business process. Therefore, one of the best ways of launching a CRM initiative in banks is to start with what banks are doing now and working out what should
be done to improve its relationship with its customers. Then and only then, it should link to an IT solution.

The adoption of CRM within the banking industry chiefly depends on the overall adoption of IT culture within the country. Today, developed countries like the UK are enjoying innovative technologies, tailored-made systems, and have a high level of IT maturity within their organizations, especially within their banking industry. Because of such a high level of IT maturity, most of the IT projects in their organizations are well managed. On the other hand, developing countries such as Pakistan are dealing with several technological issues and the biggest one is the lack of IT alignment within most of their organizations (Kundi and Nawaz, 2006). Therefore, it is essential for researchers to further investigate the major IT-related problems faced by the banking industry, especially problems with the current use of the CRM system within the banking industry of developing countries compared to the banks in developed countries.

To date, most of the CRM related studies have reported that CRM has a high adoption and success rate in the banking industry of developed countries such as the UK, USA, and Canada, compared with the developing countries such as Pakistan, India and Iran. These studies have contributed a lot towards the success of CRM in the banking industry of developed countries. Despite the usefulness of these contributions, however, very limited information is available on the adoption and evaluation of CRM systems in the banking industry of developing countries context like Pakistan (Huma, 2009).

Previous CRM studies have also shown that numerous researchers have separately discussed the CRM operational issues in the banking sectors of both developed and developing countries. Most importantly, not a single piece of CRM related research has been conducted to identify the similarities and differences between CRM operation in the banking sectors of Pakistan and the UK, based on an in-depth comparative analysis. Therefore, this research is focused on studying and analyzing the current CRM operational issues within the banking sectors of both developing and developed countries (i.e. Pakistan and UK) by using a qualitative case study research
approach with two case studies, in which the Pakistani banking sector is selected as the developing country for case study one; for a developed country, the UK banking sector is selected as case study two.

In general, the UK retail and commercial banking sector is dominated by Barclays, HSBC, Lloyds Banking Group, the Royal Bank of Scotland Group, and the Spanish-owned Santander; most of these companies operate more than one banking brand in the UK. The fifth major UK-based bank is Standard Chartered, which operates primarily in Asia and Africa (Wikipedia, 2010a). The Bank of England, the central bank of the UK, is committed to promoting and maintaining monetary and financial stability as its contribution to a healthy economy (Bank of England, 2010). Similarly, the Financial Services Authority (FSA), which is an independent non-governmental body, regulates and monitors the financial services industry in the UK (Wikipedia, 2010b).

Similarly, the Pakistani retail and commercial banking sector comprises both domestic and foreign banks; some of the well known domestic banks are: Habib Bank Limited (HBL), Muslim Commercial Bank (MCB), Union Bank (UBL) and NIB Bank; the major operative foreign banks in Pakistan include The Royal Bank of Scotland (RBS), Citibank, and HSBC. The performance of these banks is monitored by the State Bank of Pakistan (SBP) which is the central bank of Pakistan located in Karachi (the financial capital of Pakistan); its second headquarters is located in the capital, Islamabad. The State Bank of Pakistan looks at many aspects of banking to deal with the changes in economic climate and different purchasing and buying powers (Wikipedia, 2010c).

From these several existing UK and Pakistani banks, this research focuses on the selection of some leading banks from the two countries and conducts several semi-structured interviews with different bank employees in order to completely understand the current CRM operation within the banking sectors of the two countries. The results from these interviews will also be useful in presenting and analyzing the two case studies and helpful in highlighting the current CRM operational issues within the banking sectors of the two countries. Furthermore, the
obtained results from both case studies will be compared and discussed using an in-depth *cross-case analysis* approach in order to uncover the similarities, differences, and several issues with the CRM operations in the banking sectors of both Pakistan and the UK.

### 1.2 Why the Banking Industry is Selected for CRM Research

The banking industry was selected for CRM research because, in general, banks are more advanced in terms of technology adoption than many other organizations. One of the reasons is that other organizations do not usually require the level of information from their customers which banks do; banks keep a lot of in-depth information about their customers. Therefore, the CRM system currently used in banks needs to be more robust to be able to handle such sensitive information about different types of customers. Secondly, in the current environment where technologies are rapidly improving, banks have to be up-to-date in terms of technology, while keeping efficient employees which creates a competitive advantage over rivals.

Similarly, the banking industry had an early lead in CRM adoption as its transactions are essentially IT-based and contain valuable information about their customers (Karakostas, *et al.*, 2005). Moreover, in banks, CRM aims to co-ordinate all business processes that deal with customers and involves the collection, collation, and interpretation of customers’ data in order to define patterns of buying behaviour that can be used to support effective marketing programmes (Laudon and Laudon, 2000; Karakostas, *et al.*, 2005).

On the other hand, customers these days are also looking for ease and a secure environment. Having CRM properly operative in banks also allows customers to trust their respective banks in terms of their financial matters. Moreover, CRM allows technological capabilities in banks that attract new businesses as well as building relationships with the customers. If CRM were not used by banks, people would hesitate to use the banks and would not manage their finances through the banking industry as CRM is a useful strategy which allows banks to maintain a strong
relationship with their customers. Therefore, the banking industry has been selected to conduct the CRM research.

1.3 **Research Aims and Objectives**

Ideally, in the banking industry, the CRM system is used as an IT-based strategy which helps banks to learn more about their customers’ needs and behaviours. Using such information gathered from the customers, banks further design several marketing strategies in order to develop stronger relationships with their customers. By considering this focus of CRM in banks, the main objective of this research is focused on studying and analyzing the current operational issues of CRM within the banking sectors of Pakistan and the UK based on an in-depth *cross-case analysis* approach to uncover the similarities and differences of the CRM operations in the banking sectors of the two countries.

Moreover, the current research is based on a *multiple case study* approach using two case studies in which the Pakistani banking sector is selected as the developing country for *case study one*; for developed country context, the UK banking sector is selected as *case study two*. The other aims and objectives of this study are outlined below. This research focuses on the following:

- To study and discuss multiple contact channels (such as: branch banking, phone banking etc..) which are mostly offered by banks in Pakistan and the UK to interact with the customers.

- To explain and discuss several components of CRM (i.e. several CRM software packages) that are mostly used in banks of the two countries, and to design a taxonomy in order to categorize these CRM components based on the four major operational areas in a bank, i.e. (i) Marketing, (ii) Sales, (iii) Service and Support, and (iv) IT and IS.
To study and discuss several research theories that are mostly used in a social science research project to analyze the research findings. Also, to select a social theory that can be relevant and helpful to analyze the findings of this study. Furthermore, using the ideas and the design principles of the selected social theory, to propose suggestions to the banks in Pakistan and the UK in order to improve the use of CRM system.

To study and discuss the existing CRM models and to select an appropriate CRM model (i.e. the CRM model particularly designed for banks) that can be used as a frame of reference for this study. Also, using the components of the selected model, to further analyze and discuss the results obtained from the two case studies.

To study research methodologies and research strategies from the existing literature and to select a research methodology and strategy that is more suitable to conduct this study. Also, from the available data collection techniques, to select appropriate techniques that would help to gather data from the selected banks of Pakistan and the UK.

To select some of the Pakistani and UK banks in order to present the two case studies. Similarly, to approach these banks for data collection and also study as well as analyze their current CRM operation.

To study several data analysis techniques which are mostly used for the qualitative case study research, and to select the most suitable one which helps to analyze the results gathered from different banks.

To compare the analysis results in order to uncover the similarities and differences in the overall CRM operation between the banking sectors of Pakistan and the UK.

Finally, to discuss the challenges and issues with CRM adoption within the banking industry of Pakistan and the UK.
Furthermore, this study comprises three major research questions which are presented in the following section.

### 1.4 Research Questions

- **Research Question 1**: What are the similarities and differences in CRM operation between the banking sectors of Pakistan and the UK?

- **Research Question 2**: How would the design principles of socio-technical theory benefit the banking industry while using the latest technologies (CRM) in the increasingly changing work environment?

- **Research Question 3**: What are the challenges and issues from CRM adoption in the banking industry of Pakistan and the UK?

### 1.5 Outline of the Research Approach and Data Analysis

Traditionally, in social science research, two research approaches are available through which a research work can be conducted, i.e. quantitative research and qualitative research. A quantitative approach is useful if the requirements of research are to gather statistical data and to analyze such data using mathematical modelling tools such as SPSS. Similarly, in gathering and analyzing the data that does not require any statistical results (i.e. the study only covers the social aspects in a research topic), a qualitative research approach would be supportive.

From the two available research approaches, a qualitative research approach is selected for the purpose of this study as the current research does not require any quantitative data such as calculations, exact results, numbers, and anything that is measurable; this research is highly focused on studying and analyzing the current CRM strategy and its operation in the banking sectors of both developing and developed countries (i.e. Pakistan and UK). Hence, the qualitative research approach fulfils the requirements and is selected for the current research.
Similarly, an interpretive case study approach is chosen as a research strategy because this allows the researcher to conduct an extensive and in-depth research of an organization (i.e. the banking industry in our case). Moreover, since the purpose of this research is to study and analyze the current CRM operation in the banking sectors of two different countries (i.e. Pakistan and UK), a multiple-case studies approach is suitable as it covers the two different cases i.e. (i) CRM operation in the banking sector of Pakistan as case study one and (ii) CRM operation in the banking sector of UK as case study two. Yin (2009, p.60) proposed the benefits of multiple-case studies over a single case study as:

*The multiple-case studies are preferred over single-case designs because the conclusions arising from the multiple cases are usually more powerful than those coming out from a single case alone.*

The data collection techniques that fall under the multiple case study approach are selected for this research. The interview technique is considered as the main source of data collection as it helps acquiring relevant information about the research area of CRM by having conversation with various banks’ officials. Moreover, the semi-structured interview style is used because it provides more insight into the research topic, allowing researchers to gather answers to the specific interview questions on one hand, and on the other hand, the researcher will gather additional information from the interviewees that could be relevant and used for the write-up at the later stage.

Furthermore, from several available data analysis techniques, a cross-case analysis technique seems relevant for this study as it is ideal for comparing at least two case studies in a more structured way. Yin (2009, p.156) and Creswell (2007, p.163) proposed that: “with cross-case analysis technique using at least two cases, the analysis is likely to be easier and the findings could be more robust”. Therefore, a cross-case analysis technique is used to analyze the results of this study.
1.6 **Original Contributions**

This thesis has made contributions in the field of information systems (IS) and particularly in the area of customer relationship management (CRM). This study should be considered the first of its kind to be conducted in the banking sectors of both Pakistan and the UK in terms of their current operation of the CRM system. Another important contribution of this study is that it has revealed the cultural differences in terms of CRM adoption within the banking sectors of Pakistan and the UK because it emphasizes finding the similarities and differences in CRM operation between the banking sectors of the two countries.

The other contributions of this study are:

- Multiple contact channels that are mostly offered by banks in Pakistan and the UK to their customers were studied and thoroughly presented. Mostly in banks, CRM is operational at these contact channels: branch banking, phone banking, ATM, and internet banking. Also, several CRM components that are mostly used in banks were explained and discussed. These CRM components were presented based on the designed taxonomy containing several components of CRM that are mostly used in four major operational areas of a bank: (i) Marketing, (ii) Sales, (iii) Service and Support, and (iv) IT and IS.

- Several CRM models (previously designed and proposed by numerous CRM researchers) were presented and discussed and the CRM model was selected and its components were thoroughly discussed. This model was designed by Liu (2007) and was particularly designed for banks to view the overall CRM activities within the banks. The model was used as a frame of reference and using the four different components of the model, the results obtained from the two case studies were thoroughly analyzed and discussed. Furthermore, some suggestions were also proposed using the components of the same CRM model.
Several research theories were discussed that are useful for social science research, and socio-technical theory was selected to analyze the research findings and propose suggestions. The theory was selected because it provides a comprehensive and structured view of how different departments should work within the bank (i.e. the social system) while using different technologies such as CRM, ERP, and SCM (i.e. the technical system). Similarly, using the design principles of the theory, the researcher answered one of the research questions by proposing several benefits of the theory for the banking industry. These are:

- The idea of job design/re-design,
- The idea of providing training to the bank employees’ in the new technologies (i.e. CRM),
- The idea of employees’ job satisfaction that would bring customers’ satisfaction,
- The idea of health and safety, and employees’ stress-related issues.

Research methodologies and research strategies were thoroughly presented and the qualitative case study approach was selected as this approach allowed the researcher to conduct an extensive and in-depth study of an organization (i.e. the banking industry). Furthermore, the multiple-case studies approach was selected as this research comprises two case studies, CRM operation in the banking sector of Pakistan as case study one, and CRM operation in the banking sector of the UK as case study two. Also, several semi-structured interviews were conducted with different UK and Pakistani banks in order to present and analyze the two case studies.

Several data analysis techniques were discussed and a cross-case analysis technique was selected and the obtained results from the two case studies were analyzed using this technique. A cross-case analysis technique was selected as this technique was found ideal for comparing the obtained results from the two case studies in a more structured way.
The results gathered for the two case studies were first presented and analyzed separately in each case study in the form of ten different themes using a within-case analysis approach. Similarly, these results (themes) from both case studies were further compared using the cross-case analysis approach to uncover their similarities and differences in terms of the overall CRM operation between the banking sectors of Pakistan and the UK.

The challenges and issues of CRM adoption within the banking industry of Pakistan and the UK were thoroughly discussed. Some of the major issues presented in this study are:

- Political and Governmental Issues,
- Technological Issues, and
- Cultural Issues.

1.7 Structure of the Thesis

This thesis presents the research work based on the current use of CRM within the banking industry of Pakistan and the UK using the qualitative case study research approach with two case studies. In order to study the overall CRM operation within the banking industry of the two countries, a semi-structured interviews style was selected and used as the main source of data collection. Similarly, the data analysis in this study was performed using the cross-case analysis technique to analyze the results more precisely.

Chapter 2 provides the background to the current research. In the first part, the chapter presents some basic definitions and concepts of customer relationship management (CRM) and its development in the banking industry. Secondly, the chapter presents different types of CRM and it also highlights the importance of CRM within the banking industry. Similarly, some of the major problems with the current use of CRM in the banking industry of Pakistan and the UK are presented. The chapter presents discussions about multiple contact channels that are mostly offered
by CRM-enabled banks; and a taxonomy of several CRM components that are mostly used in different departments of any CRM-enabled bank. At the end of the chapter, we discuss some of the major vendors of CRM and also present the success stories of CRM in some of the renowned banks.

Chapter 3 presents a theoretical framework which introduces the ideal CRM model that was previously proposed by Liu (2007). The model is specifically designed for banks, containing a complete view of the overall CRM activities and projects all the functional areas of CRM within a bank. The selected CRM model will be used in this study as a frame of reference and will also be used to analyze and discuss the obtained results more accurately. The chapter also contains an overview of research theories that are useful for social science research and the reasons for using a social theory in this study. It introduces socio-technical theory as the main theory that would be used in this study to analyze the research findings and would help to propose suggestions for the banking sector in order to improve the use of CRM system. The chapter also contains discussions about several other social theories that were initially considered for the purpose of current research.

Chapter 4 provides the research methodology adopted by the researcher to conduct this study. It starts with some discussions about the available research approaches that are mostly used in social sciences, i.e. quantitative and qualitative research. The background information about these research approaches and several research strategies that fall under both quantitative and qualitative research are thoroughly presented. Then, the chapter presents the three research paradigms or research philosophies, i.e. positivistic, interpretive, and critical research that are generally used in IS research. Similarly, from the available research strategies, the chapter presents some discussions about selecting the case study approach and particularly multiple-case study approach for this research. Finally, a complete description of the available data collection techniques is presented and the techniques that are useful for multiple-case study research are also highlighted.

Chapter 5 covers the first stage of data analysis, within-case analysis, in which the two main case studies of current research are separately presented in the form of
several themes. These themes contain the results of interviews, which are thoroughly analyzed and discussed for each theme. The chapter also presents several other data analysis techniques that are useful for interpretive case study research. These analysis techniques have been proposed by numerous qualitative researchers in their work. Upon considering the pros and cons of these techniques, a cross-case analysis technique was selected for this research as this approach specifically applies to the analysis of multiple cases and this technique is also ideal for comparing two different case studies in a more structured way.

Chapter 6 presents the second stage of data analysis, cross-case analysis, in which the analysis results from the first stage in each case study are further presented and compared to identify the similarities and differences in CRM operation between the two case studies. The chapter also presents some discussions of the results by using the components of an ideal CRM model (proposed as a frame of reference in chapter 3) in order to discuss these results more accurately. Some suggestions are proposed by the researcher using the best practices of the CRM; the benefits of the socio-technical theory for the banking industry are also described. In the last part, the chapter covers some challenges and issues from CRM adoption within the banking industry of Pakistan and the UK.

Chapter 7 summarizes the research chapter by chapter. The first section summarizes the discussions from each chapter, and also presents the research limitations and the theoretical, methodological, and practical contributions of this study. In the second section of the chapter, the researcher recommended some future tasks within the current research area.
1.8 Research Design

Research Questions

RQ1: What are the similarities and differences in CRM operation between the banking sectors of Pakistan and the UK?

RQ2: How would the design principles of socio-technical theory benefit the banking industry while using the latest technologies (CRM) in the increasingly changing work environment?

RQ3: What are the challenges and issues from CRM adoption in the banking industry of Pakistan and the UK?

Research Paradigm

Multiple Case Study Approach

Research Strategy

Case Study 1: CRM Operations in the Banking Sector of Pakistan

Case Study 2: CRM Operations in the Banking Sector of UK

Data Collection

Interviews

Observations

Archival Records

Within-Case Data Analysis

Cross-Case Data Analysis

Data Analysis

Providing Answers to the Research Questions. Discuss results using the components of an ideal CRM model

The ideas of Socio-technical theory, its design principles, and its benefits for the banking industry.

Proposed CRM model used as a frame of reference

Figure 1.1: Research Design: The Overall Plan for Conducting the Study
Chapter 2

Background

This chapter provides an overview of CRM through an extensive review of the literature. The chapter starts with some basic concepts about CRM and its importance for the banking industry. Some discussions based on the current operation of CRM in the banking industry of both developed and developing countries i.e. UK and Pakistan are presented and the major problems associated with the current use of CRM are also highlighted in this chapter. Similarly, multiple contact channels that are mostly offered by banks are also discussed. Moreover, based on the views of several researchers, the chapter presents a taxonomy of several CRM components (i.e. CRM software and packages) that are mostly used in different departments of an ideal CRM enabled bank. These CRM components are mostly used in four major operational areas of a bank i.e. (i) marketing, (ii) sales, (iii) service and support, and (iv) IT and IS. Furthermore, some well known vendors of CRM for banks i.e. SAP, Oracle’s Siebel Systems, and Salesforce are thoroughly discussed. Finally, the chapter provides the best practices of CRM in some of the renowned banks.

2.1 Customer

Imhoff et al., (2001) defines customer as:

A party who is involved with the acquisition of the company's goods and services, and who is also of interest to the organization.
In the above definition, party or customers can be either individuals or organizations. Customers can also be loose group of individuals joined together as a membership organization such as the Civil Aviation Authority (CAA) in the UK (Jiang, 2003). The author also described the list of some customer types based on the above definition, such as:

- Agent
- Beneficiary
- Bill payer
- Consumer
- Competitor
- Employee
- Guarantor
- Household
- Prospect
- Referral source
- Supplier

This definition is too broad, but in the context of current research, we mean customer as a Bank Client.

**2.2 Customer Relationship Management (CRM)**

Customer Relationship Management (CRM) is defined in many ways by many researchers. For instance, Dyche’ (2002, p.4) in his book defines CRM as:

*The infrastructure that enables the delineation of and increase in customer value, and the correct means by which to motivate valuable customers to remain loyal - indeed, to buy again.*

According to Jiang (2003), providing customers with a good experience however and whenever they choose to contact the organization is a key part of managing
relationships with them. Similarly, as seen in Bradshaw and Brash (2001), Ovum (an independent research and consulting company) defines customer relationship management (CRM) as:

A management approach which enables organizations to identify, attract and increase retention of profitable customers by managing relationships with them.

However, CRM definition that best suits the current research in the banking industry context was defined by Ling and Yen (2001) as:

CRM comprises a set of processes and enabling systems supporting a business strategy to build long term, profitable relationships with specific customers. The key objective of CRM is to enhance customers’ value through better understanding of each individual customer’s needs and preferences (Ling and Yen, 2001).

2.3 The Origins of CRM

(relationship Marketing)

CRM came from the origins and is based on the principles of Relationship Marketing (RM) which is considered one of the key developmental areas of modern marketing and the one which has generated great research interest over several years (Sheth and Parvatiyar, 2000). Back in the early 90’s, relationship marketing was embraced as a way for marketing departments to get to know their customers more intimately by understanding their preferences and thus increasing the odds of retaining them (Dyche’, 2002, p.25). Peppers and Rogers (1993) in their work highlighted relationship marketing as a one-to-one marketing approach which was later discussed by Dyche’ (2002, p.25) in his book. The original authors argued that in coming years:

...you will not be trying to sell a single product to many customers as possible. Instead, you will be trying to sell a single customer as many products as
possible over a long period of time, and across different product lines. To do this, you will need to concentrate on building unique relationships with individual customers on a one-to-one basis (Peppers and Rogers, 1993).

Brodie et al., (1997) referred relationship marketing as a new paradigm and according to the authors, relationship marketing has emerged from a number of streams of research. The first stream examines marketing from a service context (Berry, 1983, 1995; Gronroos, 1990); while the second stream focuses on the inter-organizational exchange relationships (Hakansson, 1982; Ford, 1990; Dwyer, et al., 1987; Wilson, 1995). Similarly, the third stream is based on the channels literature, e.g. development of effective and efficient channel relationships (Buzzell and Ortmeyer, 1995). The fourth stream of research examines network relationships (e.g. Axelsson and Easton, 1992; Johanson and Mattsson, 1985, 1988). The emphasis in this case is on industrial markets and the sets of relationships that connect multiple organizations.

The fifth stream of research underlying the new paradigm of relationship marketing stems from the strategic management literature, and draws on recent conceptualizations about the role of relationships in the value chains (Normann and Ramirez, 1993). Finally, the sixth stream draws on the information technology literature and examines the strategic impact that information technology has on the relationships within organizations and between organizations (Scott Morton, 1991). The authors further explained that drawing these streams of research together provides the basis for the new paradigm argument which views marketing as an integrative activity involving personnel from across the organization, with emphasis on facilitating, building and maintaining relationships over time.

Osarenkhoe and Bennani (2007) in their paper discussed that in early days, relationship marketing’s aim was to acquire information about their customers’ preferences and information which was stored by them in their databases. This evolved into one-to-one marketing which implies that through interaction and processing, companies will create more customized offers to their customers.
The relationship marketing’s one-to-one approach which was very popular throughout the 90’s was then replaced with a new approach known as Customer Relationship Management (CRM). CRM was developed in order to secure and manage these one-to-one relationships and to create a profitable and long-term relationship with the customers. Today, CRM is the dominant strategy and has generally been used (Reynolds, 2002).

2.4 Evolution of CRM

CRM was born around 1997 as a means of redefining the customer company relationship through computer-based tools. The main idea behind CRM was that with the help of latest technology, every customer-company interaction can be recorded which allows the company to proactively provide the best customer service possible while creating a large database (data warehouse) of customer preferences that can be reviewed by sales, marketing, and management personnel. Such customer data can then be used to reduce costs and to improve employee productivity (Bergeron, 2002, p.2).

In a web article by Fraya (2006), the author mentions that the actual concept of CRM began back in 1993 when Tom Siebel founded Siebel Systems Inc. Use of the term CRM is traced back to that period. In the mid 90’s, CRM was originally sold as a guaranteed way to turn customer data into increased sales performance and higher profits by delivering new insights into customer behaviours and identifying hidden buying patterns buried in the customer databases. More than a decade later, a 2005 study by the Gartner Group found that 60 percent of midsize businesses intended to adopt or expand their CRM usage over the next years. The interest in these organizations was developed because of a large number of CRM vendors offering more targeted solutions with a wider range of prices and more accountability.

Harris (2003) in his work presented the three important phases of CRM. The author discussed that CRM has evolved since its earliest incarnation, originally driven by an
inside-out focus through three phases of evolution i.e. technology, integration, and process. These three phases were further described by the author as:

**Technology:** In its earliest incarnation, CRM meant applying automation to existing sales, marketing, support, and channel processes as organizations attempted to improve communications, planning, opportunity, and campaign management, forecasting, problem solving, and to share best practices. The promise of the technology was there, but few organizations were realizing the pinnacle of performance. The metric of success was increased efficiency in sales, marketing, support and channel processes.

**Integration:** By developing cross-functional integration, supported by data warehousing and shared roles and responsibilities, organizations began to create a customized view of their customers. Support issues, web hits, sales calls and marketing inquiries started building a deeper understanding of each customer and allowed aggressive organizations to adapt their tactics to fit individual needs. Integration focused around two primary components:

- **i) Make it easier to do business with the seller:** Instead of operational silos that inhibited superior customer relationships, the organization as a whole took ownership and the responsibility for customer satisfaction. With a single view of the customer, it was much easier for anyone to respond to sales opportunities or impending support issues and take appropriate steps. Expected benefits are to improve retention and lower support costs.

- **ii) Predictive modelling:** Data mining of an aggregate of corporate knowledge and the customer contact experience was used to improve operational and sales performance. By applying complex algorithms to a history of purchasing or inquiry characteristics, it became practical to predict the demands of individual customers. Up-selling, cross-selling, even the ability to pre-empt potential problems, was now possible for all customer-facing representatives. Expected benefits are to have better cross-selling, up-selling and improved product offerings or delivery.

**Process:** By rethinking the quality and effectiveness of customer-related processes, many organizations began to eliminate unnecessary activities, improve outdated processes, and redesign activities that had failed to deliver the desired outcomes.
Then, by re-creating the process through an understanding of the capabilities of the technology, the outcomes were more predictable and the promises for a meaningful ROI (return on investment) more substantial and realistic. The metrics for success became the improved effectiveness in serving the customer (Harris, 2003).

Today, CRM is a need of almost every organization; several companies around the globe have already realized its importance and therefore invested millions on its implementation. To them, CRM is the only approach for organizations (especially financial organizations such as banks) to increase their revenues as CRM is more focused on customers’ satisfaction and retention.

2.5 **Types of CRM**

Several researchers have presented different views about which types comprise a best CRM consideration. For instance, Reynolds (2002) in her book presented three different types of CRM i.e. operational, analytical, and collaborative CRM. These three different types were also presented in the recent work of (Minna and Aino, 2005). Similarly, Dyche’ (2002, p.13), in his work emphasized more on operational and analytical CRM. However most recently, Buttle (2009, p.4) in his book presented strategic CRM as a fourth type of CRM. In general, these all types of CRM are important because they all have a common objective which is to deliver CRM successfully within the organizations. Therefore, in this section we present and discuss all four major types of CRM.

2.5.1 **Operational CRM**

According to Dyche’, (2002, p.13) an operational CRM is also known as *front office* CRM. It involves the areas where direct customer contact occurs which is also known as *touch points*. A touch point can be an inbound contact (e.g. a call to a company’s customer support hotline) or an outbound contact (e.g. an in-person sales call or an e-mail promotion to customers). In other words, the operational CRM is used to capture customers’ data. The operational CRM also enables and streamlines communications to and from customers, but it does not necessarily mean optimizing service. Just
because a banking customer checks his/her balance on a website would not conclusively establish that he/she does not prefer to perform his/her transaction in the branch. Figure 2.1 illustrates the various levels of operational CRM.

![Diagram of Operational CRM](image)

Figure 2.1: Operational CRM: Touching the Customer (Source: Dyche’, 2002, p.13)

### 2.5.2 Analytical CRM

An analytical CRM is also known as a *back office* CRM. It involves understanding the customers’ activities that occurred in the front office. The analytical CRM requires technology (to compile and process the mountains of customers’ data to facilitate analysis) and new business processes (to refine customer-facing practices to increase loyalty and profitability). Under pressure from analysts and industry experts, most of today’s CRM vendors are either creating analytical CRM capabilities or partnership with business intelligence (BI) vendors to incorporate analysis into their offerings (Dyche’, 2002, p.13).

Figure 2.2 shows how the data and processes combine to refine business actions. Dyche’, (2002, p.13) further explained that the refined-business-actions piece of the
puzzle is the most difficult of all to put in place. The greater the number of missing pieces, the harder it is to construct a meaningful CRM picture. In other words, if enhanced customer loyalty is the door, then integration is the key.

Figure 2.2: Analytical CRM: Understanding the Customer (Source: Dyche’, 2002)

Similarly, Adebanjo (2003) described that an analytical CRM is mainly used for building data warehouses, improving relationships, and analyzing customers’ data. Using analytical CRM, customers’ data can be analyzed for a variety of purposes:

- Design and execution of targeted marketing campaigns to optimize marketing effectiveness.
- Design and execution of specific customer campaigns including customer acquisition, cross-selling, up-selling, retention.
- Analysis of customer behaviour to aid product and service decision making (e.g. pricing, new product development etc).

- Management decisions e.g. financial forecasting and customer profitability analysis.

- Prediction of the probability of customer defection (churn analysis).

- Analytical CRM generally makes heavy use of data mining (Wikipedia, 2008a).

### 2.5.3 Collaborative CRM

According to the definitions from (SearchCRM, 2007), “collaborative CRM is an approach to CRM in which the various departments of a company such as: sales, technical support, and marketing etc., share any information which they collect from interactions with their customers. For instance, customer feedback gathered from a technical support session could inform marketing staff about products and services that might be of interest to the customer. The purpose of this collaboration is to improve the quality of customer service in order to increase customer satisfaction and loyalty”. Minna and Aino (2005) and Adebanjo (2003) explained that: “a collaborative CRM system is mainly used for building online communities, developing business-to-business customer exchanges, and personalizing services”.

### 2.5.4 Strategic CRM

Based on the ideas of Buttle (2009, p.4), strategic CRM is focused upon the development of a customer-centric business culture within an organization. This culture is dedicated to winning and keeping customers by creating and delivering value better than competitors. The author further argues that such business culture is reflected in leadership behaviours, the design of formal systems of the company, and the myths and stories that are created within the firm. Also, in such culture, the resources would be allocated where they would best enhance customer value, reward
system to promote employee behaviours that enhance customer satisfaction and retention, and customer information to be collected, shared and applied across the business. In this way, the heroes of the business would be those who deliver outstanding value or service to the customers.

2.6 CRM in the Banking Industry

2.6.1 Objectives and Benefits

Over the last eight years, banks are highly focusing on the CRM and are expected to continue (Foss, 2002). Dyche’ (2002) in his book proposed the objectives and benefits of CRM in the banking industry as:

Before implementing any CRM application, banks would need a complete view of its customers across the various systems that contain their data. If the bank could track customer behaviours, executives can have a better understanding, a predicting future behaviours, and customer preferences. In this way, the data and the applications will help the bank to manage its customer relationship and continue to grow and evolve (Dyche’, 2002).

According to Foss (2002), most of the banks around the world are trying to use CRM techniques to achieve various outcomes. These include:

- Creating consumer-centric culture;
- Securing customer relationships;
- Maximizing customer profitability;
- Aligning effort and resource behind most valuable customer groups.

In a recent paper by Onut et al., (2006), the authors discussed that using the CRM system into the banking industry helps businesses (using technology and human resources) to gain insight into the behaviour of customers and focus on the value of those customers. If CRM system works as hoped, the business can:
 Provide better customer service;
 Make call centres more efficient;
 Cross-sell products more effectively;
 Help sales staff close deals faster;
 Simplify marketing and sales processes;
 Discover new customers;
 Increase customer revenues.

2.6.2 Types of Customers in Banks

Burnett (2001) in his book mentioned four different types of customers in banks as described below:

- **Loyal Customers**: They perceive the company’s product as much superior to a competitor’s product.

- **Competitive Customers**: Perceive the company’s product as slightly superior to a competitor’s product.

- **Switchable Customers**: Perceive a competitor’s product as slightly superior to the company’s product.

- **Competitor Loyal Customers**: Perceive a competitor’s product as much superior to the company’s product (Burnett, 2001).

Similarly, bank customers are usually segmented into different groups based on the number of products they use and also based on their account balances. Day (2000) in his work described two different types of customers that are involved with the banks. The customers with a low number of products and low balances in the banks are having a different relationship with the banks which is known as *transactional exchange relationship*. With these customers, the focus of a bank is to provide cost effective services.
On the other hand, customers which are holding many products and high potential balances may fall into the *value-adding* or *collaborative* relationship with the banks. The author further discussed that the transactional exchange relationship may be transformed into value adding relationship when customers taken up staff’s recommendations for additional products such as investment or higher savings accounts perhaps with the automatic funds transfer to optimize interest. From the bank’s perspective, the account becomes value-adding because the number of products and services used by the customer increases and fees earned by the bank also increase.

In general, majority of banks around the world are dealing with these two types of customers. These customers most often approach the bank through its branch or a call centre (also referred as *customer contact centre*). To manage such relationships with customers, a branch and a call centre staff must be responsible and having awareness of both bank products information and customers’ information.

### 2.6.3 Customer Touch points

A customer interacts with the bank through various touch points such as visiting the branch, phone banking, e-mail, internet, fax, etc. However, these days, visiting the local branch and phone banking are the most commonly used touch points from the customer’s perspective. Similarly, using these channels, banks also interact with their customers to inform them about their latest products and services. According to Bergeron (2002, p.26), sometimes only one or two touch points are actually supported, and in other cases there are more potential touch points than customers can or want to access. The author further argued that every touch point is critical in providing service and potentially increasing customer satisfaction. Figure 2.3 shows several touch points of customer with the bank. Some of these commonly used touch points are:

- **Telephone**: Direct conversation with the customer service representatives about the account information, different account transactions, credit cards, etc.
➢ **E-mail**: Sending and receiving emails for any queries related to the different accounts.

➢ **Branch Visit**: It is a most commonly used method for account queries and balance information.

➢ **Ordinary Mail**: Information over the traditional mails, flyers, etc.

➢ **Media**: TV advertisements about the bank’s new products etc.

Figure 2.3: Customer’s Interaction with the Bank using Multiple Touch Points.

### 2.7 CRM Operation in the Banking Industry of Developed and Developing Countries (i.e. UK and Pakistan): Problems based on the Initial Investigations

Several studies have reported that CRM has a high adoption rate in developed countries such as the UK, USA, Canada, etc., while comparing with the developing
countries such as Pakistan, India, and Iran etc. For instance, an article in (CRMguru.com, 2009) talked about the implementation and operation of CRM in the UK and in several European countries. The article explained that the emerging economies in the UK and Europe are taking CRM much more seriously because they see it as a way to compete in the world markets. Geib et al., (2005) discussed that over the past few years, CRM has played an increasingly important role in the banking industry of developed countries where majority of the banks in the UK, Europe especially banks in Germany and Switzerland have successfully conducted various CRM implementation projects.

Similarly, as seen in Keramati et al., (2009), Foss (2002) in his work discussed that: “banks in the developed countries are completely aware of the importance of CRM and numerous banks in the UK, USA, Australia, and Europe have already invested in CRM based data warehouses and data mining tools over the past decade. They have been building models of consumer-segment profitability and behaviour which helps them to target direct marketing campaigns for the right groups of customers. They have been analyzing and classifying customers’ needs, assessing the risk of loss, and trying to predict demand and delivery methods for various types of customers. Furthermore, these banks have been leveraging information for selling and enhancing the effectiveness of new customer marketing campaigns” (Foss, 2002).

On the other hand, developing countries such as Pakistan are still in the initial stages of adopting CRM culture within their banking industry. To them, CRM requires a huge investment; therefore, they are still not ready to fully adopt CRM culture. Similarly, in Pakistan, there has been a lot of competition within the banking industry in recent years. Several foreign banks have opened their branches in Pakistan that has brought a lot of pressure to the state owned banks. These local banks have realized that they need to compete in order to maintain their position and to survive in the dynamic marketplace. Secondly, they have also realized the importance of customers; so, their prime focus these days is to retain their existing customers as well as to attract new ones by offering better facilities. Therefore, most of these local banks have installed few CRM related packages at call centres and also at the branch
banking level in order to understand their customers’ needs more closely and at the same time remain competitive.

The initial investigations of the existing research has shown that CRM works different in the UK banks while comparing its operation with the banks in Pakistan. In the UK banks, CRM is currently used as an internal centralized system of banks which is used by every member of staff working at the bank. Using CRM, each department can easily view customers’ different accounts details. However, each department’s job is different while using the central CRM system; for example, credit card department employees can only make changes in credit card section of customers’ accounts using the central system.

On the other hand, CRM in Pakistan is seen as a new concept where different departments at the banks have different views about it. It is mostly referred by most of the bank employees as an IT system which records customers’ details (necessary or unnecessary). It is not currently used as a centralized system. At present, only few CRM-based packages are used in the banks. However, during the initial investigations, it was also seen that most of the branches of these local banks especially those in the rural areas of Pakistan are still not getting benefits of CRM and are dealing with a lot of problems. Some of these problems were highlighted by (Malik and Wood-Harper, 2009) as:

- At present, each branch services its own customers with no centralized customer service or telephone-based automated services. Therefore, customers’ data can not be easily tracked and the concept of customer relationship management (CRM) is virtually impossible.

- Most of the times, customers have to restate their information whenever they interact with their bank, and the members of staff are unaware of the previous transactions and have no quick access to the customers’ previous records.

- The IT personnel at some of the rural banks are not fully trained to handle CRM packages installed at the bank.
➢ The websites are overloaded with graphic data and are not clear, concise, and informative.

➢ Major bank services such as internet banking and phone banking are not available in some of these local banks.

➢ In most of these local banks, only cash card is offered through which customers can only withdraw cash from the selected cash machines (ATMs). Without having credit or debit cards, customers are having problems to shop online (Malik and Wood-Harper, 2009).

Therefore, with these issues in mind, one of the main reasons of conducting the current research is to further investigate these problems associated with the current use of CRM within the banking industry of Pakistan by performing some in-depth study and analysis. Similarly, to investigate the performance of current CRM strategy in more detail by conducting interviews with different bank employees working at different departments. Furthermore, UK banking industry is selected for this study for three main reasons i.e. to study and analyze their current CRM operation within the banking industry (more in-depth); secondly, to understand their point of view about CRM (i.e. how they see it and how they use it); and thirdly, in order to analyze the current performance of CRM within the banking industry of Pakistan, UK banks are also selected to compare the obtained results of the two countries more precisely and to identify the similarities and differences in the overall CRM operation between the banking sectors of the two countries.

2.8 Multiple Contact Channels Offered by Banks

This section presents some discussions about the multiple contact channels that are mostly offered by banks to their customers. In the past, banks used to offer branch banking as the only channel to their customers where most of the customers’ queries were dealt by the bank employees during the opening hours of the branch. Hamilton and Hewer (2000) explained that the technological advancement in the banking
industry has led to the development of several e-Commerce related channels such as: phone banking, automated teller machines (ATMs), and internet banking etc. By having variety of available contact channels, each customer nowadays can contact the bank according to his/her own preference. Similarly, several CRM components are used by banks at these contact channels to acquire and then analyze the valuable information of their customers. An overview of these contact channels is presented in the following sections.

2.8.1 Branch Banking

Branch banking is seen as the traditional and renowned contact channel offered by almost every bank. According to Howcraft and Beckett (1993), branch banking evolved to attract relatively cheap retail deposits through the convenience of branch locations and branch-based payment systems. Similarly, Devlin (1995) and Devlin, et al., (1995) discussed that a bank’s branch serves three main purposes i.e. firstly, it provides major bank services to the customers through its physical presence; secondly, it also provides convenience to the customers in terms of their financial transactions such as money in and out etc. Thirdly, the branch banking also provides a platform for banks in order to maintain relationships with their customers by providing better services.

2.8.2 Phone Banking

Phone banking is another contact channel offered by banks nowadays which allows the customers to perform their transactions while talking to the call centre agent over the telephone. According to Devlin (1995) and Devlin, et al., (1995), the development of telephone based banking is considered as an initial step towards home banking system. In phone banking, calls are usually answered by call centre advisors, or operators working at the branch level; they provide all types of services including: account balance enquiries, transfer of funds between different accounts, bill payments, and problems related with different accounts.
2.8.3 Automated Teller Machine (ATM)

“An automated teller machine (ATM), also known as a cash machine is a computerized telecommunication device that provides the customers with access to their financial transactions such as balance enquiries, withdraw cash, purchase cell phone credit etc., in a public place without visiting the local branch of their bank. On most modern ATMs, customer is identified by inserting a plastic ATM card with a magnetic stripe or a plastic smart card with a chip which contains a unique card number and some security information. Authentication is provided when the customer enters his/her personal identification number (PIN). ATMs have increased customers’ convenience not only in terms of cash withdrawals from different locations, but also in terms of 24/7 banking facility” (Wikipedia, 2010d).

2.8.4 Internet Banking

These days, with the advancement in technologies, internet based banking is seen as a new way of banking which is becoming popular among several customers. According to Claessens, et al., (2002), internet and wireless technologies are dramatically changing the structure and nature of financial services. They are more than just new contact channels; they are simply a different way of providing financial services. For instance, internet banking helps customers to check their financial activities at home or at the workplace by using an internet account. On the other hand, it helps banks to easily obtain their customers’ information; and using several data mining techniques, they further design and offer products to their customers based on each customer’s preferences. Therefore, internet banking has not only facilitated customers but it has also facilitated banks by lowering the costs for servicing their customers.

2.9 Major Components of CRM for the Banking Industry

Ideally, a typical CRM system comprises of several components that are essential for any organization. For instance, customer management, lead management, sales force automation (SFA), customer service, business reporting etc., are all CRM components
used at the banks. Each component has significant advantages towards the success of a CRM system used within a bank. In an article by West (2001), the author argued that in order to implement CRM system successfully, organizations (especially banks) must apply policies, processes, and technologies in order to provide a personalized and engaging experience which would be consistent across all customer interactions. The author presented several components of CRM such as, marketing automation, sales force automation (SFA), contact centres, field service, etc., which are used in three major operational areas of a CRM enabled bank i.e. Marketing, Sales, and Service. These components may also be seen as the life cycle of a customer relationship which moves from marketing, to sales, and service.

Similarly, Xu et al., (2002) discussed that: “if we look into a complete CRM picture, we will see that in business terms, the basic operational areas to address are sales, customer service, and marketing”. However, Kincaid (2003) presented IT and IS as another crucial area in supporting these three operational areas as well as the whole CRM process in banks. Based on these ideas, Ngai (2005) in his CRM review paper, covered 205 articles of CRM and presented a taxonomy containing several components of CRM which are broadly classified into the four major operational areas of a bank i.e. (i) Marketing, (ii) Sales, (iii) Service and Support, and (iv) IT and IS. According to the author, in order to successfully deliver CRM system, organizations especially banks would need to focus on these four operational areas where most of the CRM components are functioning.

The previous sections of this chapter covered the general concepts of CRM and work done by several researchers in this field; here, we will present and discuss several CRM components that fall under the four operational areas of a bank. These major operational areas discussed in this section are: (i) Marketing, (ii) Sales, (iii) Service and Support, and (iv) IT and IS which are also shown in figure 2.4. Each operational area contains several CRM components and some of these well known CRM components used in each operational area of a bank are also shown in table 2.1 and are thoroughly discussed in the following sections.
Figure 2.4: Major Operational Areas of a Bank (Source: Ngai, 2005)

<table>
<thead>
<tr>
<th><strong>Components of CRM</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Marketing</strong></td>
</tr>
<tr>
<td><strong>Sales</strong></td>
</tr>
<tr>
<td><strong>Service and Support</strong></td>
</tr>
<tr>
<td><strong>IT and IS</strong></td>
</tr>
</tbody>
</table>

Table 2.1: A Taxonomy Containing Major CRM Components Used in the Four Operational Areas of a Bank.
2.9.1 Marketing

Traditionally, the term marketing simply refers to carry out the promotional activities that are involved in promoting a product to either a single customer or to a group of customers. CRM facilitates and enhances the marketing function in order to increase the effectiveness of marketing by studying the potential targeted customers (Crminfoline, 2009). Several CRM components are available under this domain and some of them are discussed in this section which relates to the banks.

2.9.1.1 Customer Value

Schneider (1980) in his work presented a clear view about the customer value. According to the author, knowing customer’s value and being able to pinpoint profitable customers is just the beginning of CRM. To build a successful CRM, organizations need business strategies and practices that enable them to nurture the relationship beyond its simple dollar value. Similarly, Reichheld and Sasser (1990) argue that the longer an organization retains a customer, the better profit it will generate. Bolton et al., (2004) and Reinartz and Kumar (2000) in their research indicates that the breadth and depth of the relationships with customers are possibly more important than its length. Farquhar and Panther (2008) discussed that banks should need to identify valuable customers and then maintain relationships with them to generate most profit. Also, knowing the customers’ value would help the segmentation process. In this way, banks would identify and focus on maintaining relationships with the most valuable as well as profitable customers.

2.9.1.2 Customer Segmentation

According to (Groth, 2000; Ahn, et al., 2003), customer segmentation is an analytical technique of marketing department at banks which is required for personalized services. Clustering and classification are the two common techniques used for customer segmentation in CRM. For segmentation, certain variables of customers can be used such as sex, age, as well as their visiting order and the visiting time of the
web pages etc. With the help of segmentation technique, it is easy for marketing staff of banks to promote their products to the required and targeted customers.

2.9.1.3 Customer Behaviour Prediction

Behaviour prediction is a marketing component of CRM which (by using some data mining techniques) helps marketing department at the bank to determine what customers are likely to do in the future. It uses historical customer behaviour to predict future behaviour (Dyche’, 2002, p.33). The author further explained that this analysis involves several variations:

- **Propensity-to-buy analysis**: Understanding which products a particular customer is likely to purchase.

- **Next sequential purchase**: Predicting what product or service a customer is likely to buy next.

- **Product affinity analysis**: Understanding which products will be purchased with other products. It is also known as *market basket analysis*.

- **Price elasticity modelling and dynamic pricing**: Determining the optimal price for a given product, often customer or customer segment.

By understanding how a customer is likely to behave using the behaviour prediction analysis, marketing department makes further offerings to retain that particular customer (Dyche’, 2002, p.33).

2.9.1.4 Customer Retention

In any organization, keeping an existing customer is far more cost effective than acquiring a new one. In other words, the more customers leave the bank, the greater the loss of revenue, loss of the initial acquisition investment, and the loss of a stable market base for selling new products (Dyche’, 2002, p.32). According to Ahmad and
Buttle (2002), customer retention is increasingly being seen especially in the context of saturated market or lower growth of the number of new customers. It has also been acknowledged as a key objective of relationship marketing primarily because of its potential in delivering superior relationship economics.

2.9.1.5 Customer Loyalty

Customer loyalty describes the tendency of a customer to choose one product over another for a particular need. In other words, it is the result of well-managed customer retention programs; customers who are targeted by a retention program demonstrate higher loyalty to a business. All customer retention programs rely on communicating with customers, giving them encouragement to remain active and choosing to do business with a company (Jimnovo.com, 2009). Similarly, Kincaid (2003) believes that customer loyalty is based on the customer’s value perception and is measured by behaviour. Moreover, customer satisfaction is often used as a loyalty indicator.

However, Bergeron (2002, p.30) argued that it is hard to predict which customers are loyal and which ones are not. Customer loyalty can sometimes be predicted by looking at customer’s positive and negative behaviour. The positive contributors to behaviours consistent with loyalty include:

- **Value**: The greater the perceived value of a company’s goods or services, the greater the loyalty effect.

- **Investment**: The more time and money invested in the relationship, the more likely the relationship will continue.

- **Difficulty Locating Alternatives**: The more unique or readily available a product or service, the more likely a customer will continue buying it from a particular company.

Similarly, the negative contributors to loyalty behaviours include:
- **Number of Affordable Alternatives:** The more affordable alternatives exist, the less the loyalty effect.

- **Customers’ Frustration:** Being put on hold, corralled into endless push-button menus and an extended-hold customer support system, and having to wait in excessively long lines are some examples associated with customers’ frustration (Bergeron, 2002, p.30).

### 2.9.2 Sales

Sales department in any organization is considerably an important area which is responsible for improving the overall CRM strategy hence, it should be tightly integrated. Basically, sales department in banks is responsible for direct interactions with the customers (Kincaid, 2003). According to Ingram et al., (2002), in order to effectively achieve CRM goals in the banks, it is important for banks to develop sales strategies at the customers’ level in order to build and maintain close relationships with them and to accomplish revenue goals. Numerous CRM components fall into this area; some of them are presented in the following sections.

#### 2.9.2.1 Account Management

In an article published in Articlebase (2006), the author explained that account management is a business practice which involves storing, sharing, managing, and reviewing of all account information. In simple words, it is a CRM software program used by the sales personnel in the banks through which they can easily track their customers’ every interaction with the bank. It usually stores all information related to the customers such as: customer name, customer contact information, number of visits, how much money customer spent on products, visiting intervals etc., in an appropriate CRM databases. Similarly, the software also manages complete history of customers’ various accounts. Also, these software solutions automatically tracks and stores all small and large interaction of accounts such as customer contacts, money transfers, employee payment, partnership programs etc. Account management tool further automatically stores customers’ information in a centralized database (data
warehouse). In the same article, the author further explained that such information is then retrieved and integrated by the sales department in order to find the potential customers. Account management software also helps sales department at banks to design and develop suitable service and marketing plans for each individual customer (Articlebase, 2006).

2.9.2.2  **Cross-Selling and Up-Selling**

Cross-selling means selling other products (utilizing a current customer for one product from a bank and engage them in purchasing other) i.e. in a retail banking level, where customers have current and savings accounts; banks then cross sell other financial services such as investment advice, mutual funds, etc. Similarly, up-selling is specific to the particular product i.e. selling a more expensive and profitable product to increase the value of the sale (MarketingProfs, 2005). In the banking industry context, both cross-selling and up-selling are components of sales department which helps sales representatives at banks to understand which products and services customers have already purchased. Such information is further used to accurately predict which products and services customers are most likely to purchase in the future (Chaudhry, 2004).

2.9.2.3  **Sales Force Automation (SFA)**

According to Kincaid (2003), sales force automation (SFA) is CRM software designed to facilitate the sales process. It helps sales representatives at the banks to be more effective and efficient in front of their customers by looking at their previous account history. These representatives then provide or sale the best available products and solutions based on the previous knowledge of their customers. The author further mentioned that many of the SFA implementations fail because they are launched without remembering what the sales force is really for. Zeng, *et al.*, (2003) in their work presented SFA as a characteristic of CRM which can be used for any organization. According to the authors, SFA include automation of sales promotion analysis, automatically tracking a client’s account history for repeated sales or future sales, and coordinating sales, marketing, call centres, and retail outlets etc.
2.9.3 Service and Support

Today, with the help of new technologies and with the use of internet, customers are more knowledgeable having variety of options when it comes to buying products. They can easily switch to other company if they find better products and services. In short, customers are more demanding; hence, it is becoming more difficult for banks to meet with their expectations. Banks must realize that customer retention is as important as customer acquisition. The only way to survive in the marketplace is to maintain good relationship with the existing as well as with the new customers by providing better customer service and support. Ngai (2005) argued that high quality customer service and support is the key to improve customer retention rates and maintaining good relationships with the customers. Customer service and support is an important area of banks having several CRM components. Some of them are presented in the following sections.

2.9.3.1 Contact Centre (also known as Call Centre)

According to West (2001), in the majority of organizations especially in the banking industry, a contact centre of telephone agents is the primary mechanism for providing service and support to the customers. Solutions exists that helps contact centre agents to be productive by automatically distributing calls, allowing customers to get answers to their common questions through interactive voice response (IVR) systems and other telephone integration. The author further argued that the contact centres are equipped to handle web chat and collaboration as well as respond to their customers’ e-mails.

2.9.3.2 Quality Management

According to the definition from Wikipedia (2009a), quality management can be considered to have three main components: quality control, quality assurance, and quality improvement. Quality management is not only focused on product quality, but also the means to achieve it. Quality management therefore uses quality assurance and control of processes as well as products to achieve more consistent quality. In a web
article by Addington (2004), in which the author relates quality management with customers’ feedback; the author explained that the customer feedback is a requirement for any organization if it is engaged in executing a quality management system. Listening to the voice of customers and gathering the qualitative data is a key element to the success of the quality management program. The author further argued that by measuring customer feedback, banks can easily determine how current technology solutions offered by them are performing and what solutions may be applied to provide better service and additional sales to customers. Usually at banks, call centres gather customers’ feedback with the help of different surveys by using their automated system. Using customers’ feedback, banks can also test the performance of their newly instituted systems i.e. new speech applications at the call centres, etc., and their success by how well it measures up to customer expectations via automated surveys. The use of customer feedback in the speech project life cycle, can give additional insight into the human-interaction factors of the new system.

2.9.3.3 Customer Satisfaction

Ideally, for any organization, customer satisfaction can be achieved by providing the best quality of service and support to its customers. Khalifa and Shen (2005) in their work focused on the effects of CRM on the customer satisfaction. The authors argued that in the context of CRM, customer satisfaction is an immediate objective that also determines the medium-term goals (e.g. customer retention and loyalty) and subsequently the bottom-line (i.e. profitability). Indeed, satisfaction has been shown to have significant effects on customer loyalty, customer retention, and profitability. The authors further argued that the only way to study the CRM success is to examine the relationship between CRM and customer satisfaction.

2.9.4 IT and IS

IT and IS plays a key role in any organization and is considered as an important area in the development of CRM. In banking industry, several technological issues related to (computer hardware, backup hardware, network hardware, CRM software, telecommunication products used at call centres, security systems, databases, data
warehouses, etc.) are handled by IT and IS department. According to (Ngai, 2005), appropriate CRM strategies can be adopted through the assistance of technology, which can manage the data required to understand customers. Moreover, the use of IT and IS can enable the collection of the necessary data to determine the economics of customer acquisition, retention, and the life-time value. Some of the known components of CRM related to IT and IS are described in this section.

2.9.4.1 Hardware and Software

Generally, internal communications (staff to staff interaction via email) and external communication (interaction with the customers using CRM packages via call centres) in the banks is performed using computer hardware. Such communication is possible with the help of special licensed software. If these hardware and software are not up-to-date, the whole communication process slows down. Bergeron (2002, p.81) argued that the continual upgrading of computer hardware and software is essential and is a part of every modern CRM operation. The author further explained that computer hardware and software are interdependent. Not only is either one is useless by itself, but most systems also use some combination of software and hardware to get things done. For instance, voice recognition software at the bank’s call centre requires a microphone, a sound card, and software. In short, the performance of the CRM system depends on how well the hardware and software works together. Therefore, it is important for IT staff at the banks to keep upgrading their hardware and software in order to avoid any unpredicted problems.

2.9.4.2 Database Management

Database management is a software interface between the customer service representatives and the data stored in a computer system is a database management system (DBMS). The DBMS stores, processes, and manages customers’ data in a systematic, economic way. It simplifies and regulates the process of working with the records and files of a database by providing tools for ensuring security, querying relations among different data, and removing duplicate data. Because it provides
access to customer, product, service, and employee data, a good DBMS is a prerequisite for any significant CRM effort (Bergeron, 2002, p.78).

2.9.4.3 Data Warehousing

Data warehousing is more precisely described by Bergeron (2002, p.79) in his book. According to the author, a typical data warehouse for a large organization (such as a bank) is a central database that can provide customer service representatives, call centre managers, administrators, and other authorized users with access to a variety of information. A data warehouse, which is based on DBMS, is different from a simple database; it provides customer service representatives with data from a variety of otherwise non compatible sources, such as a separate customer database, product database, order database, and inventory database. In a CRM enabled organization, data warehousing software is not a single program but is typically a suite of software tools that can be used to extract data from disparate databases, check for errors and duplicate data, and store the data in a data warehouse. As illustrated in Figure 2.5, a typical data warehouse incorporates data from different applications into one accessible database (Bergeron, 2002, p.79).

![Figure 2.5: A Typical Data Warehouse Containing Data from Several Applications (Source: Bergeron, 2002, p.79).](image-url)
2.9.4.4  Web Data Mining

Web Data mining is also an important component of CRM in IT and IS area and is defined as the process of extraction and analysis of useful information and patterns from the web data. Basically, it extracts the useful information from the web data such as server access logs, user profiles, and user transactions etc. (Ahn, et al., 2003; Cooley et al., 1997). Using data mining techniques, IT and IS personnel at the banks extract the necessary information of their customers from the internet to perform further analysis in order to provide efficient service.

2.9.4.5  Security Systems

For organizations especially banks and other financial institutions, customers’ data is considered as most valuable information because customers share their financial and personal information by having trust on their service provider. Securing customer information should be the top most priority for any organization. Failure to do so would result the loss of customers as well as business. With the use of new technologies, several security products are available for organizations to secure customers valuable information. Basically, these security products encrypt the information such that those bank employees with access to decryption key can only read customers’ information. According to Kincaid (2003), security systems are used for keeping customers’ information safe from anyone with whom you have not planned to share it. Security systems involve finding the right products and technology and using them. When the customers’ data is stored in the bank’s databases, it should be protected with a combination of a firewall, encryption, and passwords.

2.10  Major Software Vendors of CRM for Banking Industry

Several CRM vendors such as SAP, Oracle’s Siebel Systems, Salesforce.com, Amdocs, Microsoft, SSA Global Technologies (formerly known as Epiphany) etc., are available for small, mid-size and large organizations. For banking industry, SAP,
Oracle’s Siebel Systems, and Salesforce.com are very popular for providing complete banking solutions. Based on the recent results published in Gartner studies (Gartner, 2009), as presented in table 2.2, these vendors were selected as the top three CRM software vendors for generating large revenues amongst many others. Therefore, in this section, we will further discuss these top CRM vendors and the business solutions they offer to the banking industry.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP</td>
<td>2,055</td>
<td>22.5</td>
<td>2,072</td>
<td>25.5</td>
<td>-0.8</td>
</tr>
<tr>
<td>Oracle</td>
<td>1,475</td>
<td>16.1</td>
<td>1,320</td>
<td>16.2</td>
<td>11.8</td>
</tr>
<tr>
<td>Salesforce.com</td>
<td>965</td>
<td>10.6</td>
<td>676</td>
<td>8.3</td>
<td>42.7</td>
</tr>
<tr>
<td>Microsoft</td>
<td>581</td>
<td>6.4</td>
<td>332</td>
<td>4.1</td>
<td>75.0</td>
</tr>
<tr>
<td>Amdocs</td>
<td>451</td>
<td>4.9</td>
<td>419</td>
<td>5.2</td>
<td>7.6</td>
</tr>
<tr>
<td>Others</td>
<td>3,620</td>
<td>39.6</td>
<td>3,311</td>
<td>40.7</td>
<td>9.3</td>
</tr>
<tr>
<td>Total</td>
<td>9,147</td>
<td>100.0</td>
<td>8,130</td>
<td>100.0</td>
<td>12.5</td>
</tr>
</tbody>
</table>

Table 2.2: Worldwide Vendor Revenue Estimates for Total CRM Software (Millions of U.S. Dollars) Source: (Gartner, 2009)

2.10.1 SAP

According to an article in (SAP, 2005) website, SAP was founded in 1972 and now it is one of the world’s leading provider of business software solutions. Today, more than 27,000 customers in over 120 countries run more than 91,500 installations of SAP® software; from distinct solutions addressing the needs of small and midsize businesses to enterprise-scale suite solutions for global organizations.

SAP for banking is an industry solution that combines mySAP™ business suite solutions and tailored functionality to meet the unique demands of financial institutions. With more than 550 customers in 60 countries worldwide, SAP for banking industry provides an integrated set of tools and automated processes to manage every aspect of the front-office and back-office banking environment; from high-volume transactional banking processes and customer relationship management to financial accounting, cost controlling and profitability, and risk analysis. Based on
the open architecture of the SAP NetWeaver™ integration and application platform, SAP for banking helps companies expertly manage transactions and relationships across the institution to quickly identify and exploit market opportunities and easily tailor new products to the specific needs of individual customers (SAP, 2005).

2.10.2 Oracle’s Siebel System

According to the definitions from (Wikipedia, 2008b), Siebel Systems Inc. was a software company which was principally engaged in the design, development, marketing, and support of CRM applications. The company was founded by Thomas Siebel in 1993. At first, the company was mainly known for its sales force automation products; then the company expanded into the broader CRM market. By the late 1990s, Siebel Systems was the dominant CRM vendor peaking at 45% market share in 2002. On 12th September 2005, Oracle Corporation announced that it had agreed to buy Siebel Systems for $5.8 billion. Siebel is now a brand name owned by Oracle Corporation.

Oracle’s Siebel Customer Relationship Management (CRM) application for banking industry provides the power and flexibility to get the right information to the right person at the right time. With more than 20 industry specific solutions and fully hosted on demand or installed on premise deployment options, there is a solution to meet the unique needs of any organization; from fortune 100 enterprises to small businesses (Oracle, 2008).

2.10.3 Salesforce.com

Salesforce.com is one of the pioneers of the Software as a Service (SaaS) model of distributing business software, in which access to business software is purchased on a subscription basis and hosted offsite. They are best known for their Customer Relationship Management (CRM) products, which it delivers to businesses over the internet using the SaaS model. The company was founded in 1999 by former Oracle executive Marc Benioff. In June 2004, the company went public on the New York Stock Exchange under the stock symbol CRM. For banking sector, Salesforce.com's
CRM solutions is broken down into several modules such as: sales, customer service, partner relationship management, service and support, IT, retail, marketing, content, ideas and analytics (Wikipedia, 2009b; Salesforce.com, 2009).

2.11 CRM Success Stories in the Banking Industry

“Many studies have reported that banks which develop a customer-centric strategy get higher profits (Formant, 2000; Melnick, et al., 2000). Starting from the early services of ATMs, banking industry then began to offer telephone banking, network banking, customer care centres, etc., which have gradually increased the investment in front-office systems, which itself is directly related to the customers” (Liu, 2007). Secondly, it is also seen and discussed by numerous researchers in their work that several banks in the developed countries such as the Unites States, Canada and Europe etc. are ahead in responding to the customer related queries and provide better customer service at branch, through call centre, and even using the internet and phone banking. Hence, these banks have produced quite a number of CRM success stories. On the other hand, very few banks in the developing countries have produced success stories with relate to the proper implementation of CRM. Therefore, in this section, we cover some of the CRM success stories in banks of developed countries i.e. Canada, USA, and South Africa. These leading banks are known for their best customer service and support. Similarly, at the end of this section, a CRM success story related with the banks in developing country i.e. Pakistan is also presented.

2.11.1 The Royal Bank of Canada

The Royal Bank formerly known as Royal Bank of Canada is one of the North America’s leading diversified financial services companies and Canada’s largest bank. In total, it serves more than 12 million personal, business, and public sector clients worldwide having its offices in more than 30 countries. According to a paper by Khirallah (2001), in which the author presented the case study based on the CRM success story of the Royal Bank of Canada. The author discussed that the bank’s success with the CRM can be traced to a number of factors. Firstly, the bank was an
early adopter of a client information file (CIF) over 20 years ago. Secondly, the bank has aggressively used its customers’ data (a rolling 3 months of detailed transaction data and 18 months of summarized customer data online in its data warehouse) to better understand its customers and create meaningful and actionable segments and customer strategies. Thirdly, the bank’s CEO and executive team vocally and visibly support the bank’s CRM efforts. Finally, the Royal Bank is willing to experiment with CRM and learn from its mistakes. The bank has led an aggressive effort to manage the quality of its interactions with the customers. In pursuing a CRM business strategy, the stated objective of the bank is:

To capture the full potential of customer base through the use of customer information to deliver the right solutions in a consistent, professional manner at every point of contact (Khirallah, 2001).

At Royal Bank, gathering and mining customers’ data to better understand and serve customers is a critical imperative that is a yielding success (Khirallah, 2001).

2.11.2 Bank One of the United States

According to Liu (2007), “Bank One is a part of the new JPMorgan Chase created on July 1, 2004, and is famous for its Service Quality. It takes its value discipline as the financial institution which provides omni-bearing services, and adjusts its strategy to develop CRM and the internet from mergers and acquisitions (M&A). Furthermore, it has build up its virtual organization with strategic alliances and collaborative relationships (Intel, Metro Group, Merchants Group, etc.) to find out and satisfy the customers’ needs quickly and directly. It has expanded its services with the promise of no satisfaction, no charge (Liu, 2007).

2.11.3 Standard Bank of South Africa

According to an article in Innovative Systems (2007) website, that covers the CRM success story of Standard Bank of South Africa. The article explained that the Standard Bank of South Africa was established in 1862 and now has over 1,000
branches, affiliated offices, and around 33,000 employees worldwide. The bank is the second largest banking group in the Republic and has the reputation of being the most technologically advanced. It was the first bank to start automated teller machines (ATMs), and has experimented with technologies such as: biometric fingerprint identification, and virtual banking with touch-screen terminals. Today, the bank is expanding rapidly because of its attention towards the good customer service (Innovative Systems, 2007).

The Challenge

While competing with the new banks and around 50 international banks that had moved into the country, Standard Bank began a review of its customer base and product offerings. The major challenge to the bank was to identify which customers were profitable and which were not, and then apply to each customer the appropriate service. The bank decided to restructure itself into four specialized units: Retail Banking, Regional Banking, Commercial Banking, and Standard Corporate and Merchant Bank. This moved away from the one-size-fits-all approach to one which concentrated on giving customers what they needed and could afford. This progressive change meant that managers needed to be more aware of their customers and required accurate, up-to-date information quickly. The challenge was that this information resided in at least 18 different source systems. (Innovative Systems, 2007)

Extending the concept

The bank set up the data warehouse on a testing basis with a small group of users. It proved so successful that it was quickly extended to the whole marketing and customer service departments. However, the initial linking of records from the warehouse to overcome duplicate records had been done using the bank's own deduplication tools which were found to be too rigid.

Having used Innovative Systems' standardizing process to good advantage for some years, Standard Bank decided to use their advanced individual linking capability for
personal customers and corporate linking capability for corporate accounts. These products provide a true picture of client relationships by eliminating duplicate records, and would be a vital preparatory step to loading the enterprise-wide data warehouse (Innovative Systems, 2007).

**Benefits**

The data warehouse has become fundamental to the bank and because of the accurate and complete client information is critical to the data warehouse, data management is also critical to the bank’s success. Budgets, targets, and forecasts, supported by a five-year strategic plan, were finalized and approved in the bank based on the segmentation undertaken in the Enterprise Data Warehouse. Now that the system has been running for a while, Standard Bank has begun to realize many significant benefits by providing a true picture of the bank’s customers. Some of the key ones are dramatic changes in the way the bank sells and services customers, supported by technology. It enables a much more informed, personal and focused approach to working with customers (Innovative Systems, 2007).

### 2.11.4 Union Bank (now merged with Standard Chartered Bank)

The success story of Union Bank is presented by Genesys digital library (2005). According to the paper, Union Bank was established in 1991 having its headquarters in Karachi, Sindh, Pakistan. Before its recent merger with Standard Chartered Bank, the bank was Pakistan's eighth largest bank having 65 branches in some 22 cities, and around 400,000 customers. In 2006, Standard Chartered Bank acquired 81% of Union Bank's shares for US $ 413 million. The merged bank is named the *Standard Chartered Bank (Pakistan)* and is now Pakistan's sixth largest bank.

**The Challenge**

At start, the bank had no centralized customer service or telephone-based automated services available. Therefore, customers’ data could not be tracked easily. To resolve the situation, the management team decided to create a call centre environment to
make the bank more accessible to its customers’, and the customers’ data to be easily accessible to the staff. Another goal of the bank was to expand the number of products available (e.g. credit cards) to the customers’ to satisfy their demand and increase revenues.

The Solution

In May 2001, Union bank introduced its call centre, followed by integration with NCR’s data warehousing solution, called Teradata. According to the head of contact centre at the bank, “Teradata is capable of holding retrieving the complete banking history of all our customers, compared to the three months’ worth of data that was previously available to staff. This makes it possible for managers to study behavioural trends and for the agents to quickly access the data they need when they are dealing with customers on the phone. So, at every level within the bank, decisions are made more quickly and based upon better information”.

Results

According to the paper, a recent survey conducted by the bank after successfully implementing its call centre revealed that 87% of the bank’s customers are highly satisfied with the service. Also, the bank’s customer base has increased since 2001, and more people are moving from over-the-counter services to the telephone-based services. The solution has led to cost savings and more satisfied customers and staff (Genesys digital library, 2005).

2.12 Conclusions

This chapter provided the contextual background required for the current research. In the first part of this chapter, we provided some basic definitions such as customer, relationship marketing (RM), and customer relationship management (CRM); followed by the discussion based on different types of CRM i.e. operational, analytical, collaborative, and strategic CRM. Then, we focused on the use of CRM
and its potential for the banking industry which includes work done by several researchers in the past and present about CRM in the banking industry of developed and developing countries i.e. UK and Pakistan (in particular), and based on the initial investigations, we also highlighted the problems associated with the current use of CRM within the banking industry. Multiple contact channels of banks such as branch banking, phone banking, ATM, and internet banking are also discussed. Then, major components of CRM that are commonly used at bank’s contact channels and at bank’s internal operational departments are thoroughly presented. These components are categorized based on the designed taxonomy comprises of several CRM components that are classified into four major operational areas of a bank i.e., (i) Marketing, (ii) Sales, (iii) Service and Support, and (iv) IT and IS. Ideally, in banks, CRM is implemented across these four operational areas. CRM components in each area are thoroughly presented. Finally, some well known vendors of CRM for banks i.e. SAP, Oracle’s Siebel Systems, and Salesforce.com are discussed and the success stories of the CRM implementation in the banking industry were also presented in the last part of this chapter.
Chapter 3

Theoretical Framework

The contents of this chapter fall chiefly into two parts. The first part starts with discussion of the concept of philosophy in the IS discipline. Then, we present an overview of research theories that are useful for social science research and the purpose of using a social theory in this study. The chapter introduces socio-technical theory as the main theory used in this study to analyze the research findings and make suggestions for the banking sector in order to make proper use of CRM system. A thorough discussion about the theory, its design principles, and its previous contributions to different organization over the past several years is also presented in this chapter. Then, some other social theories are discussed which were initially considered for the purpose of the current research. The second part of the chapter presents several CRM models which were previously proposed by several researchers for different organizations. In the last section of the chapter, an ideal CRM model is presented, taken from the existing CRM models, which is used in this study as a frame of reference and also used to analyze the findings of the current research.

3.1 Philosophy in Information Systems Discipline

Philosophy in information systems (IS) discipline invites an investigation of the following terms: philosophy, information, systems, information systems, and social theory. The term Philosophy is defined by several scholars in different ways; some of its definitions are presented in (Oxford English Dictionary, 2010) as:
A particular system of ideas or beliefs relating to the general scheme of existence and the universe; a philosophical system or theory (Oxford English Dictionary, 2010).

Similarly, it is also defined as:

The branch of knowledge that deals with the principles of human behaviour, the study of morality, and ethics (Oxford English Dictionary, 2010).

Previously, Lee (2004) proposed that any discussion of philosophy that stands beside a social science research would require consideration of the following terms: ontology, epistemology, methodology, and method. One of the argument in these terms made by several researchers is that the ‘-ology’ suffix of the first three terms indicates that they refer to the fields of study, whereas the common usage of these terms indicates that they refer to the subject matters of study. For instance, it has been said that the term ‘history’ can refer to both a subject matter (the past) as well as the scholarly field that studies it (the academic discipline of history). The author further explained these four terms as:

**Ontology** is “that branch of philosophy which deals with the order and structure of reality in the broadest sense possible” (Angeles, 1981). According to Lee (2004), “ontology comprises its members’ foundational beliefs about the empirical or real world that they are researching”. For instance, scientific researchers believe that the physical world can only be approached or explained through quantitative methods, whereas the social science researchers believe that certain entities such as shared beliefs held by a long-established group of people, their values, their social culture and structure etc., influence the real world even though these entities are invisible, intangible, and in a real sense subjective in nature.

**Epistemology** refers to “the nature of human knowledge and understanding that can possibly be acquired through different types of inquiry and alternative methods of investigation” (Hirschheim et al., 1995). It can be sometimes defined as the theory or science of knowledge. It is a broad and high-level outline of the reasoning process by
which a school of thinking performs its empirical and logical work. For instance, unlike scientific researchers, social researchers believe that scientific investigations of socially constructed realities such as a culture of a given organization, calls for reasoning processes different from those used in scientific examinations of animals, plants, and rocks. Also, ontology can lead to more than one epistemology. For example positivist ontology can lead to the highly mathematical formulae as well as reasoning methods that framed Darwin’s theory of evolution (Lee, 2004).

**Methodology** on the other hand is a less high level than epistemology. A methodology refers to “a more specific manner in which to perform both empirical and logical work” (Lee, 2004). The author further explains that the same epistemology can have several methodologies. For example, epistemology based on social aspects will recognize the ethnography of (Van Maanen, 1983) and the grounded theory of (Strauss and Corbin, 1998) to be methodologies. Finally, a *method* can be described as “a process through which work can be carried out” (Lee, 2004). Moreover, through different steps, a method can be used as a device for uncovering facts and knowledge.

Similarly, in *Information Systems*, the term *Information* has traditionally been seen as a ‘processed data’ while later on, soft and interpretive approaches have taken information to be ‘data plus meaning’; whereas, the term *Systems* has always come to denote ‘computer systems’ (Mingers, 1995). The author further discussed the terms information systems (IS) and information technology (IT); the term information systems can mean the same as information technology where both these terms sometimes simply designate ‘the computer’. An information system is not the information technology on its own, but the system that emerges from the mutually transformational interactions between the information technology and the organization. As seen in Lee (2004), Bostrom and Heinen (1977), in their work explained these terms as:

*Information system is that which results from the intervention of an information technology into an already existing social system, as much as an information system is that which results from an intervention of a social system into an already existing information technology.*
Lee (2004) elaborated their idea as:

*Information system is the result of an information technology enabling an organization, as much as an information system is the result of an organization enabling an information technology.*

Similarly, in *Social Theory*, the term *Theory* comes from the origins of natural sciences and those sciences that follow them. In the natural sciences, a theory is considered as a set of independent and dependent variables which relates to one another by the rules of mathematics or formal logic (Lee, 2004). For instance, Popper (1965) suggested an idea that the propositions’ making up a scientific theory has to satisfy four different conditions. First, they must exhibit internal logical consistency. Second, they must be empirically testable. Third, they must survive attempts at empirical testing. Fourth, they must be at least as explanatory or predictive as any rival theory. These ideas for theory can suit those social sciences that model themselves on the natural sciences. However, these ideas are inadequate for those researchers who focus on the social dimension of social sciences.

The term *Social* in *Social Theory* requires some additional clarification. Some researchers believe that any theory about the human beings is a social theory. Others believe that it is not about the individuals; it is about shared, socially constructed institutions that endure even when the individuals who are momentarily present are replaced by the new ones (Lee, 2004; Popper, 1965).

### 3.1.1 Why Social Theory (Socio-technical Theory) is Useful for the Current Research

As this research is focused on studying and analyzing the current use of CRM (which can be seen as a technology) within the banking industry of both Pakistan and the UK. In order to investigate and analyze how different banks’ employees in both countries interact with their customers, as well as how different departments within these banks collaborate and communicate with each other using CRM, it is necessary to carry out a social science research which is more useful to attain the research findings.
Generally, social theories are helpful in conducting social science research. For instance, Reeves et al., (2008) talked about the advantages of using theories in social science research. The authors explained that: “social theories provide complex and comprehensive conceptual understandings of things that can not be pinned down. For example, how societies work, how organizations operate, and why people interact in certain ways. The authors further explained that social theories give researchers different lenses through which they will look at complicated problems and social issues; focusing their attention on different aspects of the data and providing a framework within which to perform their analysis”.

Amongst several social theories, the Socio-technical Theory (STT) provides a comprehensive and a structured view of how different departments should work within the organization (i.e. the social system) while using different technologies such as: CRM, ERP, SCM etc. (i.e. the technical system). The concepts behind the theory are useful for this study as it covers both social and technical aspects within the organization (i.e. in our case, the use of CRM in the banking industry can be seen as a technical system; while the bank employees or different bank departments that are using the CRM system can be referred as a social system).

Furthermore, the social theory is helpful as it can be used to propose suggestions to the organization (i.e. banks) to make proper use of technology or to improve the current use of technology (i.e. CRM) while considering the social factors (i.e. how people behave with the use of these latest technologies within the organization). Since, the basic concept of socio-technical theory fulfils the requirements of current research; therefore, it is further selected to analyze the research findings and to propose suggestions to the banking sectors of the two countries (i.e. Pakistan and the UK) in order to make proper use of CRM system. Furthermore, the concepts of the theory are also useful to answer one of the research questions of this study.

➢ **Research Question 2**: How would the design principles of Socio-technical theory benefit banking industry while using the latest technologies (CRM) in the increasingly changing work environment?
A detailed account of socio-technical theory and work done by several social scientists using the ideas of the theory is presented in the following section.

### 3.2 Socio-technical Theory

#### 3.2.1 Historical Overview of Socio-technical Theory

Socio-technical theory (STT) or Socio-technical Systems (STS) is more than half a century old. It was founded by a group of researchers, social scientists, therapists, and consultants who came together at the end of Second World War and formed the Tavistock Institute of Human Relations at London in 1946 and its concept was to assist soldiers to regain their mental stability and health after the war. This was the initial focus and orientation of these members of the Tavistock institute, although they were also interested in applying their ideas to the workers in the industry (Mumford, 1985).

Enid Mumford (1985, 2006) presented an extraordinary work on socio-technical theory and in most of her work she covered the complete history of the theory along with its design aspects, and the impacts and implications of information and communication technologies. The author argued that the Tavistock pioneers believed that their research projects should not only be attempts to increase knowledge, but that they should also embrace the improvement of work situations that were unsatisfactory in human terms. This decision led them to develop an approach and methodology which they called socio-technical. This meant that technology, which, in their definition, covered both machines and the associated work organization, should not be allowed to be the controlling factor when new work systems were implemented. Also, equal attention must be given to providing a high quality and satisfying work environment for the employees. In practice, a primary objective of the socio-technical system is to ensure that both technical and human factors should, whenever possible, be given equal weight in the design process. One of the important components of socio-technical design is that employees who used the new system should be involved in determining the required quality of working-life improvements (Mumford, 2006).
Another remarkable work on socio-technical theory was done in the late 1970s by (Bostrom and Heinen, 1977). In their research work, the authors highlighted major management information systems (MIS) related problems and challenges in the organizations and how these problems can be rectified using socio-technical system. The authors argued that the socio-technical system assumes that an organization, or organizational work system, (e.g. a department), can be described as a socio-technical system. In other words, a work system is made up of two jointly independent, but correlative interacting systems i.e. the social system and the technical system. The technical system is concerned with the processes, tasks, and technology needed to transform inputs and outputs.

On the other hand, the social system is concerned with the attributes of people e.g. attitudes, skills, values etc., the relationships among people, reward systems, and authority structures. It is assumed that the outputs of the work system are the result of joint interactions between these two systems. Thus, any design or redesign of a work system must deal with both systems in an integrated form. Figure 3.1 represents these two jointly independent, but correlative interacting work systems.

![Figure 3.1: The Interacting Variable Classes within the Work System (Source: Bostrom and Heinen, 1977, p.25)](image-url)
Recently, Cartelli (2007) a researcher in didactics in his work also discussed these two subsystems in his own way. The author argues that socio-technical theory hypothesizes the presence of two subsystems in every organization or corporate; which are: the technical sub-system and the social sub-system. According to the author, “many researchers at the Tavistock Institute in London, while studying the resistance of the work force to innovation and especially to the introduction to the technological systems for work automation, suggested that a fit between the two sub-systems was needed for the overcoming of the workers’ difficulties and for the achievement of the expected benefits from management. The features that many scholars hypothesized for the two sub-systems were:

- The technical sub-system is much more than the sum of the equipment in the organization; it can be identified with the process responsible for the conversion of system inputs into system outputs. Also, the conversion process must be continuously controlled to be sure that system goals can be achieved.

- The social sub-system on the other hand, is much more than the set of technical control tasks to be performed by people. Such technical tasks are combined with individual jobs and with responsibilities assigned to groups. Any analysis and redesign of the social sub-system implies a revision of the jobs and of the corresponding social roles, for the implications they have on the technical sub-system and for the extent to which they enhance or reduce the quality of working life for the individuals and the groups involved in production” (Cartelli, 2007; Watson, 2004).

The above authors further argued that “the basis of socio-technical approach is that the fit is achieved by a design process aiming at the joint optimization of the subsystems; any organizational system maximizes performance only if the interdependency of the subsystems is explicitly recognized. Therefore, any design or a re-design must seek out the impact each subsystem has on the other, and planning must aim at the achievement of superior results by ensuring that all the subsystems are working in harmony” (Cartelli, 2007).
3.2.2 Evolution of Socio-technical Concepts and its Design Principles

As seen in Mumford (2006), from the start of 1950s, several socio-technical researchers have tried to test and develop the theory. Later on, Open System was an initial and important concept of the socio-technical theory which recognized that every socio-technical system is deeply rooted in its surroundings and this has a strong influence on the way it behaves. For instance, if the environment is the department of a university, it will also include the surrounding departments (e.g. other academic departments) and all other activities that enable the university as an organization to function effectively. In addition to the internal environment, it will also include the external environment of the university. Such notion of an ‘Open System’ was greatly influenced by the work of the European biologist (Bertalanffy, 1950). This open system concept accepted the theory of ‘homeostasis’ which suggested that systems evolve and become increasingly complex but eventually settle for a steady state in which they can accommodate change without disruption (Davis and Taylor, 1972). The idea of homeostasis is still argued today. The opponents of this theory argued that stability is not inevitable; problems may happen in systems as they progress from one state to another.

Mumford (2006) further argued that the idea of open systems regarded both technical systems and social systems as one inclusive system. The researcher or practitioner must always consider them together whereas, the relationships between the two systems, and between them and the external environment, must also be carefully analyzed. Such approach led to the development of a complex method for analysing work systems, which went through a number of several stages. The groups of tasks or unit operations which can be fitted logically together to become a work activity were first needed to be identified. Each of these unit operations has the responsibility of such work group. Next, each workgroup has the power to make progress in the production process if they find necessary. Supporting activities for instance maintenance and purchase of supplies etc., were also brought into the analysis and these were also the responsibility of work group. Also, the key management functions such as coordination and control of the system were left to the executives. Attention
was given to the interpersonal relationships and workers were also asked to explain how they saw their roles.

The socio-technical ideas were then developed by the innovative thinking of Fred Emery, who was an earlier member of the Tavistock Institute in London. The author produced the concept of ‘redundancy of functions’ or ‘multiskilling’. According to Emery (1978), individuals or group workers must have the aptitude to perform several different tasks even though they do not require them in daily working life. Emery believed that such redundancy would make the organization more responsive to coping with undesirable occurrences. The author also believed that unstable environment needs redundancy as it enabled the organization to be adaptive, and that such redundancy was also easier to achieve in self-managing groups rather than in individual work arrangement. These ideas by the author resulted in the development of adaptive strategic planning. Therefore, planning now involved the combination of the value and goals of the organization. This would require the recognition of shared values.

Similarly, as seen in Mumford (2006), Herbst (1974) developed a new concept of minimal critical specifications. The idea of this concept was that “workers should be told what to do but not how to do it; workers should take their own initiative. The author also developed an alternative to work hierarchies which involved work groups, matrices, and networks. Whereas in a work group, all group members should learn and perform their work tasks, in matrices a number of tasks are performed by all the group members and other tasks require specialists. In networks, workers collaborate from a geographical distance. These approaches were used and developed in 1962 in the Norwegian Industrial Democracy Project”.

According to Mumford (1985), the use of socio-technical design methods of analysis in many different work situations led the Tavistock group to develop a set of principles for good design. Cherns (1976) in an article in human relations described these principles which were then presented by (Mumford, 1985) as:
Compatibility: In this first principle, the author states that the design process must be compatible with its main objectives. This implies that, if the objective is to establish democratic work structures (DWSs), then democratic processes must be used from these (DWSs).

Minimal Critical Specifications: This principle contains both negative and positive aspects. The negative aspect is that ‘no more shall be specified than is absolutely essential’. This means that a considerable amount of discretion is left to a work group. The positive aspect is that ‘what is essential needed to be identified’.

The Socio-technical Criterion: This is that deviations from expected norms and standards must be controlled as closely as possible. Problems of this kind must be resolved by the team which is being affected and not by the supervisor.

The Multi-function Principle: This principle is that people should not be given fractionated tasks. It is more adaptive and less wasteful for each individual or group to have a range of tasks.

Boundary Location: This principle is that in an organization, departmental boundaries have to be drawn. In the work process, boundaries must be set where work practices pass from one group to another. All groups should learn from each other despite the existence of the boundary.

The Principle of Information Flow: In most of the organizations, information about the company’s efficiency etc., is usually collected and given to the top management. However, it is preferable that such information should go towards the workgroup whose efficiency is important and is being monitored.

The Principle of Support Congruence: The social support system must be designed to support social behaviour. If workers are expected to cooperate with each other, management must also show the supportive behaviour.
➢ *The Principle of Design and Human Values*: The objective of the organizational design should be to provide a high quality of working life for the members. The high quality of work requires:

- job to be demanding
- opportunity to learn on job
- involves decision making
- social support
- opportunity of relating work with social life
- opportunity to a desirable future

➢ *The Principle of Incompletion*: This final principle states that the design is an iterative process which never stops. High demands in the work system require continual rethinking of structures and objectives (Cherns, 1976; Mumford, 1985).

Another author named Pasmore (1985) wrote an article in Human Relations in which he provided a positive assessment of socio-technical theory and what the theory has achieved over the past three decades. In his study, the author suggested that the work system must need to be viewed as a group of activities to facilitate the whole, and not as a set of individual jobs. In this way, the work group will become more significant than individual job holders. Control must be given to the work group members not to the external supervisors. Such practice would increase the efficiency as well as democracy within the organization. The author also discussed the concept of multi-skilling which was described by the author as work group members should have more skills than a normal production required. Lastly, as the core objective of socio-technical theory is to spread knowledge within the organization; work system should be designed in such a way that learning would take place within both group workers and the individual job holders.

The design principles of the socio-technical theory were first adopted by the organizations in 1960s; with the passage of time, these principles became more helpful and were then applied in later decades by several organizations in different
countries around the globe (Mumford, 2006). In the following section, we present some examples of international developments of socio-technical theory.

### 3.2.3 International Developments and Recognition of Socio-technical Theory

**From 1960s Onwards**

Cooper and Mumford (1979) in their work argued that European countries were the first initiators of socio-technical ideas and its design principles. These Scandinavian countries such as Norway, Sweden, and Denmark etc., used different methods and emphasized on different aspects of work; these countries had a similar set of values. Within the organizations of these countries, both management and trade unions were required to cooperate with each other to achieve improvements in all levels of work. One of the major focus in these organizations was that workers at all levels should participate in the decision making process, and should be ready to work together to solve any unforeseen problem.

Throughout Europe, many companies were interested in socio-technical design principles for many reasons. During that period, the European industry was expanding and different companies were having labour problems; they were having problems with obtaining staff and were scared of losing the ones they already had. Researchers and engineers were becoming interested in designing new and flexible production processes. Several human-computer interaction groups started to take interest in the socio-technical approach whereas many academics were concerned with its adoption within the industry. From the academic circle, a Dutch expert named Geert Hofstedte believed that the humanization of work could become the third industrial revolution. According to Hofstedte (1979), the first industrial revolution was the move from muscle power to machinery in the 19th century. The second revolution was the arrival of information technology whereas; the third was the socio-technical ideas and its design approach towards work. The following section describes the experiences of the principle participating countries in more detail as presented by Mumford (2006).
Norway was the major follower in the work humanization movement. In 1962, Elinar Thosrud, along with other researchers initiated the Norwegian Industrial Democracy Programme which was assisted by Fred Emery. The programme was focused on three phases: the first phase was to create improved representative systems of joint consultation. The second phase involved the creation of worker directors; and in the third phase, the programme was progressed to the workplace democracy with the workers gaining the authority, power and resources to change their own work organization when and where it was required. This programme was of great success and later on, it was adopted by the major organizations in Norway.

At the workplace in Denmark, the cooperation between management and workers about job content and job design began in several Danish companies after the World War II. Later on in 1970s, an agreement was made between the Danish Employers Confederation and the Danish Federation of Trade Unions which was focused on both production and job satisfaction. This agreement gave workers the facility to become partners with their employers in the decision making process of the organization. Also, through this agreement, workers were also allowed to design their own work situations. Several factors influenced this move towards work humanization. They included increased interest from both management and unions, who both saw advantages in a more contented work force. By applying these policies within organizations, the results were encouraging but on the other hand, a number of problems appeared. For instance, not all groups of employees had the same interests and wanted the same solution, other problem such as lack of support from the top management. Danish experience suggested that such problems should be rectified for success (Mumford, 2006).

France was also interested in the humanization of work during the 1970s. Based on a survey of different companies in 1975 and 1976, the results showed that many jobs were extended and enriched using the socio-technical design concept. The main reasons were to search for manufacturing gains, reduce workers’ problems, industrial problems, and poor work quality. To overcome these problems, French government introduced legislation which required employers to prove themselves about how the work situation had improved and how they will continue their better performance in
future. However, the French unions were suspicious of these job design efforts, seeing them as another mean to exploit workforce.

On the contrary, Italy was having a different situation than France. In Italy, work was organized with rigid structures and tightly controls, called as Taylorism, which was seen as a product of Fascism. The Italian unions were prepared to fight against it and were determined to secure control over the work organization (Rollier, 1979). Change proposals were came from the unions while management were being their reluctant partners. Later on, the union became a dominant force and were became the major promoters of work humanization and organizational research.

Mumford (2006) argued that in UK, a large-scale socio-technical project took place in 1965 at Shell UK with the assistance from the Tavistock group. The people at Shell UK were interested in a new management philosophy whose idea was ‘that the resources of the company are also the resources of the society’ (Hill and Emery, 1971). The company’s objectives were then redefined based on this philosophy and decided that both business and social objectives could best be achieved using the socio-technical concepts. The important factor was to rethink the operation of plant and its production equipment before further automation (Davis and Cherns, 1975). The people from management were concerned that the workers were not satisfied with the present work process and if the company would automate its refineries, a committed workforce would be important. Therefore, it was then decided that both management and workers must adopt a participative management philosophy; the target setting and performance review style was adopted in the company. The Tavistock principles of achieving joint optimization of both technical and human factors helped in implementation of the programme. The programme lasted for four years and later on these experiments continued in Shell plants in other countries such as Austria, Holland, and Canada which are still ongoing.

The adoption of socio-technical design principles were not only restricted to Europe and the UK; they were also adopted by many other countries. For instance in USA, the interest in socio-technical approach was developed back in 1972. The main reason for its adoption was that organizations during that time realized that the decrease in
productivity might be because of unhappy workforce. On the other hand, the competition from Japan and West Germany was also increasing. In 1980s, a group of American researchers, managers, and consultants formed themselves into the socio-technical round table. The group was sponsored by the Society of Manufacturing Engineers, and managers from both the Digital Equipment Cooperation and General Motors who played a major role in its early activities. Researchers and practitioners from different countries in the field of socio-technical research were also invited to join this group. Later on, the group played a major role in spreading knowledge about the socio-technical approach to the industries. The group is still active in the USA these days.

According to several researchers, 1980s was considered as a disappointing time for organizational innovation because during that period, industry came under pressure to cut their costs; hence, the socio-technical work methods were seen very risky and unaffordable. Computers were introduced to facilitate routine work which reduced clerical costs and lean production methods were used in the industry which became very popular during that period (Moldaschl and Weber, 1998). With the use of these lean production methods, work processes became standardized and the socio-technical concepts which encouraged decentralized control and coordination were discarded (Niepce and Molleman, 1988). Even though, few socio-technical projects were carried out by several researchers in both UK and US during that period to assist the use of new computer system. These projects provided equal assistance to both technical and human concerns and introduced teamwork, multi-skilling and a degree of self-management concepts (Mumford, 1995; Mumford, 1996a; Mumford, 1996b). These projects were then successfully implemented in large organizations such as Rolls Royce, ICI, several banks, and hospitals in both UK and USA. The participative design of XSEL (digital’s first expert system), was one of the significant project amongst many others. The concept of this project was to assist the sales force and was designed worldwide implementation (Mumford and MacDonald, 1989).

Similarly, during the 1990s, several companies in USA, Europe and Australia carried out with the socio-technical projects by redesigning its concepts in accordance with both economic and social conditions. Numerous US projects were started based on the
development of high commitment and high performance work groups founded on the power sharing between both management and workers. In Sweden, Volvo adopted the socio-technical design principles into their business environment. The company now uses the phrase ‘delivery, quality, and economic results’ to describe its objectives which are related to cost control. Their results are obtained through having contact between work groups and external market groups such as customers and suppliers (Mumford, 2006).

To summarize, starting from the early 1960s until today, the ideas of socio-technical theory have been readily accepted by many companies around the globe. In general, one of the major concepts of the socio-technical theory for any organization is that the workers at all levels should participate in the decision-making process, and should be ready to work together using technology to solve unforeseen problems. Scandinavian countries such as Norway, Denmark, France, and Italy were the initial adopters of the theory. These countries incorporated laws which required companies to improve different aspects of work. The adoption of socio-technical design principles was not restricted to Europe; they were also adopted by several other countries around the world. These countries realized the importance of the theory and implemented several projects within numerous organizations which are still of great success.

The concepts of the socio-technical theory will be further used in the next chapters of this research to analyze the research findings and propose suggestions to the banking industry in order to make best use of CRM systems, at the same time considering the human factors.

3.3 Consideration of Other Theories

Before selecting socio-technical theory to analyze the findings and to provide suggestions for current research, several other theories were also considered. The basic concepts, benefits, and weaknesses of these theories were thoroughly studied. Two of these theories are described in this section, together with their design
principles and their contributions to the field of information systems: Work Systems Theory, and Actor Network Theory.

### 3.3.1 Work Systems Theory

The *Work Systems Theory* was developed by Steven Alter, a professor of information systems at the University of San Francisco. In his recent work, Professor Alter explained that the term *work system* has been used loosely for many areas. It was first discussed back in 1977 by Bostrom and Heinen (1977) in their articles of MIS Quarterly. Later on, Sumner and Ryan (1994) used the term to explain problems in the adoption of CASE (Computer Aided Software Engineering). Several socio-technical pioneers such as Trist and Mumford also used the term occasionally, but it was not defined in detail by these researchers. The author further argued that the work system approach defines work system carefully and he considers it as a basic analytical concept. The author defined work system as:

> A system in which human participants and/or machines performs work using information, technology, and other resources to produce products and/or services for internal or external customers. Typical business organizations contain work systems that procure materials from suppliers, produce products, deliver products to customers, find customers, create financial reports, hire employees, coordinate work across departments, and perform many other functions (Alter, 1999).

Professor Alter further explained that the work system concept is like a common denominator for many of the types of systems that operate within or across organizations. Information systems, projects, and supply chains are all special cases of work systems. An information system is a work system whose processes and activities are devoted to processing information. A service system is a work system that produces services for its customers. A project is a work system designed to produce a product and then go out of existence. Similarly, a supply chain is an inter-organizational work system devoted to procuring materials and other inputs required to produce a firm’s products.
A typical work system framework is shown in figure 3.2 which can be used to summarize any work system and can be used for analyzing the work system. The framework comprises of nine different elements; each element in the framework should be used in even a superficial understanding of a specific system. The arrows used between each element reflect the importance of maintaining the mutual alignment between these elements. Four elements in the trapezoid which are business processes, participants, information, and technology comprise the system performing the work. Along with that, five other elements are required for brief understanding of a work system. These are: products and services, customers, environment, strategies, and infrastructure. The framework is useful in describing the system being studied, identifying problems and opportunities, describing possible changes, and to identify how those changes might affect other areas of the work system (Alter, 2002; Wikipedia, 2010e).

Business processes: The work performed within the work system can be summarized in terms of one or more business processes whose steps may be defined tightly or may be relatively unstructured.
Participants: These are the people who perform at least some of the work in the business process. Some of these participants use computers and IT extensively, while others may use little or no technology.

Information: Information includes codified and non-codified information used and created while participants perform their work. Either type of information may or may not be captured on a computer.

Technologies: Technologies include tools (such as: cell phones, projectors, spreadsheet software, and automobiles) and techniques (such as: management by objectives, optimization, and remote tracking) that work system participants use while doing their work.

Customers: These are the people who receive direct benefit from the products and services which the work system produces. This includes external customers who receive the organization's products and/or services and internal customers who are employees or contractors working inside the organization.

Products and Services: Products and services are the combination of physical things, information, and services that the work system produces.

Environment: Environment includes the organizational, cultural, competitive, technical, and regulatory environment within which the work system works.

Infrastructure: Infrastructure includes human, informational, and technical resources that the work system relies on even though these resources exist and are managed outside of it and are shared with other work systems.

Strategies: The work system’s strategy and the organization’s strategy may help in explaining why the work system operates as it does. Examples of work system strategies include assembly line approach versus a case-manager approach and mass customization approach versus a commodity approach or a manually customized approach (Alter, 2002).
There are many advantages of a work system theory. The major advantage is that the theory is generally used as a problem solving approach for organizations which starts from identifying the actual problem within the organization towards the final recommendations for making better decisions for future. Although, there are several advantages of the theory, there are few drawbacks. The major disadvantage of the theory is related with the alignment and the balance between its various elements since all of its elements are interdependent. A change in its one element would usually require a corresponding change in other elements in order to maintain balance. For instance, better information or technology may have no effect on work system performance if nothing is being done about limiting factors elsewhere, such as with the business process or participants. Also, it is easy to say that elements of a work system should be aligned and balanced, but the fact that work systems contain disparate elements often lead to imbalances and misalignments which require management attention (Alter, 1999).

### 3.3.2 Actor Network Theory (ANT)

Actor network theory (ANT) was also initially considered to analyze the findings of the current research. It is basically a social theory originally created by Science and Technology Studies (STS) scholars Bruno Latour and Michael Callon, the sociologist John Law, and others during the early 1980s. According to Wikipedia (2010f), *Actors* is considered as people, organizations or objects. *Network* is a relationship between these actors. Actor network theory attempts to describe how material-semiotic networks come together and how they work together as a whole. For instance, a bank is both a network and an actor that hangs together, and for certain purposes act as a single entity.

Latour (1991, p.179) discussed that “the theory differs from many other theories and it views both people and technology equally in the network. Therefore, the term actant is symmetrical; it applies indifferently to both humans and non-humans”. However, (Learning-theories.com, 2010) explains that the theory does not typically attempt to explain why a network exists; it is more interested in the infrastructure of actor-networks such as how they are formed and how they can fall apart etc.
Similarly, Rose et al., (2005) in their work discussed that a long-standing debate in the field of information systems concerning the relationship between technology and organizations. The authors emphasized on the use of ANT and Structuration theory to create balance between organizations and technology. According to these authors, ANT is an assumption of general symmetry between the technical and social worlds. Furthermore, ANT is not restricted to humans, but is attributed to technologies (machines) and to material objects. The trust of the theory is to treat human and machine (or material) agency equality.

Actor Network Theory was used by several researchers in their work; for instance, Beekhuyzen and Hellens (2006) in their research work applied ANT to investigate the use of online banking in Australia. The authors used the theory as a lens to view online banking practices in Australia. They explored the various user groups and their varying needs for interacting with the bank. According to the authors, the actor network theory was the best choice for their research because the theory allows exploring the relationship between technology and people, whilst giving insight into the changes enacted through interactions between them and the bank. The authors further explained that the adoption of actor network theory would help to investigate the sensitive balance between the technical and social aspects of online banking. Also, the theory has given them a solid basis for more detailed investigation and interpretation of the data. Figure 3.3 shows the clear description of the complex practices of online banking activities in Australia.
Although there are several advantages of the ANT; it has also been criticized by several researchers. For instance, (Learning-theories.com, 2010) stated in their website that there are several criticisms held regarding ANT, these include:

- Firstly, the absurdity of assigning agency to nonhuman actors i.e. no distinction is made between humans and animals or physical objects that may be part of the network under consideration;

- Secondly, ANT is considered by many critics as immoral; that is because it assumes all actors are equal within the network, no accommodations for power imbalances can be made; and

- Lastly, ANT leads to useless descriptions which seems pointless to many critics.
To summarize, work system theory relates to the participation of both humans and machines to perform work together, using IT to produce products for internal as well as external customers; actor network theory attempts to describe how different actors interact in a network to work together. Although both theories were initially considered for analyzing the research findings, they were not utilized because one of the main concerns of the current research is to look at the social consequences of technology (CRM) within the banking industry. No doubt, these theories cover the participation of both humans and technology within the organization (banking) to work together on the same platform to achieve better targets. However, these theories do not focus sufficiently on the social aspects. The socio-technical theory, on the other hand, covers human, technological, and social aspects within the banking industry. Therefore, socio-technical theory has been selected to analyze the findings of this study. A detailed account of socio-technical theory has already been given in previous sections of this chapter. The ideas of the theory will be further covered in the analysis chapters to support the analysis and to answer one of the major research questions.

### 3.4 CRM: The Management Models

Over many years, several researchers have proposed numerous CRM models to enable organizations, especially the banking industry, to improve the current performance of CRM systems across all the functional areas, e.g. marketing, sales, service and support, and IT/IS. Each model has its own advantages for banks, where the sole purpose of these models is to support CRM to run successfully within the banking industry. In this section, we present some of these models and discuss their components.

We start with a discussion of the latest work of Payne and Frow (2004, 2005, and 2006). These authors proposed a strategic framework for customer relationship management (CRM) which helps broaden the understanding of CRM and its role in enhancing customers’ value and, as a result, shareholder value. As shown in figure 3.4, the model has two main components: core cross-functional CRM processes, and
The authors discussed the five core cross-functional processes as:

- **Strategy Development**
- **Value Creation**
- **Multi-Channel Integration**
- **Information Management**
- **Performance Assessment**

Figure 3.4: CRM Strategy and Implementation Model (Source: Payne and Frow, 2006)
➢ *Strategy Development Process:* The process defines the overall objectives and parameters for the organization’s CRM activities. The process focuses on the organization’s business strategy as well as customer strategy.

➢ *Value Creation Process:* It involves taking the outputs of the strategy development process and building a program that both extracts and delivers value.

➢ *Multi-Channel Integration Process:* This process involves managing every contact point between the customer and the company. Also, creating better ways for customers to experience the company and ensuring the communications and services a customer receives through different channels are coordinated, coherent, and tailored to their particular interests.

➢ *Information Management Process:* This process is known as an *engine* that drives CRM activities. It involves IT systems which includes organization’s hardware, software, and middleware; analytical tools; and front-office and back-office applications.

➢ *Performance Assessment Process:* This final process ensures that the organization’ strategic CRM objectives are being delivered to an appropriate standard and that key metrics to guide future improvement are identified (Payne and Frow, 2006).

Similarly, the key CRM implementation elements are further discussed by the authors as:

➢ *CRM Readiness Assessment:* This first element helps managers to assess the overall position in terms of readiness to progress with CRM implementation and to identify how well developed their organization is relative to other companies.
➢ **CRM Change Management**: In order to implement any large-scale CRM software, organizations normally have to undergo substantial organizational and cultural change. A critical dimension of any large CRM programme, therefore, is an effective change management programme.

➢ **CRM Project Management**: CRM project management has increasing importance as the size and complexity of CRM initiatives increase. Successful CRM projects deliver against the CRM objectives derived from the corporate objectives and support the overall business strategy.

➢ **Employee Engagement**: This final element is the engagement of employees to support the various initiatives that comprise the overall CRM programme (Payne and Frow, 2006).

Eid (2007) discussed the critical success factors (CSFs) for CRM implementation. CSFs can be viewed as those activities and practices that should be addressed in order to ensure the successful implementation of CRM within the banking sector. Eid further developed a conceptual model to integrate the CRM system, covering three different areas: CRM enablers, CRM effectiveness, and CRM success.

The third model we discuss here is presented by Keramati *et al.*, (2009). Their research was based on the investigation of CRM activities in e-banking among Iranian banks. These banks, according to the authors, are already adopting CRM but their approach towards CRM is different. As a result, they have achieved different rates of success towards customer satisfaction and CRM. The authors developed a theoretical framework to investigate CRM activities in public and private banking in Iran, using a qualitative case study approach and conducting several interviews with bank officials. As shown in figure 3.5, their model is split into three main types/components: communicational/collaborative CRM, operational CRM, and analytical CRM. The authors discussed their interview results using all three components and highlighted major problems related to CRM activities in both public and private banks in Iran.
The last model we discuss here was presented by Buttle (2009, p.20) in a remarkable work in which he proposed a CRM value chain model. The idea of this model was taken from Michael Porter’s value chain model (Porter, 1985). It consists of five primary stages and four supporting conditions leading towards the end goal of enhanced customer profitability. As seen in figure 3.6, the primary stages of Buttle’s model are: customer portfolio analysis, customer intimacy, network development, value proposition development, and managing the customer life cycle. These five primary stages are sequenced to ensure that a company, with the support of its network of suppliers, partners, and employees, creates and delivers value propositions that acquire and retain profitable customers. The primary stages are supported by four
supporting conditions which are: leadership and culture, data and information technology (IT), people, and processes. These supporting conditions enable the CRM strategy to function effectively and efficiently.

Figure 3.6: The CRM Value Chain Model (Source: Buttle, 2009, p.20)

3.5 **Proposed CRM Model used as a Frame of Reference**

In the previous section, we presented some well known CRM models designed and proposed by several researchers in their recent work. This section presents an ideal CRM model (selected from existing CRM models) which will be used to analyze and discuss the results of this study. Basically, the idea of designing a model or using an existing model while conducting a research is to build up an ideal case, after having reached a thorough understanding of the research area. Such a model or a framework can be further used as a frame of reference after data gathering to help the researcher
to analyze the obtained data and to propose suggestions. As the objectives of this research do not require designing a new model, the research is based on studying and analyzing the current CRM operation in the banking industry of Pakistan and the UK. These research objectives can be achieved using an existing CRM model (previously proposed and used by researchers in their work). The chosen model can be used in this study as a frame of reference and can also be used to analyze the findings of the current research by discussing the results using the different components of the model. Given the existence of so many CRM models, designing a completely new model was not considered as a main concern for this study, and the results of this work will be analyzed and discussed using the components of an existing CRM model.

The CRM model used for this research work is selected from models studied in the literature survey. The model was proposed by Liu (2007), who presented an ideal CRM architecture which shows a complete view of CRM activities and projects all the functional areas within the bank. The model is specifically designed for banks and it covers most of the CRM components which were presented in detail in chapter 2. The model contains four major functional areas within a bank: contact channel management, customer data management, enterprise-wide management, and IT management. A complete account of these four major areas is presented in the following sections.

Liu (2007) explained that an ideal CRM strategy for the banking industry includes action plans for adapting e-Commerce to facilitate customer contact with banks more conveniently and intimately. Furthermore, constructing a bank’s own CRM architecture and its proper functionality is essential in these plans. Based on CRM development and the best practices in the banking industry, the architecture focuses on maintaining customer intimacy with the streamlined (arrowed) business process, as shown in figure 3.7.
3.5.1 Contact Channel Management Strategy

In this first area, the author explained that the strategy focuses on contact channel unification and concentrates on strengthening channels through value-added services. This strategy should reflect where and when the customer wants to connect with the bank, from a streamlined process perspective (Liu, 2007).

- **Building a friendly way for customers to connect with business**: Banks should build multi-channels to expand their services such as branches, call centres, ATM (Automatic Teller Machines), IVR, internet banking, PC-banking (Personal Computer Banking), PDA (Personal Digital Assistant), Kiosks, telephones (wired, GSM, or WAP) etc., to connect to the customers and
improve the security and convenience of all these channels. The critical channels in the future will be websites and mobile devices.

- **Integrating and utilizing various cost-effective contact channels:** Banks should integrate all the contact channels from a customer-oriented perspective and should build standard operating procedures (SOPs) among the various channels to process and integrate customer data. The more consistency there is between processing customer data and various channels, the more information there will be that all channels can share, and the more business resources there will be that can be used (Liu, 2007).

### 3.5.2 Enterprise-wide Management Strategy

The author explained in this second area that banks have to design a business strategy in the value discipline of customer intimacy and put the benefits of customers’ fist. This is critical for the success of CRM. They can then re-engineer their business processes from the point of view of customers and integrate all the systems/contact channels. The latter requires the unification of business goals, rules, and objectives for transforming data-centred solutions into customer-centred ones (Liu, 2007).

- **Re-engineering process and formulating a customer-centred strategy:** Banks should aim to move from mere operational excellence or just product leadership to a situation where they manage customer data in such a way as to allow every unit (person or department) in the enterprise to use the resulting integrated and consistent information.

- **Integrating front-office and back-office systems:** The front-office activities that connect with the customers can be divided by their function into three different kinds of activity: sales force automation, marketing automation, and customer service/support. The customer data that support these activities are produced from the internal operations and from external data emanating from the back-office (Liu, 2007).
3.5.3 Customer Data Management Strategy

In this third area, Liu argued that if banks want to improve their relationship with their customers, they must recognize their preferences and different behaviours and satisfy the needs of individuals by integrating all the interactive data in their database in such a way as to support customer analysis and decision making. Also, banks should establish criteria and systems to segment customers, interpret the differences among them (for instance, the profits, costs, preferences, loyalties, etc.), and then offer personalized services (Liu, 2007).

- Collecting and integrating customer data: Banks have to collect and integrate customer data from all the various sources with data from the internal operations of the enterprise, and with external data from ‘collaboration’ with the database. With some internal data, it is possible to use data-cleansing tools to standardize and validate the data or to obtain new data that provides additional capabilities for analyzing customers.

- Analyzing customer data: This approach includes evaluating the actual and potential value of customers, evaluating their loyalty by estimating the degree of customer satisfaction with goods and services, identifying the targeted customers to balance the relationship and calculating the cost, revenue and actual contributions of each customer (Liu, 2007).

3.5.4 Information Technology (IT) Management Strategy

In this final area, the author explained that CRM-related IT with its operational, analytical, and collaborative support systems complements the processes involved in all aspects of customer interactions. An effective CRM architecture, one that is suitably comprehensive, is founded upon such an IT infrastructure and upon customer data management and enterprise-wide management (Liu, 2007).
- **IT-related contact channel management**: The major IT applications involved in this category are telephone centres, automatic call distribution (ACD), interactive voice response (IVR), and private branch exchanges (PBX).

- **IT-related customer data management**: The collection, integration, and analysis of customer data are founded upon database technology, including data cleansing, data mart, data warehousing, data mining, and OLAP. XML has passed from the early adopter phrase into the mainstream acceptance phase and may become the primary syntax for all enterprise data development.

- **IT-related enterprise-wide management**: The technology related to the integration of messages between front-office and back-office includes FEDI, COBRA, COM/DCOM, RMI, and other transmission technologies, with middleware (Liu, 2007).

The four major functional areas of the proposed CRM model (as mentioned in this section) along with the ideas and design principles of socio-technical theory (presented in the previous sections of this chapter) will be further used in the analysis chapter to analyze the research findings and answering the research questions. Similarly, the concepts and design principles of the socio-technical theory, the knowledge obtained from the CRM literature, and the proposed CRM model will also be used in the later chapters to propose suggestions to the banking industry of both Pakistan and the UK so as to improve their current use of CRM system.

### 3.6 Conclusions

This chapter presented a theoretical framework in which we discussed an ideal CRM model for the banking industry, previously proposed by Liu (2007). The model was selected for this study as it shows a complete view of CRM activities and projects all the functional areas of CRM within a bank. The model is specifically designed for banks and it covers most of the CRM components discussed in chapter 2. The model shows four major functional areas of CRM within a bank: contact channel...
management, customer data management, enterprise-wide management, and IT management. These four major areas of the model were thoroughly discussed in this chapter. This CRM model will be further used in this study as a frame of reference and will also be used to analyze and discuss the results from the two case studies and propose suggestions to the banks.

This chapter also presented an overview of research theories that are useful for social science research, and we also discussed the purpose of using a social theory for this study. The concepts of socio-technical theory (used as the main theory to analyze the research findings and make proposals for this study) were presented in this chapter along with its design principles, and its contributions towards several organizations. This chapter also reviewed other social theories which were initially considered for this study.
Chapter 4

Research Methodology

This chapter presents the research methodology adopted by the researcher to conduct this study. The chapter starts with the concept of research and its approaches that are mostly used in social sciences i.e. quantitative and qualitative research. Then, an overview of positivistic, interpretive, and critical research paradigms is provided. Next, several research strategies that fall under the interpretive paradigm are presented i.e. action research, case study research, ethnography, and grounded theory. These research approaches are thoroughly discussed and their advantages and disadvantages are also presented in this chapter. Then, the chapter presents some discussions about selecting case study approach and particularly multiple-case study approach for this research. Similarly, in the last part, the chapter presents the available data collection techniques that fall under the multiple-case study approach and the techniques that are used for this research.

4.1 What is a Research?

The term Research is defined by several researchers in their own ways. For instance, according to its basic definition from the oxford dictionary, it is define as:

The systematic study of materials and sources in order to establish facts and reach new conclusions (AskOxford, 2010).

Similarly, Wikipedia has provided the basic definition of research as:
The search for knowledge or any systematic investigation to establish facts (Wikipedia, 2010g).

Likewise, Myers (2009, p.6) a known Professor of IS has defined the term research in his recent book as:

An original investigation undertaken in order to contribute to the knowledge and understanding in a particular field.

The author further explained that research typically involves enquiry about an empirical or conceptual nature and it is conducted by people with specialist knowledge about the subject matter, theories, and methods in a specific field. Research may involve contributing to the intellectual infrastructure of a subject or discipline e.g. by publishing a dictionary. In some fields such as computer science, or information systems (IS), research can also include the experimental design of new artefacts. The author further explained that the only way to tell if the research findings are both sound and original is if those findings are open to scrutiny and formal evaluation by experts in a particular area. That is, the findings must be evaluated by those who are experienced and qualified to do so. Furthermore, if these experts in evaluating the research find that the results are sound, and that the findings are new to them, then we can safely say that the research project represents an original contribution to the knowledge. Such a way of evaluating the quality of research in social sciences is called the peer review system (Myers, 2009, p.6).

4.2 Research Approaches

Traditionally, in social sciences, there are two research approaches available i.e. quantitative research and qualitative research. However, mixed method approach (i.e. the suitable combination of both quantitative and qualitative research approaches) is treated as a third research approach that is accepted and used by several researchers in their work. A detailed account of these approaches is presented in the following sections.
4.2.1 Quantitative Research

According to Creswell (2009, p.4), “a quantitative research is a means for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures. The final written report has a set structure consisting of introduction, literature and theory, methods, results, and discussion”.

Similarly, Straub, et al., (2004) and Myers (2009, p.8) explained that the quantitative research approach was originally developed in the area of natural sciences to study the natural phenomena. The examples of quantitative research approach are nowadays well accepted in the social sciences. The quantitative researchers generally emphasize on numbers more than anything else. That is, the numbers come to represent values and levels of theoretical constructs and concepts and the interpretation of the numbers is viewed as a strong scientific evidence of how a phenomena works. The authors further explained that the presence of quantities is so predominant in quantitative research that statistical tools and packages are an essential element in the researcher's toolkit. Sources of data are of less concern in identifying an approach as being quantitative research than the fact that empirically derived numbers lie at the core of the scientific evidence assembled. In most of the cases, quantitative researchers use some statistical tools and packages to analyse their data such as Statistical Package for Social Sciences (SPSS) etc. Some quantitative approaches are: survey methods, laboratory experiments, formal methods (e.g. econometrics), and numerical methods such as mathematical modelling (Straub et al., 2004; Myers, 2009, p.8). Some of the well-known quantitative strategies are presented in the following sections.

4.2.1.1 Survey Method

It is a strategy which is usually associated with the deductive approach. It is popular and a common strategy in business and management research because it allows the large amount of data from sizable population in a highly economic way. According to Straub et al., (2004) and Emory (1980), in the survey method, “the researcher seeks verbal or written responses to the questions or statements. Surveys can be very
effective in gathering data about individual preferences, expectations, past events, and private behaviours. The versatility of this method is its greatest strength. It is the only practical way to learn many types of information and the most economical way in many other situations”.

4.2.1.2 Laboratory Experiments

“Laboratory experiments take place in a setting especially created by the researcher for the investigation of the phenomenon. Using this method, the researcher has a control over the independent variable(s) and the random assignment of research participants to various treatment and non-treatment conditions” (Boudreau et al., 2001; Straub et al., 2004).

4.2.2 Qualitative Research

Qualitative research approach has been used by numerous researchers for a long time now. Flick (2007, p.1) in his latest work explained that the qualitative research approach is a distinctive way to describe an alternative to the ‘quantitative research’ and was coined against the background of a critique of the latter and especially the development it had taken in the 1960s and 1970s. However, qualitative research has a long history in many disciplines, where social science research in general began with approaches that would now be summarized under qualitative research. Today, the label ‘qualitative research’ is used as an umbrella term for a series of approaches to research in the social sciences.

Similarly, Myers (2009, p.8) in his book explained that: “the qualitative research approach was developed in the social sciences to enable researchers to study social and cultural phenomena. Some of the known qualitative approaches are: action research, case study research, grounded theory, and ethnography. Qualitative data sources include observation and participant observation (fieldwork), interviews and questionnaires, documents and texts, and the researcher’s impressions and reactions. Generally, the qualitative research methodology is designed to help researchers to understand people and the social and cultural contexts within which they live;
whereas, the qualitative data are mostly a record of what people have said”. A detailed account of these qualitative research strategies i.e. action research, case study research, grounded theory, and ethnography are presented later on in this chapter followed by the strategy that is used for the current research.

### 4.2.3 Mixed Methods Research

As seen in Creswell (2009, p.4), previously Creswell and Plano Clark (2007) explained mixed methods approach as: “a research approach that combines or associates both quantitative and qualitative forms. It involves philosophical assumptions, the use of quantitative and qualitative approaches, and the mixing of both approaches in a study. Thus, it is more than simply collecting and analyzing both kinds of data; it also involves the use of both approaches in tandem so that the overall strength of a study is greater than either quantitative or qualitative research”.

### 4.2.4 Proposed Research Approach for Current Research

The selection of a research approach is highly dependent on the type of research which is to be carried out. If the requirement of research is to gather statistical data and to analyze such data using some mathematical modelling tools (such as using SPSS etc.), a quantitative research approach best suits the nature of that particular research. Whereas, for gathering and analyzing the data which covers the social aspects of research, and the research does not require any statistical results, a qualitative research approach would be supportive in that case.

As the current research does not require any quantitative data such as calculations, exact results, numbers, and anything that is measurable; it is highly focused on studying and analyzing the current CRM strategy and its operation within the banking sectors of both developing and developed countries (i.e. Pakistan and the UK). This research work also intends to highlight the weaknesses of current CRM operation in the banking sectors of the two countries and would provide some suggestions to improve CRM operation in banks based on the understanding from the CRM literature. Therefore, a qualitative research approach is suitable for the nature of
current research. Secondly, the qualitative research approach is selected because the current research intends to cover a lot of social and cultural aspects of CRM such as how CRM is currently used by major banks of both Pakistan and UK, what are the cultural differences between the two countries in terms of CRM adoption, and how different banks in both countries perceive it (either as a technology or a strategy) to attract new customers while maintaining relationships with the existing customers. As a result, the current research is based on the qualitative research approach.

4.3 Research Paradigm

According to Rubin and Rubin (1995; 2005, p.20), “a research paradigm, or philosophy shapes how people study their world. It constitutes a way of looking at the world; interpreting what is seen; and deciding which of the things seen by the researchers are real, valid, and important to document. It also indicates how research ought to be conducted, by whom, and with what degrees of involvement or dispassion” (Rubin and Rubin, 1995; 2005, p.20; LeCompte and Schensul, 1999, p.41). Myers (2009, p.23) proposed that every research project is based on some philosophical assumptions about the nature of the world and how knowledge about the world can be obtained. Often, these assumptions are taken for granted and are implicit in researcher’s mind. The author believes that every qualitative researcher should make their philosophical assumptions explicit. Such assumptions provide the foundation of everything that follows.

As proposed by Orlikowski and Baroudi (1991); Hirschheim and Klein (1989); Chua (1986); and Oates (2006), generally, in information systems (IS) discipline, there are three research paradigms or philosophies i.e. positivistic, interpretive, and critical research. These three categories are based on the underlying research epistemology. As shown in the following figure 4.1, a qualitative research can be positivist (Yin, 2003), interpretive (Walsham, 1993), and critical (Bernstein, 1978; Orlikowski and Baroudi, 1991). These research paradigms are also proposed by Myers (2010) in his latest work and are discussed in the following sections.
4.3.1 Positivist Research

“Positivists generally assume that the reality is objectively given and can be described by measurable properties which are independent of the observer (researcher) and his or her instruments. Positivist studies generally attempt to test theory, in an attempt to increase the predictive understanding of the phenomena” (Myers, 2010). According to Remenyi et al., (1998, p.33), the basic principle of positivist research is the assumption that “the researcher is independent of and neither affects nor is affected by the subject of the research”. Gill and Johnson (1997) argue that “the positivist research emphasises on highly structured methodology to facilitate replication and quantifiable observations which leads to the statistical analysis”.

4.3.2 Interpretive Research

“Interpretive research is concerned with understanding the social context of an information systems; the social processes by which it is developed and constructed by people and through which it influences, and is influenced by, its social setting” (Oates, 2006, p.292). Interpretive research is about discovering the details of the
situation to understand the reality and to explore the subjective meanings motivating people’s actions (Remenyi et al., 1998). Rubin and Rubin (2005, p.27) explained that: “interpretive research is about how people view an object or event, and the meaning that they attribute to it is what is important. It matters less whether a chair is 36 inches high and 47 years old than that one person perceives it as an antique and another views it as junk”. On the other hand, interpretive research does not attempt to test a hypothesis, but seeks to discover and describe the interaction between various independent social factors. Also, the interpretive research is concerned with deriving meaningful information from social interaction (Braa and Vidgen, 1999).

4.3.3 Critical Research

Orlikowski and Baroudi (1991) in their work presented the idea of (Bernstein 1978, p. 181) about the critical research. According to the above authors, “a critical researcher attempts to critically evaluate and transform the social reality under investigation. Where the other two research perspectives (i.e. positivist and interpretive research) are content to predict or explain the status quo, the critical perspective is concerned with critiquing existing social systems and revealing any contradictions and conflicts that may inhere within their structures. Through fostering this type of self-consciousness and understanding of existing social conditions, critical researchers believe they can help to overcome oppressive social relations”.

As the objectives of this study are based on studying and analyzing the social aspects of CRM i.e. how CRM is currently operated in the major banks of Pakistan and UK, and how different departments in these banks share information with each other and interact with the customers using the central CRM system. Upon considering the pros and cons of the three research paradigms, an interpretive research approach seems relevant to the current study because the interpretive studies attempt to understand the social phenomena through the meanings that human beings (researchers) attach to them. Secondly, several researchers have also reported that the interpretive research highly emphasizes on the role of researcher as an interpreter of the data and an individual who represents information (Creswell, 2007, p.248). Therefore, in order to study and analyze the research problems, an interpretive approach seems suitable and
is selected for this study as the approach is more focused towards the understanding of social context of information systems and it gives more freedom to a researcher to interpret and analyze the data based on his/her own understanding to the actual problem. The research strategies that fall under the interpretive paradigm will be discussed in the following sections.

4.4 Research Strategies

Several research strategies are available which can be used to conduct interpretive research in information systems (IS). Among them, four research strategies i.e. action research, case study research, ethnography, and grounded theory are most commonly used for information systems (IS), business and management related research (Myers, 2009, p.24; Oates, 2006). The authors also mentioned that each research strategy can be used with any of the research/philosophical paradigms. For example, a case study research strategy can be positivist, interpretive, or critical. A detail account of these research strategies is presented in this section.

4.4.1 Action Research

Rapoport (1970, p.499) defines action research in the following way:

Action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework.

In a special issue on action research in MIS quarterly, Baskerville and Myers (2004) presented the historical background of action research. According to the authors, action research was originated in the social sciences out of the massive social changes of World War II. It was developed by Kurt Lewin (1947) at the Research Centre for Group Dynamics (University of Michigan) in order to study social psychology within the framework of field theory. Lewin, later on presented a model of action research which included six different stages i.e. analysis, fact finding, conceptualization,
planning, implementation of action, and evaluation. The model was adapted by several researchers for many years. Several scholars conducting research in socio-technical systems also used different forms of action research for many years (Lewin, 1947).

The authors further presented four pragmatist premises from the major set of assumptions underlying the action research methods of Lewin, and several other researchers; the authors believe that these four premises are still most essential in order to conduct research using action research approach. First, it is necessary to establish beforehand the purpose of any action. It means that the theory must be explicit before the action is taken; otherwise there is a risk that the action is purposeless, and therefore meaningless. Second, there must be a practical action in the problem setting. Third, the practical action must inform the theory whereas; the theory must be adjusted according to the practical outcome of the action. Fourth, the reasoning and action must be socially situated which means that the action researchers must be participant observers (Baskerville and Myers, 2004).

Mingers (2003) discussed that: “in action research, the researcher explicitly becomes involved in intervening in the situation and attempting to bring about the change. It is distinguished from consultancy in that the researcher enters the situation with particular theoretical or methodological tools and then uses the process and results of the intervention to evaluate the theory or method”. The author further argues that specific methodologies such as soft systems methodology (SSM) (Checkland and Holwell, 1998) and participatory action research (Fals-Borda and Rahman, 1991) are included in this category.

Baskerville (1999), in an article discussed that action research was explicitly introduced to the information systems community as a purely research methodology by Wood-Harper (1985). Like Mumford and Checkland, Wood-Harper also incorporated action research concepts into an action-based systems development methodology called Multiview (Wood-Harper et al., 1985). Similarly, Baskerville and Wood-Harper in their work further state that: “the ideal domain of the action research method is characterized by a social setting where:
the researcher is actively involved, with expected benefit for both researcher and organization,

the knowledge obtained can be immediately applied, there is not the sense of the detached observer, but that of an active participant wishing to utilize any new knowledge based on an explicit, clear conceptual framework,

the research is a (typically cyclical) process linking theory and practice” (Baskerville and Wood-Harper, 1996).

As seen in Baskerville (1999), previously Susman and Evered, (1978) presented the cyclic process of action research in five different phases. According to the authors, the approach first requires the establishment of a client-system infrastructure or research environment. Then, five identifiable phases are iterated as shown in Figure 4.2:

- diagnosing,
- action planning,
- action taking,
- evaluating and,
- specifying learning
Lau (1999) in his work presented several benefits of action research for information systems (IS) discipline. According to the author, the use of action research in information systems (IS) can be a rewarding experience yet a challenging one at the same time. For those aspiring to make a difference in IS, action research provides a unique opportunity to bridge theory with practice, allowing one to solve real-world problems while contributing to the generation of new knowledge. However, problems happen if the approach is not used properly. For instance, Baskerville and Wood-Harper (1996) presented several problems related to action research approach. Some of these problems are: “the lack of impartiality of the researcher has led to rejection of the action research method by a number of researchers. Secondly, some of the action research offered to the scientific community lacks rigor which makes it difficult for the work to be assessed for the award of research degrees and for publication in academic journals. Another problem highlighted by the authors is that action research is context-bound, and not context-free. Therefore, it is difficult to determine the cause
of a particular effect that could be due to the environment, researcher or methodology. This means that action research produces narrow learning in its context because each situation is unique and cannot be repeated”.

4.4.2 Case Study Research

There are many definitions of a case study research. For instance, Benbasat et al., (1987) define case study as:

A case study examines a phenomenon in its natural setting, employing multiple methods of data collection to gather information from one or a few entities (people, groups, or organizations). The boundaries of the phenomenon are not clearly evident at the outset of the research and no experimental control or manipulation is used.

According to Myers (2010), “the term case study has multiple meanings. It can be used to describe a unit of analysis (e.g. a case study of a particular organization) or to describe a research strategy”. However, in this section, we discuss the use of case study as a research strategy. Case study research strategy is the most common approach of qualitative research used in information systems (IS) (Orlikowski and Baroudi, 1991; Alavi and Carlson, 1992).

Yin (2009, p.18) in his recent book presented the scope of a case study into two parts which are discussed as follows:

1. A case study is an empirical inquiry that:

   - investigates a contemporary phenomenon in depth and within its real-life context, especially when

   - the boundaries between phenomenon and context are not clearly evident (Yin 2009, p.18).
2. **The case study inquiry:**

- copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result

- relies on multiple sources of evidence, with data needing to coverage in a triangulation fashion, and as another result

- benefits from the prior development of theoretical propositions to guide data collection and analysis (Yin, 2009, p.18).

Similarly, Creswell (2007, p.73) described case study as a qualitative research approach in which the investigator explores a bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information (such as: observations, interviews, audiovisual material, and documents and reports), and reports a case description and case-based themes. For instance, several programs (a multi-site study) or a single program (a within-site study) may be selected for the study.

Creswell (2007, p.74) presented several steps for conducting an interpretive case study research that were previously presented by Stake (1995). According to the author, the first step for a researcher is to determine if a case study approach is appropriate to the research problem. Secondly, the researcher needs to identify the case or cases. These cases may involve an individual, several individuals, a program, an event, or an activity. Thirdly, the data collection is required which involves several techniques such as interviews, documents, and audiovisual materials. The fourth step is to write a detailed description of the case using the data collected from the field. The fifth step is to analyze the data in which the researcher has to focus on the key issues (analysis of themes). The final interpretive step for a researcher is to report the meaning of the case or cases, whether that meaning comes from learning about the issue of the case (an instrumental case), or learning about an unusual situation (an intrinsic case) (Creswell, 2007, p.74; Stake, 1995).
The case study research has several advantages. One of the main advantages of the case study research is its ‘face validity’ which means that a well-written case study based on empirical research in an organization represents a real story that most researchers can identify with. Another advantage is that it allows researchers to explore or test theories within the context of messy real-life situations. However, the case study approach has several disadvantages. One of the main disadvantages is that it can be difficult to gain access to the particular organization that a researcher wants to study. Another disadvantage is that the researcher has no control over the situation which means that if the company is suddenly taken over by another company while the researcher is half way through his/her study, there is a very little he/she can do about it (Myers, 2009, p.80).

4.4.3 Ethnography

Creswell, (2009, p.13) in his latest book define ethnography as:

A strategy of enquiry in which the researcher studies an intact cultural group in a natural setting over a prolonged period of time by collecting, primarily, observational and interview data. The research procedure is flexible and typically evolves contextually in response to the lived realities encountered in the field setting (Creswell, 2009, p.13; LeCompte and Schensul, 1999).

The author further explained the historical background of ethnography. According to the author, ethnography had its beginning in the comparative cultural anthropology conducted by early 20th century anthropologists such as: Boas, Malinowski, Radcliffe-Brown, and Mead. Although, these researchers initially took the natural sciences as a model for research; they differed from those using traditional scientific approaches through the firsthand collection of data concerning existing primitive cultures (Atkinson and Hammersley, 1994; Creswell, 2007, p.69). Lewis (1985, p.380) believes that ethnographers immerse themselves in the lives of the people they study. Recently, scientific approaches to ethnography have expanded to include “schools” or subtypes of ethnography with different theoretical orientations and aims, such as structural functionalism, symbolic interactionism, cultural and cognitive
anthropology, critical theory, and cultural studies (Atkinson and Hammersley, 1994; Creswell, 2007, p.69).

According to Preston (1991), “ethnography within the MIS context looks beneath the surface and examines, from the viewpoint of the participants of the setting, the meaning and role of MIS in their social or organizational world. From ethnographic accounts, the theoretical constructs and models of MIS may be challenged. It is the critical distance between managers’ views of MIS and the theory of MIS that creates the tension necessary to reorient our understanding of the craft”. However, Yin (2009, p.15) argued that IS research using ethnography approach usually require long periods of time in the field and emphasize detailed, observational evidence. Participant-observation may not require the same length of time but still assumes a hefty investment of field efforts.

Myers (1999) in his research work discussed the benefits and limitation of research using ethnography approach. According to the author, one of the most valuable aspects of ethnographic research is its depth. Because the researcher is there for an extended period of time, the ethnographer sees what people are doing as well as what they say they are doing. Over time, the researcher is able to gain an in-depth understanding of the people, the organization, and the broader context within which they work. As Grills (1998), points out by going to where the action is, the field researcher develops an intimate familiarity with the dilemmas, frustrations, routines, relationships, and risks that are part of everyday life. The profound strength of ethnography is that it is the most in-depth or intensive research method possible.

The same author also presented several disadvantages of ethnographic research. According to the author, “one of the main disadvantages of ethnographic research is that it takes a lot longer than most other kinds of research. Not only does it take a long time to do the fieldwork, but it also takes a long time to analyze the material and write it up. Another disadvantage of ethnographic research presented by the author is that it does not have much breadth. Unlike a survey, an ethnographer usually studies just the one organization or the one culture” (Myers, 1999).
4.4.4 **Grounded Theory**

Grounded theory is a research strategy that seeks to develop theory that is grounded in data systematically gathered and analyzed. As quoted by Myers (2009), Martin and Turner (1986) define grounded theory as:

*An inductive, theory discovery methodology that allows the researcher to develop a theoretical account of the general features of a topic while simultaneously grounding the account in empirical observations or data.*

The author further discussed that the major difference between grounded theory and other research strategies is its specific approach to theory development. Grounded theory suggests a continuous interaction between data collection and analysis (Myers, 2009). Mingers (2003) in his work discuss that: “grounded theory is a general approach which was originally developed by Glaser and Strauss (1967), for developing theory from, or grounded in, empirical social research (Strauss and Corbin, 1994). The approach uses data from a range of sources (which includes quantitative research approach) in order to generate theories that plausibly explain relationships among the concepts within the data. It is distinguished from the positivistic approach to data analysis in that it does not accept an independent, pre-existing reality about which truth can be discovered. Rather social theories are always interpretations, and truth is enacted” (Mingers, 2003).

Similarly, Urquhart (2001) in his work discussed that: “grounded theory can be employed either as a philosophical approach to a research or as a technique to analyze the data. As a research philosophy, the researcher approaches a research question without adopting a *priori* a research framework or a theoretical context. The grounded theory can be used as a research technique and includes the process of constant comparison of data with categories which have emerged from previous data. Such constant comparison either generates new categories or supports previously identified categories”.
The two popular approaches of grounded theory were presented by Creswell, (2007, p.64) in his work. According to the author, “these two approaches are: the systematic procedures of (Strauss and Corbin, 1990, 1998) and, the constructive approach of (Charmaz, 2005, 2006). In the systematic approach, the investigator seeks to systematically develop a theory that explains process, action, or interaction on a topic (such as the process of developing a curriculum). The constructive approach of grounded theory lies squarely within the interpretive approach to qualitative research with flexible guidelines, a focus on theory developed that depends on the researcher’s view, learning about the experience within embedded, hidden networks, situations, and relationships, and making visible hierarchies of power, communication, and opportunity”.

For data collection using grounded theory approach, Crewell (2007, p.64) explained that the data collection in grounded theory study is a zigzag process. The researcher goes out to the field to gather information, and then back into the office to analyze the data, back to the field again to gather more information, into the office, and so forth. On the other hand, Strauss and Corbin (1990) discussed grounded theory’s data analysis process using the terms open, axial, and selective coding. “Open coding includes analyzing the data and identifying the categories that represent conceptual groupings of data. The axial coding involves making connections between the categories to identify an overall theoretical framework. Finally, the selective coding represents completing the association of data for all emerging categories and the identification of core categories to support the conceptualization of the theoretical framework”.

The main advantage of grounded theory research is that it encourages systematic, detailed analysis of the data and provides a method for doing so. “For the beginner researcher, the detailed guidance provides a certain level of comfort that the data are being analyzed in a systematic manner. This advantage of theory is at one and the same time its major disadvantage. For instance, the beginner researchers of the grounded theory method tend to get overwhelmed at the coding level. The attention to word and sentence-level coding usually focuses the mind on the detail. Beginner or inexperienced researchers tend to find it difficult” (Myers, 2009, p.112). On the other
hand, grounded theory research is also considered as a lot of time consuming process by several researchers in the past.

### 4.4.5 Proposed Research Strategy for Current Research

Upon considering several research strategies, a case study approach is selected for this study as it allows researcher to conduct an extensive and in-depth research of an organization (i.e. banking industry in our case). Benbasat et al., (1987) believes that in IS research, an interpretive case study research strategy is considered as a well-established qualitative research method that allows the researcher to “examine phenomena in its natural setting, employing multiple methods of data collection to gather information from one or a few entities such as people, groups, or organizations”.

Similarly, Hartley (2004, p.323) describe that: “a case study research strategy consists of a detailed investigation, often with data collected over a period of time, of phenomena, within their context. It is particularly suited to research questions which required detailed understanding of social or organizational processes because of the rich data collected in context”. In the context of current research, understanding of organizational processes can be seen as the current use of CRM within the banking sectors of Pakistan and UK whereas social processes can be referred as how bank employees collaborate and communicate with each other using CRM system.

Furthermore, this study is based on multiple-case studies approach i.e. CRM operation in the banking sector of Pakistan as case study one, and CRM operation in the banking sector of UK as case study two. Yin (2009, p.60) in his latest work discussed that a case study research includes both single- and multiple-case studies. The author proposed the advantages of using multiple case studies as:

> Although all designs lead to successful case studies, however, if the researcher has a choice and resources, “multiple-case studies” are preferred over “single-case” designs because, the conclusions arising from the multiple
cases (independently) are usually more powerful than those coming out from a single case alone.

Therefore, the current study is based on multiple case studies (using two cases) and several data collection techniques that fall under the multiple case study approach are discussed in the following sections.

4.5 Data Collection Techniques for Qualitative Case Study Research

There are several data collection techniques that can be used to conduct a qualitative research. Particularly, for a case study research, multiple data collection techniques are used to support the research findings (Benbasat _et al._, 1987). According to Yin (2003), for conducting a case study research, the preparation for data collection can be complex and difficult. If they are not handled well, the entire case study investigation can be jeopardized, and all of the earlier work.

According to the same author, there are six sources of evidence available that are most commonly used in doing a case study research. These are: documentation, archival records, interviews, direct observations, participant-observation, and physical artefacts (Yin, 2003, 2009; Oates, 2006; Myers, 2009). McNamara (1999) presented a table containing most of these techniques and proposed another two techniques i.e. questionnaires and focus groups as shown in the following table 4.1. Therefore, in this section, we first discuss these available data collection techniques and then, highlight some of these techniques that are used for the current research.
<table>
<thead>
<tr>
<th>Method</th>
<th>Overall Purpose</th>
<th>Advantages</th>
<th>Challenges</th>
</tr>
</thead>
</table>
| Questionnaires, Surveys, Checklists | When need to quickly and/or easily get lots of information from people in a non threatening way | -Can complete anonymously  
-Inexpensive to administer  
-Easy to compare and analyze  
-Administer to many people  
-Can get lots of data  
-Many sample questionnaires already exist | -Might not get careful feedback  
-Wording can bias client's responses  
-Are impersonal  
-In surveys, may need sampling expert  
-Doesn't get full story |
| Interviews               | When want to fully understand someone's impressions or experiences, or learn more about their answers to questionnaires | -Get full range and depth of information  
-Develops relationship with client  
-Can be flexible with client | -Can take much time  
-Can be hard to analyze and compare  
-Can be costly  
-Interviewer can bias client's responses |
| Documentation Review     | When want impression of how program operates without interrupting the program; is from review of applications, finances, memos, minutes, etc. | -Get comprehensive and historical information  
-Doesn't interrupt program or client's routine in program  
-Information already exists  
-Few biases about information | -Often takes much time  
-Info may be incomplete  
-Need to be quite clear about what looking for  
-Not flexible means to get data; data restricted to what already exists |
| Observation              | To gather accurate information about how a program actually operates, particularly about processes | -View operations of a program as they are actually occurring  
-Can adapt to events as they occur | -Can be difficult to interpret seen behaviours  
-Can be complex to categorize observations  
-Can influence behaviours of program participants  
-Can be expensive |
| Focus Groups             | Explore a topic in depth through group discussion, e.g. about reactions to an experience or suggestion, understanding common complaints, etc.; useful in evaluation and marketing | -Quickly and reliably get common impressions  
-Can be efficient way to get much range and depth of information in short time  
-Can convey key information about programs | -Can be hard to analyze responses  
-Need good facilitator for safety and closure  
-Difficult to schedule 6-8 people together |

Table 4.1: Basic Methods for Data Collection (Source: McNamara, 1999).

### 4.5.1 Documentation

Documentary information is likely to be relevant to every case study topic. This type of information can take different forms and should be the object of explicit data collection plans. There are a wide variety of documents such as:

- letters, memoranda, e-mail correspondence, and other personal documents such as official publications, letters, dairies, journals, branch literature and broachers etc.;
agendas, announcement and minutes of meetings, and other reports of events;

news clippings and other articles appearing in the mass media or in community newspapers (Yin, 2009, p.101).

4.5.2 Archival Records

Yin (2009, p.105) discussed that archival records in computerized form are mostly used these days and this technique is also considered as an important data collection technique. Examples of the archival records include:

- **Service Records**: These records show the number of clients served over a given period of time.

- **Organizational Records**: The examples are organizational charts and budgets over a period of time.

- **Maps and Charts**: The maps and charts of the geographical characteristics or layouts of a place.

- **Survey Data**: Such as census records or data previously collected about a site.

- **Personal Records**: Such as diaries, calendars, and telephone listings (Yin, 2009, p.105).

4.5.3 Interviews

Interview technique is one of the most important and useful data collecting techniques for the qualitative case study research in IS. An interview can be defined as an exchange of words between two people. These two individuals can be characterized as an interviewer and an interviewee. The interviewer schedules the interview in a planned manner with the intention of obtaining useful information about his/her area of research from the interviewee. Interviews is a useful technique for a number a
reasons: they are concerned with acquiring information on a particular topic, getting answers about complex issues, obtaining answers as well as emotions, and probing sensitive information (Oates, 2006). According to Yin (2003), while conducting an interview, the interviewer has two jobs:

- to follow own line of inquiry, as reflected by researcher’s case study protocol;
- to ask actual (conversational) questions in an unbiased manner that also serves the needs of researcher’s own line of inquiry (Yin, 2003).

Three major types of interview techniques were proposed by Myers (2009, p.123) which are: *structured interviews*, *semi-structured interviews*, and *unstructured interviews*. The author further elaborated these three techniques as: “structured interviews involve the use of pre-formulated questions, usually asked in a specific order, and sometimes within a specific time limit. Semi-structured interviews involve the use of some pre-formulated questions, but there is no strict adherence to them. New questions might emerge during the conversation, and such improvisation is encountered. Finally, the unstructured interviews involve the use of a very few pre-formulated questions. There may or may not be a time limit, and interviewees have a free rein to say what they want”.

Myers and Newman (2007) conceptualized the interview process as a *Drama*. Their dramaturgical model was build upon Goffman’s theory of face-to-face interaction, which views the interview process as a social interaction. The dramaturgical model’s concepts are summarized below.

- **Drama**: The interview is a drama with a stage, props, actors, an audience, a script, and a performance.

- **Stage**: A stage is a variety of organizational settings and social situations. In organizational setting, the stage is normally an office. Various pops will be used such as pens, notes, and a voice recorder.
 Actor: Both the interviewer and the interviewee can be seen as actors. The
researcher has to play a role of the interviewer whereas the interviewee plays
the role of a knowledgeable person in the organization.

 Audience: Both the interviewer and interviewee can also be seen as the
audience. The researcher should listen carefully while the interviewee should
listen to the questions and answer them appropriately. The audience can also
be considered as those individuals who will read the research study at a later
stage.

 Script: A script is considered as a list of questions that need to be asked during
the conversation with the interviewee. The interviewee has to use his/her
expertise and knowledge to answer such questions.

 Entry: It is important for interviewer to make a good impression during the
first meeting with the interviewee.

 Exit: Leaving the stage, thanking the interviewee for sharing the relevant
information or documents.

 Performance: All of the above steps will produce a good or a bad
performance. The quality of performance affects the quality of the findings
which in turn affects the quality of data.

The above authors further explained that the dramaturgical model can help IS
researchers to address some of the potential drawbacks and challenges of the
qualitative interview. The model also focuses on conceptualizing the interview as a
drama and aims to discover the participants’ experiences in their own words (Myers
and Newman, 2007).

131


4.5.4 Direct Observations

In this type of data collection, the investigator is having a field visit to the case study site thereby creating an opportunity for direct observations. For example the condition of buildings or workspaces will indicate something about the climate impoverishment of an organization. Thus to increase the reliability of observational evidence, a common procedure is to have more than a single observer making an observation, whether of a formal or casual variety (Yin, 2003).

4.5.5 Participant-Observation

It is a special mode of observation in which the investigator is not merely a passive observer. Instead, the investigator may assume a variety of roles within a case study situation and may actually participate in the events being studies (Yin, 2003). Myers (2009, p.139) explain it as: “a data collection technique in which a researcher is not only observing people doing different things, but also take part in these activities to some extent. The main idea of this approach is that the researcher is interacting with different people in attempt to gain an understanding of their beliefs and activities from inside. For example, a researcher working in an organization on a part time basis, while doing his research on the development of an information system”.

4.5.6 Physical Artefacts

According to Yin (2009, p.113), “physical or cultural artefacts could be a technological device, a tool or instrument, a work of art, or some other physical evidence. Such artefacts may be collected or observed as part of a case study and have been used extensively in anthropological research”. The author further explains that: “the physical artefacts have less potential relevance in the most typical kind of case study. However, when relevant, the artefacts can be an important component in the overall case” (Yin, 2009, p.113).
4.5.7 Questionnaire

A questionnaire can be described as a set of related questions that are sequenced systematically. The researcher normally requests respondents to answer these questions on either paper based form or an electronic word file. According to Oates (2006), there are two types of a questionnaire i.e. self-administered and researcher-administered. In the self-administered type, the respondent completes the questionnaire without supervision, whereas for the researcher-administered type, the researcher fills in the answers that are gathered from the respondents.

The author further explained that the questions should be short, related, clear, detailed, and goal-oriented. Either open or closed question formats can be used, open questions giving respondents the freedom of answering in their own way, and closed questions specifying a list of multiple answers for selection by the respondents. The author further discussed the drawbacks of using questionnaire data collection technique. One of the major drawbacks of this technique is that the answers may not be reliable since there is no way of checking the credibility of respondents and due to the lack of interaction, little opportunity exists for probing the answers (Oates, 2006).

4.5.8 Focus Groups

As the traditional interview approach is simply one-to-one conversation between interviewer and interviewee, nowadays there is an increasing use of focus group interviews. Focus group approach is being used in a variety of fields, such as health education and in evaluation of social programs, and it became popular in the social science discipline during the 1980s. Basically, it is a group interview approach, in which the researcher engages all the participants to discuss and present their views on a particular research topic. A focus group is characterized by a non-directive style of interviewing, where the major concern is to encourage a variety of viewpoints on the topic in focus for the group. The researcher introduces the topic for discussion and facilitates the interchange. The researcher’s main task is to create a permissive atmosphere for the expression of personal and conflicting viewpoints on the topic in focus. However, the aim of the focus group is not to reach consensus about, or
solution to, the issues discussed, but to bring forth different viewpoints on an issue (Kvale and Brinkmann, 2009, p.150).

4.5.9 Proposed Data Collection Techniques for Current Research

In the previous sections, we discussed the available data collection techniques that are generally used for an interpretive case study research. For the purpose of current research, from these several available techniques, interview technique is considered as the main source of data collection for this study as it covers two different aspects i.e. acquiring relevant information about the research topic (CRM) by having conversation with various banks’ officials, and at the same time, observing different activities within the banks i.e. how CRM is currently used in different banks of Pakistan and the UK. Moreover, a semi-structured interview style is used because it provides more insight into the research topic allowing researcher to gather answers to the specific interview questions on one hand, and on the other hand, the researcher will gather some additional information from the interviewees that could be relevant and used for the write-up at the later stage. Semi-structured interview style is also useful while comparing it with the structured interview style in our case because with the semi-structured style, the interview questions are designed to be more generic and the interviewees can freely express their viewpoints about the topic.

Other data collection techniques such as documentations and archival records which include: bank publications, annual reports, broachers (information about different products and services), account tariffs, bank policy reports, and frequent visits to the banks’ websites etc., are all used as the secondary sources of data collection that are also useful for current research.

4.6 Conclusions

This chapter provided detailed information about the research methodology used to conduct this research. The available research approaches that are mostly used in social sciences research i.e. quantitative and qualitative were thoroughly presented along
with some discussions about several research strategies that fall under both quantitative and qualitative research. Similarly, we also covered the three research paradigms or research philosophies i.e. positivistic, interpretive, and critical research that are generally used in IS research. Then, we presented some discussions about the selection of qualitative research and its interpretive case study approach for this study as this approach seems relevant to the nature of this research. Furthermore, we also proposed and selected multiple-case study approach for this research as it is a suitable approach to present the two case studies in a more structured form. Similarly, a complete description of the available data collection techniques that are mostly used for the multiple-case study approach and the techniques that are used for the current study are also presented in this chapter.
Chapter 5

Field Study and Within-Case Data Analysis

This chapter presents the first stage of data analysis, within-case analysis, in which we separately explain and analyze the two case studies selected for this research, i.e. (i) CRM operation in the banking sector of Pakistan, and (ii) CRM operation in the banking sector of the UK. The chapter starts with discussion of the data analysis techniques normally used for an interpretive case study approach. The cross-case analysis technique was selected for the current research as this technique specifically applies to the analysis of multiple cases and is more relevant if a case study approach consists of at least two cases. The chapter then presents the two case studies separately in the form of ten different themes for each case. These themes contain the overall operations of CRM within the banking sector of the two countries.

5.1 Data Analysis Techniques

According to Creswell (2007, p.147) analyzing text and several other forms of data presents a challenging task for the qualitative researchers. It is a hard job for a researcher to represent the data in the form of tables, matrices, and narrative form. The author further discussed that data analysis in qualitative research consists of preparing and organizing the data; for example, text data as in transcripts, or image data as in photographs, for further analysis; and then reducing the data into different themes, and finally representing the data in tables, figures, or a discussion (Creswell, 2007, p.147). Recently, Yin (2009, p.136) proposed five different techniques for data analysis that can be used in a case study research. These are: pattern matching,
explanation building, time-series analysis, logic models, and cross-case synthesis. The author explained that for qualitative case study research, one of these techniques should be considered. However, the author argues that none of these techniques is easy to use, and all would require much practice to be used powerfully. In this section, we will further discuss these techniques and then select the one that is most appropriate to the current research.

- **Pattern Matching:** One of the most desirable techniques is to use a pattern-matching logic. Such logic compares empirically based patterns with the predicted one (or with several other predictions). If the patterns coincide, the results can help a case study to strengthen its internal validity. If the case study is an explanatory one, the patterns may be related to dependent or independent variables of the study (or both). Similarly, if the case study is a descriptive one, pattern matching is still relevant, as long as the predicted pattern of the specific variables is defined prior to the data collection (Yin, 2009, p.136; Trochim, 1989).

- **Explanation Building:** This data analysis technique is in fact a special type of pattern matching, but its procedure is more difficult and therefore deserves separate consideration. Using this technique, the researcher’s role is to analyze the case study data by building an explanation of the case. This implies that it is most useful in explanatory case studies, but it is possible to use it for exploratory cases as well as part of a hypothesis-generating process (Glaser and Strauss, 1967). It is an iterative process that begins with a theoretical statement, refines it and revises the proposition, repeating this process from the beginning. A major limitation with this technique is a loss of focus (Yin, 2009, p.141).

- **Time-Series Analysis:** This is a well known technique in experimental and quasi-experimental analysis. Such data analysis technique can follow many intricate patterns; the more intricate and precise the pattern, the more the time-series analysis will lay a firm foundation for the conclusions of the case study.
Time-series analysis techniques can be used in three different ways, i.e. simple time series, complex time series, and chronologies (Yin, 2009, p.144).

- **Logic Models**: This technique has recently become popular and it is useful in conducting case study evaluations. Yin (2009, p.149) stated that “the logic model deliberately stipulates a complex chain of events over the extended period of time. The events are staged in repeated cause-effect-cause-effect patterns, whereby a dependent variable or event at an earlier stage becomes the independent variable for the next stage. The use of logic models technique consists of matching empirically observed events to theoretically predicted ones; therefore, many researchers consider this technique as another form of pattern matching technique. However, because of the sequential stages in this technique, it deserves to be distinguished as a separate data analysis technique from the pattern matching one” (Yin, 2009, p.149; Peterson and Bickman, 1992; Rog and Heubner, 1992).

- **Cross-Case Synthesis**: According to Yin (2009, p.156), the above four techniques can be used for either a single-case or multiple-case studies; however, cross-case synthesis applies specifically to the analysis of multiple cases. In other words, this data analysis technique is more relevant if a case study research consists of at least two cases i.e. with cross-case synthesis technique using at least two cases, the analysis is likely to be easier and the findings could be more robust. Similarly, having more than two cases could further strengthen the findings. Cross-case technique can be used whether the individual cases were previously conducted as independent research studies or as a pre-designed part of the same study. In either situation, the technique treats each individual case as a separate study. Yin (2009, p.156) further suggested that using the cross-case synthesis technique, each case study would be first presented in the form of different themes. Then, the results of different case studies (using some key words) would be displayed in the form of word tables. Finally, these results would be further compared with a uniform framework to attain final results (Yin, 2009, p.156).
5.1.1 Proposed Data Analysis Technique for Current Research

From the above five different data analysis techniques, cross-case analysis technique seems relevant for the current research because it is ideal for comparing two different cases in a more structured way. Looking at the context of current research, we have two different case studies, i.e. (i) CRM operation in the banking sector of Pakistan, and (ii) CRM operation in the banking sector of the UK, where Pakistan was selected as a developing country and the UK as a developed country. The idea for selecting two different case studies is to identify the similarities, differences, and weaknesses in the banking sectors of these two countries by conducting an in-depth analysis into how CRM is currently operated within the banking sectors of the two different countries. Creswell (2007, p.163) presented a method of performing cross-case analysis that was also proposed by Yin (2009, p.156) as:

When using a multiple case study design, the first step is to present a detailed description of each individual case in the form of different themes that are emerged from different interviews’ results, called a within-case analysis; followed by a thematic analysis across the cases, called a cross-case analysis.

Using the above method, we will cover the first part of data analysis, the within-case analysis, in this chapter, presenting the interview results of the two case studies separately in the form of different themes. These themes have emerged from the CRM literature and from the interviews with bank officials in the two countries. The interview questions for both case studies were designed to be similar (in order to obtain the similarities and differences in the CRM operation between the two case studies more accurately) and were designed to cover the four major functional areas of CRM in the banks (already presented and discussed in CRM literature in chapter 2). These four functional areas are: (i) Marketing, (ii) Sales, (iii) Service and Support, and (iv) IT and IS. The next chapter will cover the second stage of data analysis, cross-case analysis, in which we will compare the analysis results of the two case studies in order to obtain the similarities, differences, and weaknesses between them. Such comparison will be useful in answering the main research questions. The components of an ideal CRM model presented as a frame of reference in chapter 3
will be then used in chapter 6 to compare and discuss the results from the two case studies more precisely. The model contains four different functional areas that covers the overall CRM activities within any CRM-enabled bank i.e. contact channel management, customer data management, enterprise-wide management, and IT management. The results taken from the first stage of analysis in this chapter will be further compared and discussed in the next chapter using the four core areas of the model to evaluate the level of CRM maturity at several banks in the two countries.

5.2 Case Study One: CRM Operation in the Banking Sector of Pakistan

5.2.1 Selected Banks for the Interviews

Initially, during the field trip to Pakistan for data collection, numerous banks were visited and several bank employees were contacted for interview. During that period, it was observed that most bank employees were not comfortable sharing CRM-related information and any other information relating to IT. However, letters were arranged from the university prior to the field trip, but having these letters was not enough evidence to get access to different banks and to conduct interviews with their employees. Therefore, a meeting was arranged with officials at the State Bank of Pakistan (SBP). SBP is a regulatory authority that monitors performance and provides regulations for all the banks in Pakistan, including government, private, and foreign banks. In that meeting, the research objectives were thoroughly explained and then the details of different banks’ staff members, such as their email addresses, phone numbers, and branch addresses were gathered. In that way, different bank employees were approached and several interviews were conducted. The selected banks for this study are:

- Allied Bank Limited (ABL)
- Bank Alfalah Limited
- Habib Bank Limited (HBL)
- NIB Bank (formerly PICIC Bank)
5.2.2 **Interview Participants**

<table>
<thead>
<tr>
<th>Participants Positions</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch Managers</td>
<td>07</td>
</tr>
<tr>
<td>Call Centre Agents</td>
<td>04</td>
</tr>
<tr>
<td>Call Centre Managers</td>
<td>03</td>
</tr>
<tr>
<td>IT Managers</td>
<td>03</td>
</tr>
<tr>
<td>Customer Service Managers</td>
<td>02</td>
</tr>
<tr>
<td>Marketing Staff</td>
<td>02</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

Table 5.1: Interview Participants for Case Study One

5.2.3 **Historical Overview of the Selected Banks**

5.2.3.1 **Allied Bank Limited (ABL)**

According to the bank’s website (ABL, 2010), “Allied Bank Limited was the first bank to be established in Pakistan. It first started out in Lahore by the name Australasia Bank before Pakistan’s independence in 1942; it was renamed Allied Bank of Pakistan Limited in 1974 and finally Allied Bank Limited in 2005. In August 2004, because of the capital reconstruction, the bank’s ownership was transferred to a consortium comprising Ibrahim Leasing Limited and Ibrahim Group. Nowadays, with its existence of over 60 years, the bank has built itself a foundation with a strong equity, assets, and deposit base. The bank offers universal banking services, while placing major emphasis on retail banking. The bank also has the largest network of over 700 online branches in Pakistan and offers various technology-based products and services to its various customers” (ABL, 2010).
5.2.3.2 Bank Alfalah Limited

“Bank Alfalah Limited was incorporated on June 21st, 1992 as a public limited company under the Companies Ordinance of 1984. Its banking operations commenced from November 1st, 1997. The bank is engaged in commercial banking and related services as defined in the banking companies ordinance, 1962. The bank is currently operating through 195 branches in 74 cities having its head office at Karachi, Pakistan. Since its foundation, the management of the bank has implemented strategies and policies to carve a distinct position for the bank in the market place. According to the bank’s website, the bank has invested in revolutionary technology to have an extensive range of products and services and its vision is to be the premier organization by providing the complete range of financial services to all segments under one roof” (Bank Alfalah Limited, 2010).

5.2.3.3 Habib Bank Limited (HBL)

“HBL was the first commercial bank to be established in Pakistan in 1947. Over the past decades, HBL has grown its branch network and has become the largest private sector bank with over 1,450 branches across the country and a customer base exceeding five million relationships. The government of Pakistan privatized HBL in 2004 through which Agha Khan Fund for Economic Development (AKFED) acquired 51% of the Bank's shareholding and management control, 42.5% of the shareholding is retained by the government of Pakistan, whilst 7.5% is owned by the general public i.e. over 170,000 shareholders following the public listing that took place in July 2007. The Bank is expanding its presence in principal international markets including the UK, UAE, South and Central Asia, Africa, and the Far East. The bank’s key areas of operations include product offerings and services in retail and consumer banking. The bank has the largest corporate banking portfolio in the country with an active investment banking arm. SME and Agriculture lending programs and other banking services are offered in both urban and rural areas of Pakistan” (HBL, 2010).
5.2.3.4 **NIB Bank**

“NIB bank first started as National Development Leasing Corporation (NDLC) and Pakistan operation of IFIC Bank and was later on incorporated in March 2003, as a public limited company. In October 2003, all assets and liabilities and all rights and obligations of the former NDLC and Pakistan operations of IFIC Bangladesh were amalgamated with and into NIB Bank. NIB bank has recently acquired another local financial group, Pakistan Industrial Credit and Investment Corporation (PICIC), with nearly 170 branches. Together, the bank has the 7th largest branch distribution network in Pakistan that places the bank in the top 10 Pakistani banks in terms of balance sheet size and capital. NIB bank has grown rapidly from 2 branches in 2003 to around 240 post merger in the first quarter of 2008, with a corresponding increase in its deposits and assets base. NIB bank’s business units include small and medium enterprises and commercial banking group, corporate and investment banking group, financial institutions, and consumer and small enterprise group. The bank's vision is to be the most admirable financial institution in Pakistan; whereas, the bank’s operation is based on five core values i.e. passion, respect, integrity, excellence, and fairness” (NIB Bank, 2010; Wikipedia, 2010h).

5.2.3.5 **Standard Chartered Bank (Pakistan)**

According to Wikipedia (2010i), “Standard Chartered Bank (Pakistan) Limited is Pakistan’s oldest and largest foreign commercial bank. The history of Standard Chartered in Pakistan dates back to 1863, when the Chartered Bank of India, Australia, and China first established its operations in Karachi, Pakistan. In 2006, Standard Chartered Bank acquired Pakistan’s Union Bank. On December 30th 2006, Standard Chartered merged Union Bank with its own subsidiary, Standard Chartered Bank (Pakistan), to create Pakistan's sixth largest bank”. According to the bank’s website (Standard Chartered Bank, 2010), “the bank has a network of over 162 branches in Pakistan and employs a workforce of over 9,000 employees in its operations in Pakistan. The bank is committed to all its stakeholders by living its values in its approach towards managing its people, exceeding expectations of its customers, and making a difference in communities and working with regulators”.
5.2.4 Themes

5.2.4.1 CRM: Vision

In Pakistan, different banks view CRM in different ways; even in one particular bank, different departments’ visions of CRM differ. Some banks consider CRM as just software, others as different software packages used at call centres, and yet others as different marketing tools and techniques used to maintain relationships with customers in order to satisfy their needs. For instance, during an interview with the branch manager at Habib Bank Ltd about the CRM vision, he explained CRM as:

“In most of the Pakistani banks, CRM operates differently while comparing its operations with developed countries. To us, all customers are valuable and we believe in maintaining long-term relationships with all of them. We also believe that branch banking is responsible for maintaining such relationships and therefore, it is not always necessary to just install different software at the bank in order to maintain good relationships with the customers. These relationships can be maintained by having good conversation with the customers and fulfilling their needs during their visit at our branch” (Branch Manager, Habib Bank Ltd.).

On the other hand, the IT employees at Habib Bank Ltd have different views about CRM. One of the IT managers described CRM as:

“A new concept that is recently introduced and incorporated in the banking industry of Pakistan through which banks using some analytical tools categorize their customers and by using these categories, approach them differently and provide them better customer service according to their needs” (IT Manager, Habib Bank Ltd.).

Similarly, call centre staff at the Standard Chartered Bank expressed their views about CRM. According to one of the staff members:
“CRM is a set of activities carried out by banks to maintain long-term relationships with their existing and potential customers. At our bank, initially when a customer opens an account, the information provided by that customer is stored in the CRM system. The system then generates the account profile for that customer. Such information will be further retrieved by our call centre agents, bank managers etc., by using the customer’s NIC No. (National Identification Card Number) or his/her date of birth” (Call Centre Staff, Standard Chartered Bank).

Another view about CRM was taken from the customer service manager at the head office of Bank Alfalah Ltd., who discussed how banks have recently started categorizing their customers using CRM. He further explained that:

“Nowadays, there is a new trend in the market where most of the banks have to bifurcate their customers, e.g. into priority customers, corporate customers, SME-based customers, retail customers, etc., and each category is handled by different people working in different departments of a bank having expertise in that particular category” (Customer Service Manager, Bank Alfalah Ltd.).

Similar views were gathered from several other employees of the selected banks and, in general, it was observed that some of these selected banks are at the initial stages of implementing the complete CRM system; others have installed some of the CRM packages and have started CRM operations at the call centres. Therefore, looking at the current banking environment in Pakistan, at present, CRM is viewed differently by different banks.

5.2.4.2 CRM Operation at the Branch Banking

Throughout Pakistan, the branch banking operation is more or less the same. A typical bank’s branch provides several facilities: account opening, payment of bills, balance enquiries, providing bank statements to their customers, providing facilities in terms of customers upgrading or downgrading to different accounts, money in and out, etc. Mostly, each branch is equipped with the latest computers and the bank employees
communicate with each other (within the same branch and with other branches of their bank) using their bank’s internal communication channel. The organizational structure of branch banking in Pakistan was shared by one of the bank managers and is shown in figure 5.1.

![Organizational Structure of Branch Banking in Pakistan](image)

**Figure 5.1: Organizational Structure of Branch Banking in Pakistan**

In an interview with the branch manager of NIB Bank, the manager provided details about the CRM operation at the branch banking level. According to the bank’s branch manager:

“When a customer arrives at any NIB Bank’s branch, he/she receives greetings from customer service representatives. Normally, existing customers already know the relevant person to contact for their queries. Walk-in (new) customers are further directed to the branch manager. We have trained

**CSO = Customer Services Officer**
**CRO = Customer Relationship Officer**
employees who deal with all types of queries at the branch level. Each staff member has expertise in their own area and only deals with customers having queries regarding that particular area. For instance, borrowing customers have a different Customer Relationship Officer (CRO) who deals with the customers who have borrowing-related queries. Similarly, each customer relationship officer handles a number of customers and his/her performance is constantly monitored by the branch manager. Therefore, instead of contacting any other bank employee, a borrowing customer directly contacts his/her CRO; and based on each customer’s previous account history with the bank, the CRO further approves loans and updates the customer’s details in the system” (Branch Manager, NIB Bank).

Similarly, the branch manager at Bank Alfalah explained the branch banking operations as:

“At our branch, a customer service desk usually provides useful information about our bank’s different products to new as well as existing customers. Our employees at the customer service desk are fully trained and well aware of all the basic information about our bank’s products. If a customer has any query regarding his/her account, they further direct that customer to the relevant staff member for further assistance” (Branch Manager, Bank Alfalah).

However, Allied Bank’s call centre manager mentioned a good example of why CRM does not work at the branch banking level. He further argued that:

“In most of the banks across Pakistan, CRM does not work at the branch level; while in some cases, the main branches (or head offices) are equipped with CRM facilities. Otherwise, CRM is only operative at the call centre (that can be contacted by customers via phone banking). At present, all the branches of our bank across Pakistan are only dealing with the basic account-related queries of our customers; for other technical problems such as problems with credit or debit cards, bank employees usually advise customers to contact the branch where the account was opened (because that branch holds the complete
information of their customers), or sometimes they contact the call centre agents to resolve that particular problem. One of the main reasons why CRM does not work at every branch level is that the CRM software requires a standard internet bandwidth which is not the same throughout the country. For instance, we have to think about a bank having around 800 branches across the country; so at present, it is very hard to maintain the same level of standard (in terms of service) at each branch. Therefore, CRM is not centralized, i.e. CRM does not completely work at branch level. Other reasons are related to affordability, because most of the CRM packages are very expensive to buy and maintain at each branch” (Call Centre Manager, Allied Bank Ltd).

From the above discussion, we conclude that most of the banks across Pakistan are working hard to integrate CRM across all the banking channels especially at the branch level. At present, CRM is not centralized and is not completely functioning at the branch level because of problems with the available internet bandwidth which does not support CRM software. Also, according to several bank employees, CRM is very expensive to buy and maintain across all the different branches of a bank. Therefore, currently in most of the banks, each branch services its own customers by providing major products and services. In the case of any technical issues with the customers’ existing accounts, customers can easily contact their bank’s call centre via phone banking from any local branch, or by making a call from home, and mostly these issues are handled at the branch where the customer’s account was opened as each branch holds detailed information of their own customers.

5.2.4.3 CRM Operation at the Call Centres (Customer Service Centres)

Over the last 8 to 10 years, there has been a lot of change in the overall banking environment in Pakistan. Most of the banks have opened call centres where the majority of customers’ queries are handled by well trained agents. Union Bank (now Standard Chartered Bank) was one of the first few banks to introduce a state-of-the-art call centre back in 2001. The bank implemented several CRM packages by implementing NCR’s data warehousing solution, called Teradata (Genesys Digital Library, 2005). Later on, several other banks also started their call centre operations
and today almost every bank owns its call centre where most of the customers’ problems are dealt with by the call centre representatives 24/7. One of the call centre employees at the Standard Chartered Bank explained in an interview that:

“Our call centre at Standard Chartered Bank is 24/7, has both Universal Access Number (UAN) (111) and Toll Free (0800) numbers. Recently, Union Bank merged with Standard Chartered and its call centre and operations are now working under the new Standard Chartered Bank. Their phone numbers are still the same to facilitate our previous customers” (Call Centre Employee, Standard Chartered Bank).

While being asked about the call centre operations, the call centre manager at Standard Chartered further explained the operations as:

“Customers’ information stored at the branch level can be easily retrieved by the call centre agents using the unique ID of each customer. The basic reason of having a call centre is to provide facilities to our customers 24/7 since the branch banking has only limited opening hours. We provide different types of facilities at the call centres such as all account-related queries, credit card queries, etc. For call centre operations, we have to follow the guidelines that are provided by our headquarters in the UK. However, these standards are sometimes flexible for different regions/countries; therefore, mostly we follow the call centre regulations that are provided by the State Bank of Pakistan” (Call Centre Manager, Standard Chartered Bank).

During an interview with the branch manager at NIB Bank, when asked about the back-end software through which customers’ information is maintained at the call centres, the bank manager replied that such information is confidential and only IT employees have knowledge about it and they do not share such information. He further stated that, in general, the software is licensed and up-to-date in terms of the latest technology.
Another interview was conducted with the call centre manager at Allied Bank Ltd, which was helpful in terms of information about different CRM packages used at their call centres, and the overall operation of call centres:

“We have acquired CRM through Teradata which is one of the pioneers in providing customer service solutions. At our call centre, we use CRM for three different modules, i.e. phone banking, complaint management, and customer base centre. These are the most widely used CRM applications in Pakistan and their operation is totally different from each other. Each module is operated by different call centre representatives. However, these applications are interlinked with each other. The best part of CRM is that by using these different systems, our call centre representatives can easily view our customers’ information in one window (screen). Our agents are fully trained and their performance is constantly monitored by their team managers. They deal with a lot of customers’ problems such as credit card issues, personal loans, auto loans, and different account-related queries” (Call Centre Manager, Allied Bank Ltd.).

To summarize, most of the banks in Pakistan have started call centre operations through which they provide 24-hour banking to their customers. These call centres are equipped with some of the latest CRM packages, which have improved their overall performance compared with the traditional branch banking strategy. However, banks are planning to fully integrate CRM across all the other channels, which according to them is a challenging task.

5.2.4.4 Query Response Time using the CRM System

In terms of customers’ query related issues, usually most of these queries are dealt with at both branch level (during their opening hours) and at the call centres (24/7). In Pakistan, most of the customers prefer to visit their bank’s local branch in case of any problems with their existing accounts; others prefer talking to the call centre agents about account-related problems. At Standard Chartered Bank, query-related issues were described by the call centre manager:
At our call centre, the query resolution depends on the type of query the customer has. We try to resolve customers’ queries within One Call Service (OCS). If a customer enquires about any product, such information is provided straight away. Similarly, if a customer is an annual customer maintaining a good relationship with the bank, and he/she wants to transfer funds between different accounts, card payments, credit card queries, etc., we try to resolve such type of queries within a single call (OCS). The procedure of query resolution is that when a customer makes a call to our call centre, our agents follow the security procedure for verification purposes, then they resolve the customer’s problem by looking at the customer’s account details. On average, each query is resolved within 5 to 10 minutes. Sometimes, problems occur, for example with the internet connectivity, in which case the call centre agent requests the customer to contact them again because the customer’s data is spread across different departments and the call centre agent requires access to all those departments in order to completely check where the problem happened” (Call Centre Manager, Standard Chartered Bank).

Similarly, in cases of customers’ complaints, Bank Alfalah has a specific department called Quality Assurance Department that makes sure that all complaints are resolved within 72 hours. One of the IT managers at a Bank Alfalah branch described both query- and complaint-related issues:

“If any customer wants to make a complaint about any service we offer, he/she can launch the complaint on our website. Our quality assurance department regularly checks all the complaints and tries to resolve them within 72 hours. After the complaint resolution, they contact the customer again, providing further details about how they dealt with it. For customers’ queries, our call centre agents are responsible for all account-related queries and their main priority is to resolve these queries as quickly as possible” (IT Manager, Bank Alfalah Ltd).

From the above discussions, we concluded that in Pakistan, most customers still prefer visiting their bank’s local branch in case of any account-related queries.
Recently, there has been a significant increase in customers who prefer contacting call centres for such problems, because it seems that banks are making them aware of the importance of using phone banking which saves customers’ time by avoiding making frequent visits to their bank’s local branch.

5.2.4.5 Major Products and Services

For products and services, most of the banks in Pakistan offer a variety of account products to their customers such as current accounts, savings accounts, term deposit accounts, business accounts, loans, and mortgages. Each product has different criteria for different types of customer. For instance, current accounts offered to individual customers are different from those for business customers. Similarly, these products are offered based on the monthly income of each customer.

According to a branch manager at Habib Bank Ltd:

“Our products are designed to facilitate different types of customers, and are based on customers’ needs” *(Branch Manager, Habib Bank Ltd)*.

He further explained the main priorities of customers when they visit the branch to open an account. These are as follows:

“Each customer has different priorities when it comes to opening an account at any bank. For instance, when a customer wants to open an account, his/her first priority would be that the bank should be near to the place where he/she lives. Secondly, the bank has to be well known with several branches and offer numerous products and services. Thirdly, one of the major concerns of almost every customer is regarding his/her money being safe at the bank where he/she opens an account. With these preferences in mind, when a customer enters the bank’s branch to open an account, he/she first observes the overall environment, such as how employees are dealing with other customers, do the existing customers seem satisfied, etc., and then while having conversation with the bank employees, the customer also observes the employees’
awareness of different products, and whether these products are useful, etc.”
(Branch Manager, Habib Bank Ltd).

Similarly, when asked about any particular department at the bank that deals with the customers during their first visit to open an account, the branch manager further said that:

“Normally, in most of the banks across Pakistan, the branch manager deals with new customers at branch level because they are more experienced in dealing with new customers. The branch manager’s job is important as the bank usually builds its relationship with the customers through the branch manager. At HBL, we first ask the requirements of our customers before offering any particular account product to them as we have so many types of available accounts. Once the customer has decided on the type of account, we then further explain the facilities and benefits of that particular account” (Branch Manager, Habib Bank Ltd).

In an interview at Bank Alfalah, a branch manager explained the bank’s requirements from the customers for different account products. According to this branch manager:

“At our bank, for opening an individual’s basic account, the minimum balance requirement is Rs. 5000 [equivalent to around 40 UK Pounds]. If, for some reason, customer does not keep that amount in his/her account, there are some charges for that, and those charges are automatically deducted from the customer’s account balance. The minimum balance requirement for account opening is almost the same in all the banks across Pakistan. Similarly, to get an overdraft facility, customers have to fulfil the bank’s requirements; for example: a customer has to explain why he/she requires such a facility, etc. Depending on each customer’s account history, the bank manager decides whether the bank will provide the facility or not. Furthermore, the overdraft interest charges vary but normally it is (per paisa per day)” (Branch Manager, Bank Alfalah Ltd).
Similarly, for mortgages and loans, the branch manager at Bank Alfalah discussed that loans are provided based on each customer’s circumstances. He further explained that:

“We have a set criterion for different types of our customers but mostly, loan and mortgage facilities are provided to the business customers. If any customer meets that criterion, he/she can get it but there is no fixed time limit for loans to be approved” (Branch Manager, Bank Alfalah).

In terms of interest rates for loans and mortgages, the branch manager further explained that:

“In Pakistan, the company that provides lending rates is known as “KIBOR” (Karachi Interbank Offered Rate). The company provides interest rates on weekly, monthly, and yearly basis to all the commercial banks of Pakistan so that they charge interest from their customers based on those rates. Such rates are inflation adjusted and then banks add 2 or 3% to the KIBOR rate to charge their customers for their profit” (Branch Manager, Bank Alfalah Ltd).

To summarize, different types of products are offered by different banks in Pakistan to facilitate their customers. For account opening, each bank has a fixed balance requirement which, according to most of the bank managers, is a basic requirement in almost every bank in Pakistan. The criterion for loans and mortgage facilities is high and mostly business customers obtain such a facility.

5.2.4.6 Maintaining Relationships with Business Customers and Individual Customers

For almost every bank, it is quite obvious that business customers are the prime focus and are considered as the heart of the bank, and therefore they receive better facilities compared to the individual customers. On the other hand, among business customers, some receive better facilities than others, and are treated differently depending on their overall value to the bank. The same applies to the individual customers; each
individual customer’s value is different to the bank. A branch manager of Standard Chartered Bank explained how banks categorize different types of customers:

“For different individual customers, each individual customer’s status is different and we set the priorities for each customer using some CRM tools. For instance in savings accounts, customers that maintain a balance up to Pk Rs. 100,000 get better facilities than customers whose savings are only up to Pk Rs. 5000. Similarly, for business customers, our bank provides different facilities depending on the customers’ annual turnover. The facilities we provide include better interest rates and increased credit card limits. These priority customers are treated differently by the call centre agents and their queries are handled with great care” (Branch Manager, Standard Chartered Bank).

Similar types of answers were gathered from other interviewees at different banks. Here, we will quote from an interview with a branch manager of Bank Alfalah, who explained that:

“At our bank, we have categorized our customers in three different levels, i.e. lower level, middle level, and higher level. These three levels have a different account balance limit. If a customer’s balance goes up and reaches a different level, usually our branch manager contacts that customer and informs him/her about the extra benefits he/she can get while maintaining that balance in his/her account. Similarly, business customers are usually contacted by the branch managers via phone or personal visits, and our bank always keeps our business customers up-to-date in terms of their accounts” (Branch Manager, Bank Alfalah).

To conclude, banks in Pakistan have started to categorize their customers using some CRM-based analytical tools. Each category of customers receives different facilities from their bank based on their overall value to the bank. Usually, business customers are contacted by the branch managers while individual customers are contacted by the call centre agents in case of any changes to their accounts.
5.2.4.7 Customer Acquisition vs. Customer Retention

For customer acquisition, most of the Pakistani banks usually attract new customers and approach their existing customers through different means such as: via media (TV commercials), newspapers, etc. The marketing manager at NIB bank explained this process as:

“We usually attract/approach customers through TV advertisements on different news channels. Furthermore, we also use TV advertisements to inform our existing customers in case of new products, because we have thousands of customers and it is not easy to contact them individually about the availability of new products. On the other hand, some customers do not provide their personal e-mail addresses or even their personal phone numbers. Therefore, a TV advertisement is by all means the best way to update all the customers about our products” (Manager Marketing, NIB Bank).

Similarly, for customer retention, different banks have started different CRM-based strategies to keep their existing customers for longer periods of time. For instance, Allied Bank has a particular loyalty department that works for both consumer banking and commercial banking, but it is more proactive at the consumer end. The main facilities offered by the department are:

- Discounts on different products,
- Increase in interest rates for savings accounts,
- Free account upgrade,
- Overdraft facility,
- Increased credit card limit.

The Bank’s marketing manager further explained that the agents working in the loyalty department have some limitations in terms of providing extra facilities to their existing customers. Each customer’s discount entitlement is different, and is simply estimated based on the customer’s previous account history with the bank. Such
account information is available to these agents with the help of different CRM packages used at the bank.

To summarize, for customers’ acquisition, most of the Pakistani banks advertise their products through different TV channels to attract new customers and at the same time these advertisements are useful for banks to inform their existing customers about the availability of new products. Similarly, banks nowadays have realized the importance of their existing customers and have started several CRM-based loyalty programmes to keep their existing customers for a longer period.

5.2.4.8 ATM Operations and its Issues

Over the last few years, there has been a lot of increase in customers using ATM services in Pakistan, and most of these customers benefit from this facility on a daily basis. The majority of these customers use ATMs for cash withdrawal, although other services such as balance enquiries, bill payments etc., are also available through these ATMs. In Pakistan, two ATM networks are available: One link, and MNet. Previously these two networks were run separately, providing services only to the customers of specific banks. Recently, these two networks have collaborated in order to facilitate customers of all the banks across Pakistan. The customer service manager at the Standard Chartered Bank explained ATM operations as:

“Customers nowadays can use any ATM using their cash cards. For each ATM service, charges are different; for example, if a customer wants to withdraw cash using the ATM machine, he/she has to pay a standard charge of Pk Rs. 15 each time; the amount is automatically deducted from the customer’s account balance. Similarly, charges are different for different types of service. However, it is free if a customer only enquires about his/her account balance” (Customer Service Manager, Standard Chartered Bank).

Similarly, a branch manager at Allied Bank Ltd talked about how companies benefit from those ATM service charges. According to this branch manager,
“When a customer pays a service charge of Rs. 15, from that money, the customer’s bank gets 18% to 19% that is roughly Rs. 3. The bank that provides that particular ATM gets 3% to 5%, and most of the remaining share goes to the service-providing companies (both One link and MNet)” (Branch Manager, Allied Bank Ltd).

The branch manager at Habib Bank talked about how banks are encouraging their customers to use ATM facilities. He said that:

“In order to provide ATM card facility to our customers, we usually charge an annual fee of Pk Rs. 330 that is almost the same amount other banks charge. We strongly encourage our customers to use the ATM service, because such practice reduces the number of customers visiting branches during busy hours. Similarly, customers save valuable time by avoiding frequent visits to the branch and joining long queues for only cash withdrawals during the peak hours” (Branch Manager, Habib Bank Ltd).

There are several other issues with regard to the use of ATM machines in Pakistan, which the IT Manager at NIB Bank highlighted:

- Pin code hacking,
- On spot thefts,
- ATM card misplacements,
- Machines run out of money,
- Card gets stuck in the ATM.

To conclude the analysis, One link and MNet are the two ATM service providers in Pakistan. They have recently collaborated to facilitate customers of all existing banks. For use of the ATM service, all the banks across Pakistan have the same policy to deduct some service charges from their customers’ account balance. However, there are several issues with regard to the use of the ATM facility which were explained by some of the interview participants and were also presented.
5.2.4.9 e-CRM Facilities (Internet Banking, Mobile Banking, Phone Banking, and SMS Alerts)

e-CRM is a new form of CRM through which banks using different electronic channels maintain relationships with their customers, such as: internet banking, mobile banking, and phone banking. Recently, these e-CRM related facilities have been introduced by most Pakistani banks but they are still not very popular.

For internet banking, the Bank Alfalah’s branch manager explained that:

“At present, we do not offer internet banking because it is really a sensitive issue in third world countries such as Pakistan where internet security is a big problem. Most of the banks in Pakistan (including Bank Alfalah) feel that the internet security is not up to international standards in Pakistan” (Branch Manager, Bank Alfalah Ltd).

The branch manager further talked about the internet security in developed countries and said that:

“In developed countries, the internet security standards are provided at the government level. Most of the banks and ISPs (Internet Service Providers) use very strong security software through which they can easily track any kind of misuse” (Branch Manager, Bank Alfalah Ltd).

Another e-CRM service called SMS banking facility was recently started by several banks in Pakistan and is only available for the credit card customers. The service works in the following way: every time a customer uses his/her credit card, the automated CRM system sends an alert message to the customer’s cell phone (about the amount used and the remaining account balance). Customers can easily subscribe or unsubscribe this service any time.

Similarly, Standard Chartered Bank offers a service called Internet Funds Transfer (IFS) through which customers (using their ATM card) can easily transfer funds
between different bank accounts. However, it is the customer’s responsibility to enter correct account details using the ATM to avoid any trouble. Customers always receive a confirmation message before the ATM further processes the transaction.

For phone banking, Allied Bank has recently introduced a CRM-based system that has three different modules. The first module is the front-end screen where the customers’ information appears. The second module is the database module where customers’ information is updated on a regular basis, according to customers’ account activities. The third module is the business module where the bank develops its strategy for each customer, based on each customer’s account history (Call Centre Manager, Allied Bank Ltd.).

To conclude, several banks in Pakistan have started e-CRM based services that are still not very popular because of several security issues (especially with the internet-based banking). At present, internet security is one of the major concerns as there are no set standards provided at the government level, and hence it requires consideration.

### 5.2.4.10 Future of CRM in the Banking Industry of Pakistan

During the interviews at five different banks in Pakistan, it was observed that CRM overall is seen differently by different people in the banks, because it is not integrated across all the channels and different departments at the banks. At present, only IT and call centre employees have complete knowledge of CRM. Currently, most of the banks have implemented a few CRM-based applications at the call centres and are planning to implement CRM across all the departments and also through different contact channels. However, looking at the present conditions, one thing is certain, that the majority of the banks these days are completely aware of the importance of CRM. To them, CRM is the only way they will survive in the marketplace. Therefore, in coming years, it looks as it the CRM culture will definitely increase in the banking industry of Pakistan.

The call centre manager at Allied Bank highlighted several issues with CRM adoption in Pakistan. He explained that:
“There are some constraints in terms of CRM adoption in the banking industry of Pakistan, such as: lack of support from the government level, rigid policies from the State Bank of Pakistan, issues with internet connectivity and the telecom sector, etc.” (Call Centre Manager, Allied Bank Ltd).

Therefore, these issues need to be considered and require proper resolution in order to increase CRM culture within the banks, and incorporate CRM properly within the banking industry of Pakistan.

5.3 Case Study Two: CRM Operation in the Banking Sector of UK

5.3.1 Selected Banks for the Interviews

In our second case study, the primary data was collected through several interviews from four major UK banks: Barclays Bank plc, Royal Bank of Scotland (RBS), Santander Bank (formerly known as Abbey Bank), and Lloyds TSB Bank. Initially, several other banks were approached for interviews but because insufficient data was gathered, these banks were not considered for analysis and comparison. The above four banks were selected because they have a wide network of branches in the UK i.e. having several branches in all the major cities of UK and having a large clientele. These banks are also registered and are regulated by the FSA. Furthermore, these four banks have proven business success, and are used to represent the banking sector of the UK. The data analysis presented in the following sections is performed by using the interview results from these four major banks.

- Barclays Bank PLC
- Royal Bank of Scotland (RBS)
- Santander Bank (formerly known as Abbey Bank)
- Lloyds TSB Bank.
5.3.2 Interview Participants

<table>
<thead>
<tr>
<th>Participants Positions</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch Managers</td>
<td>06</td>
</tr>
<tr>
<td>Call Centre Managers</td>
<td>02</td>
</tr>
<tr>
<td>IT Managers</td>
<td>02</td>
</tr>
<tr>
<td>Business Quality Managers</td>
<td>02</td>
</tr>
<tr>
<td>Personal Bankers</td>
<td>04</td>
</tr>
<tr>
<td>Premier Relationship Managers</td>
<td>02</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

Table 5.2: Interview Participants for Case Study Two

5.3.3 Historical Overview of the Selected Banks

5.3.3.1 Barclays Bank PLC

According to the bank’s website (Barclays, 2010), “Barclays is a major global financial services provider engaged in the retail banking, credit cards, corporate banking, investment banking, wealth management, and investment management services with an extensive international presence in Europe, USA, Africa, and Asia. With over 300 years of history and expertise in banking, Barclays operates in over 50 countries and employs approximately 144,000 people. Barclays bank moves, lends, invests, and protects money for more than 48 million customers and clients worldwide. Barclays banks is made up of two clusters i.e. global retail banking and corporate and investment banking, and wealth management, each of which has a number of business units. Barclays Group headquarters is at 1 Churchill Place in London, UK, but has operations all over the world, with products and services to meet the needs of their customers and clients in the local markets” (Barclays, 2010).
5.3.3.2 Royal Bank of Scotland (RBS)

“The Royal Bank of Scotland plc is one of the retail banking subsidiaries of the Royal Bank of Scotland Group plc. Together with NatWest and Ulster Bank, RBS provides branch banking facilities throughout the British Isles. The bank has around 700 branches, mainly in Scotland however, there are branches in many larger towns and cities throughout England and Wales. RBS and its parent, the RBS Group, are completely separate from the fellow Edinburgh based bank called the Bank of Scotland, which pre-dates RBS by 32 years. The Bank of Scotland was effective in raising funds for the Jacobite Rebellion and as a result, RBS was established to provide a bank with strong Hanoverian and Whig ties” (Wikipedia, 2010j).

According to the bank’s website (RBS, 2010), “the bank offers a full range of financial services to the personal customers, premium customers, and small and medium business customers (SMEs) through both RBS and NatWest brands. RBS and NatWest together has two of the largest ATM networks in the UK operating through a range of channels including online and fixed, and mobile telephony. The bank also claims to be the leading provider of financial services to small businesses, serving a quarter of the UK (SME) market and helping over 1.1 million customers. Also, the bank offers specialist help in the areas of vehicle and property leasing, and asset finance” (RBS, 2010).

5.3.3.3 Santander UK PLC (formerly known as Abbey Bank)

“Santander UK plc is a retail and commercial bank, based in Spain, with operations in more than 40 countries. At the end of 2008, Santander was the largest bank in the Europe zone by market capitalization and third in the world by profit. Santander acquired Abbey Bank in 2004, and recently on January 11th, 2010, Abbey and the savings business of Bradford and Bingley became known as Santander. This will be followed later in the year by Alliance & Leicester. Santander has 90 million customers worldwide, having more than 13,650 branches that are more than any other international bank, and over 180,000 employees. Santander is also a largest financial group in Spain and Latin America, with leading positions in the UK and Portugal and
a broad presence in Europe through its Santander Consumer Finance arm. In UK, the bank has over 1,300 branches and around 4,500 cash machines, and offers a full range of retail and corporate banking services to over 25 million customers. Its retail services include: mortgages, savings, bank accounts, loans, credit cards, long-term investments including pensions and unit trusts, life, critical illness and unemployment cover and household insurance” (Satander, 2010).

5.3.3.4 Lloyds TSB Bank

“Lloyds TSB Bank plc is a retail bank of UK; it was established in 1995 by the merger of Lloyds Bank, established in 1765 and traditionally considered as one of the big four clearing banks, with the TSB Group which traces its origins to 1810. Lloyds TSB has an extensive network of branches and cash machines across England and Wales and offers 24/7 telephone and online banking services. Today, it has around 16 million personal customers and small business accounts. In Scotland, the bank operates as Lloyds TSB Scotland Plc. Following the acquisition of HBOS (banking and insurance company in UK) in 2008, the parent Lloyds TSB Group was renamed Lloyds Banking Group. The bank offers a full range of banking and financial services and is authorised and regulated by the Financial Services Authority (FSA)” (Wikipedia, 2010k).

5.3.4 Themes

5.3.4.1 CRM: Vision

In UK banks, CRM overall is seen as an internal centralized system of the banks that keeps all the information of every single customer. For instance, when a customer opens an account, his/her details are stored in the central CRM system; the system then automatically generates a profile for that particular customer in which the system further stores and maintains all the information related to that particular customer on a regular basis. Similarly, based on the needs of that particular customer, the CRM system automatically generates offers of different products to that customer. In this
way, most of the banks in the UK maintain relationships with their customers in order to keep them for a longer period of time.

During interviews with several bank employees of the four different banks, similar answers were provided about CRM. Here, in this section, we will mention a few of them. For example, a branch manager of Santander Bank views CRM as follows:

“CRM is basically our bank’s internal system in which we put all the details of our customers. We use the CRM system on a daily basis and it is a place where the entire customers’ information, including their financial history, current and previous addresses, date of birth, etc., is stored and updated on a regular basis, and that is also in line with the Data Protection Act” (Branch Manager, Santander Bank).

Similarly, at Lloyds TSB Bank, CRM was discussed by a personal banker as:

“Our CRM system holds all types of information about our customers (i.e. from their first visit to the branch, to their latest transactions, and their complaints). The central system is very powerful and it keeps up to date all the customers’ information on a regular basis” (Personal Banker, Lloyds TSB Bank).

When asked about how different departments at the bank use the central CRM system, the premier relationship manager at Barclays Bank explained that:

“CRM at our bank is used by every bank employee; however, each employee’s job is different while using the system. In other words, each department has certain limitations while updating customers’ details in that system. But the customers’ information can be easily viewed by every member of staff at our bank. Different departments such as marketing department, sales department, IT department etc., all these departments have their own targets towards customers while using the central CRM system” (Premier Relationship Manager, Barclays Bank).
To conclude, in UK banks, CRM overall is viewed as an internal centralized system. The results from several interviews confirm that almost every bank employee is aware of the importance and use of the central system. CRM is not treated as a new technology or a new strategy by these bank employees, because they already use it on a daily basis and are fully aware of its purpose.

5.3.4.2 CRM Operation at the Branch Banking

Branch banking in almost every UK bank is somewhat similar across the country. In general, all branches provide similar facilities for their customers, such as account opening, credit cards, mortgages and other financing facilities. The only difference observed was that some of the branches are small in smaller areas while others are large in larger parts of different cities. Each branch is equipped with the latest hardware and software facilities while the bank employees communicate with each other using their bank’s internal communication channel. Also, at each branch, employees are efficient and can easily deal with all types of customers’ queries on a daily basis. At branch banking level, different employees such as branch manager, assistant branch managers, mortgage advisor, financial planner, business manager, personal bankers, cashiers, and customer service advisors, work together to help their customers. Such information was shared by one of the branch managers during an interview. The organizational structure of branch banking in UK is shown in the following figure 5.2.
The total number of employees working at each branch varies according to the size of the branch; but even in smaller branches, each one has at least one member of staff in each department. While discussing how CRM works at branch banking level, the personal banker at Barclays Bank explained that:

“At each branch of our bank, the CRM system is used by every employee and all of them have a responsibility for handling customers’ information. It is important and we make sure that each customer’s information is treated confidentially, also pin-pointing as much information into the system to keep a record of data on customers’ accounts” (*Personal Banker, Barclays Bank*).

During another interview, the branch manager at Lloyds TSB Bank talked about the advantages of the CRM system being centralized within the bank. He explained it as:
“With the help of our centralized CRM system, we do not need to repeat our customers’ information. Once we store any latest information about our customers in their account profile at any branch that information remains there no matter if customers visit any other branch of our bank. Any latest information regarding our customers would provide us with a reference point in case of any query from the customers about their accounts. Up-to-date information on our customers would also provide us with a reference point about the past performance of the customers in order to perform the credit scores check at the branch” (Branch Manager, Lloyds TSB Bank).

To conclude, in UK branch banking, it is clear from the interview results that almost every branch is equipped with a complete CRM system which helps bank employees to easily view the complete account profile of each customer, no matter if the customer visits a different branch of his/her bank in a different city. Each employee working at the branch has expertise in his/her own area while using the same CRM system of the bank. With the help of a centralized CRM system installed in UK banks, customers’ information can be easily seen and updated by the bank employees working at any branch of the same bank.

5.3.4.3 CRM Operation at the Call Centres (Customer Service Centres)

In UK banks, almost every bank has a call centre where most of the customers’ queries are dealt with 24/7. The reason for having a call centre is to offer banking facilities to customers round the clock, because nowadays customers are more demanding and, secondly, because of the huge competition within the banking industry. Initially, the idea of having a call centre was to resolve customers’ queries via phone banking because banks realized how hard it was to deal with thousands of customers’ queries at branch level. On the other hand, it was also not easy for customers (especially for business customers) to visit their local branch even for a small query. At present, with the advance in technology, call centres of UK banks not only deal with account-related queries but also provide all types of banking facilities such as account opening, credit cards, mortgages, etc. In short, customers can easily get all the major bank facilities by speaking to the call centre representatives. In an
interview with the call centre manager at Royal Bank of Scotland (RBS), he explained how the CRM system helps call centre agents to interact with the customers. According to the call centre manager:

“Of course, branch banking is the main channel that is interacting with the customers regarding their problems and queries on a daily basis during their opening hours. But, with the help of CRM system, interaction does not need to be face-to-face any more in banks. Our call centre provides all types of facilities to our customers compared with traditional branch banking. It is a new channel through which customers can easily interact with their bank 24/7 and vice versa. On the other hand, we as call centre employees have to make sure that all parts of our business are absolutely 100% accurate and we have to work efficiently to deliver the needs of our customers” (Call Centre Manager, Royal Bank of Scotland).

When asked about the particular department that is responsible for handling CRM software at the call centre, the call centre manager further described it as:

“Mostly, our IT department takes responsibility for dealing with and handling CRM-related issues. But, the CRM software vendor (service provider/software owners) deals with updates, hardware and software warranties, and security-related issues. IT staff are provided with training in using the software by the CRM vendor and then the IT department’s job is to further provide service and support to all the different departments at the call centre as well as at branch level in order to use the software properly” (Call Centre Manager, Royal Bank of Scotland).

In another interview, the IT manager at Santander Bank talked about how customers’ data is stored, retrieved, and updated in the CRM system. He explained it this way:

“The information collected from our customers during their interaction with the bank (it can be through call centre, branch, internet banking, etc.,) is usually stored in our central database (data warehouse). Such information can
easily be retrieved by every department of our bank (call centre employees, marketing staff, sales staff, branch employees, etc.) at any time. From the information which we collect from our customers, starting from the day when they open an account, certain things will stay the same. For instance, if a customer stays with us at least 10 years, his/her initial information such as name, surname, date of birth, etc., would obviously stay the same but the other information will be updated on a regular basis. We also update our customers’ other information (such as postal address, etc.) at least once a year” (IT Manager, Santander Bank).

To summarize, call centres in most of the UK banks provides all types of facilities to their customers 24/7. For each bank, customers’ information collected through different channels is usually stored in a large data warehouse (central database) where each customer’s information is updated on a daily basis. The up-to-date customer information can be easily retrieved by both branch and call centre employees at any time.

5.3.4.4 Query Response Time using the CRM System

Customers’ queries in most of the UK banks are usually resolved at either bank branch level (during their opening hours), or by contacting the bank’s call centre via the phone banking facility (24/7). In an interview at Barclays Bank, the branch manager explained that:

“At branch level and call centre, we aim to resolve all of our customers’ queries and problems at the point of their first contact. However, there are some situations when one particular department can not resolve the problem straight away, and they pass the query to a separate team. In those cases, it can take up to 48 hours. But usually 90% of our customers’ queries are resolved straight away during conversation with them over the phone, or face-to-face at the branch. We also share most of our customers’ common queries with the Financial Services Authority (FSA) so that they can see the most common problems customers are facing. Also, we have a separate department that
monitors employees’ performance at both branch level and at the call centre on a regular basis while they deal with the customers’ queries. The department also checks employees’ performance by selecting random queries which were previously resolved by them” (Branch Manager, Barclays Bank).

Similarly, the personal banker at Santander Bank talked about the query resolution and complaint management process thus:

“It depends upon the nature of problem. Normally, at branch level, customers’ queries are resolved face-to-face during their first contact with us. Over the phone, there is a reliable service that banks operate to ensure customers gain the best available service. However, sometimes there may be a lag involved in terms of complex queries. For customers’ complaints, every complaint has a unique complaint reference number that is issued to the customers when they make any complaint. That reference number is used to easily track the complaint from our central database for future correspondence” (Personal Banker, Santander Bank).

At Lloyds TSB Bank, the branch manager discussed how different departments share customers’ queries with each other using the CRM system. He explained that:

“Although all the departments at our bank use one central CRM system, there are certain things about customers which one particular department can not resolve because each department has its own limitations. So, in that case, they transfer the customers’ information to the other relevant department using our central CRM system. However, all the information about our customers can be easily viewed by each and every person at our bank. But, each level of staff has limitations on changes that can be made to customers’ accounts” (Branch Manager, Lloyds TSB Bank).

The business quality manager at the Royal Bank of Scotland explained two different CRM applications used for customers’ problems that are mostly used in UK banks:
the Complaint Management System (CMS) and Request Management System (RMS). These applications were further described as:

“CMS is a central system where all the customers’ complaints are stored. Customers usually make complaints through several ways, by visiting a branch, via email, written complaints, making a call to the call centre, etc. Such complaints can be easily retrieved by any bank employee using the complaint ID or reference number. CMS is basically like an email system; once a new complaint arrives it appears in the system and then the relevant department handles that particular complaint. Once a customer’s complaint is resolved, the relevant department also informs the customer, followed by a service call from the bank to that customer” (Business Quality Manager, Royal Bank of Scotland).

Similarly, request management system (RMS) was described as:

“RMS is similar to CMS and is also an automated system used to collect requests from customers. When a customer requests any bank product, he/she receives a request ID number. That request goes to the relevant department that deals with the customer’s request, and the department informs the customer once the request has been processed. RMS is part of our centralized system and any department at the bank can easily see who is dealing with a customer’s request in case the customer enquires” (Business Quality Manager, Royal Bank of Scotland).

To conclude, most of the customers’ queries are dealt with at branch level and also through making a call to the bank’s call centre. Each UK bank owns a call centre with a unique phone number where most of the queries are handled 24/7. These call centres are also centralized (i.e. they can easily view and updates customer information stored in the central database). Because of the centralized CRM system, customers’ queries are automatically received by the relevant department. Usually, all the basic queries are handled instantly and once a query is resolved, call centre agents make a service call to the relevant customer. Also, during the interviews with several bank
employees, no issues were seen regarding internet connectivity and the interviewees seemed comfortable with the use of their current CRM system.

5.3.4.5 Major Products and Services

In the UK banks, a variety of products are available for all types of customers, including current accounts, savings accounts, mortgages, personal and business loans, wealth management products, etc. In an interview at Lloyds TSB Bank, the bank’s personal banker explained how they have categorized their products according to different types of customers. He explained:

“At our bank, the account products are mainly categorized into two main types, i.e. personal accounts and savings accounts. In personal accounts we offer different types of accounts such as cash account (that is a basic account designed for customers having no previous credit history), classic account (it is a regular account that is used for daily usage such as cash withdrawal from any ATM), value added account (an account for which the customer has to pay monthly charges to get extra facilities on top of all other account facilities). Secondly, for savings accounts we offer a monthly savings account, ISA account, and term deposit account (that is for a certain term such as six months minimum and three years maximum)” (Personal Banker, Lloyds TSB Bank).

He further explained different business accounts as:

“Similarly, we offer different business accounts such as proprietorship account (design for those customers who own a small company, for example a restaurant or newsagent’s shop), company account, limited companies account, trust account, charity account, and public limited company account” (Personal Banker, Lloyds TSB Bank).

Similarly, at Barclays Bank, the branch manager discussed accounts as:
“We provide all sorts of universal banking accounts. Our accounts are designed for every individual no matter if he/she is working, not working, students, from millionaires and billionaires of this world, small businesses to large corporate. We aim to open an account for every customer and we do not have any balance requirement for basic accounts. In short, our accounts are designed based on all kinds of customers. We aim that every customer should have an account with Barclays and there should not be any barriers and exclusions in that” (Branch Manager, Barclays Bank).

For mortgages and loans, the branch manager at Santander Bank said:

“The customer needs to apply by either visiting the branch, over the phone, or using the internet. The advisor will make an application and put the customer’s details in our CRM system to perform a credit check of that customer to see the credit worthiness and see how much he/she is entitled to borrow” (Branch Manager, Santander Bank).

A similar answer was gathered from the branch manager at the Royal Bank of Scotland; he explained that:

“The customer has to make an appointment with the personal banker; they would sit down and look at the customer’s credit history, put all the customer’s finances together, and put an application through. The process is quite straightforward, and easy to understand. Also, for loans, mortgages, and overdraft facilities, the interest rates are similar throughout different UK banks” (Branch Manager, Royal Bank of Scotland).

To conclude, UK banks offer similar products that are designed for different types of customers. The procedure is straightforward to apply for any product because these banks have their central CRM system that automatically calculates the product entitlement for each customer based on each customer’s credit score. Also, the system is designed to facilitate all types of customers; for instance, based on each customer’s
annual earnings and his/her overall value to the bank, the CRM system calculates and then generates different product offers for that particular customer.

5.3.4.6 Maintaining Relationships with Business Customers and Individual Customers

Mostly in UK banks, customers are divided into two different channels, business channel (for business customers), and individual retail channel (for individual customers). For the business channel, business advisors deal with business customers; whereas, for the individual retail channel, personal banking advisors deal with day to day customers. Banks maintain relationships with their customers based on each customer’s overall worth to the bank. For instance, at Barclays Bank, the branch manager explained how they maintain relationships with both types of customers. He explained that:

“Business accounts are designed to facilitate business customers whereas for individual customers, we offer personal accounts. Business accounts are designed to offer more facilities to our business customers so that they can easily buy stuff for their business, receive better interest rates, receive better customer service, get benefit from commercial mortgages, etc. Therefore, business customers fall into a completely different suite. Although some of the basic services we offer to them are similar to what we offer for our personal account holders, business category is simply a different entity since their needs are also different. Our business products are off-the-shelf, but we can structure them to what the business customers’ need. For example, if a business customer has a large deposit with us, we can look at what these deposits are used for. If they want higher interest rates for those deposits, we can restructure their account based on their requirement. In short, we offer them more flexibility to choose the type of account and product they require. Business customers are contacted by Relationship Managers (RM) whose job is to ensure that business customers get better facilities. Similarly, for individual customers, every individual customer has an access to a Personal Banking Manager (PBM)” (Branch Manager, Barclays Bank).
When asked about how many business customers are contacted by one relationship manager, he further explained that:

“Well, it depends on the size of a business. If it is a normal business, then roughly one relationship manager (RM) relates to around 200 business customers. For small businesses, they probably do not need relationship managers. Furthermore, we also have a support team that deals with all the queries of our business customers and it operates 24/7. If you talk about the largest companies in the country, we then have a whole team of people working to fulfil their business requirements” (Branch Manager, Barclays Bank).

Similarly, at Royal Bank of Scotland (RBS), the business quality manager explained about different types of customers and how the bank maintains relationships with them:

“We have two different segments for two different categories of customers, i.e. general banking (individual customers) and preferred banking (business customers). Our bank provides products and facilities based on the category each customer falls into. General banking customers can contact any personal banking manager at any RBS branch; while preferred banking customers have their designated relationship manager (RM) who deals with their complaints and any other problems. On average, each relationship manager deals with around 150 business customers” (Business Quality Manager, Royal Bank of Scotland).

To conclude, usually in UK banks, customers are divided into two different categories, individual and business customers. Banks provide facilities to their customers based on the category each customer falls into. However, business customers get more facilities from the bank and relationship managers (RM) contact each business customer to provide these facilities; whereas personal bankers are responsible to facilitate and maintain relationships with the individual customers.
5.3.4.7 Customer Acquisition vs. Customer Retention

For customer acquisition, UK banks’ marketing departments design different strategies to attract new customers. The departments approach new customers through different channels such as through print media, electronic media, web marketing, etc. Similarly, for customer retention, each UK bank has a loyalty department that is also centralized, with access to the data of all the other departments of the bank in order to view complete details of their existing customers. Based on each customer’s value to the bank, the loyalty department further approaches each customer differently by providing different loyalty offers to retain them. The branch manager at Santander Bank talked about customer acquisition as:

“We approach new customers through lots of different ways. Obviously, the branch is the main channel to get them in. We also do television advertising, internet advertising, and sending letters to let them know our current offers and rates. In short, our marketing department follows different strategies to attract new customers” (Branch Manager, Santander Bank).

At Barclays Bank, the branch manager discussed the loyalty department:

“Well, the loyalty offers are designed based on each customer’s preferences; for instance, some customers want to switch banks because they want better interest rates; others for a better overdraft facility and credit card limit, etc. Based on each customer’s preferences and previous history with the bank, loyalty offers are produced by our central CRM system. Then, our branch managers and call centre advisors further approach each customer to provide them with such offers. In most cases, we even match the offer which a customer gets from another bank in order to retain them” (Branch Manager, Barclays Bank).

To conclude, loyalty departments in UK banks offer different types of facilities to retain existing customers. Similarly, marketing departments are responsible for designing different strategies in order to attract new customers. Employees working at
branch level and call centres play a vital role to attract new customers as well as retain existing ones.

5.3.4.8 ATM Operations and its Issues

ATMs are commonly used by bank customers to withdraw cash. These days, cash deposit, bill payment, funds transfer etc., are also done through most of the ATMs of UK banks. The hardware for ATMs is chiefly provided by a company called NCR while banks operate these machines 24/7 using the latest software. In an interview at Santander Bank, the personal banker explained different features of ATM machines and its security issues:

“In the UK, cash machines are usually free of charge and we make sure that cash is available in these machines because they are there for our customers. However, some of these cash machines, such as those inside small shops, some fuel stations on motorways, etc., may charge each time a customer withdraws money from them. These machines usually tell up-front if customers will be charged. The security issues with ATMs are if somebody looks over the shoulder of the customer to see the pin number used in the machine. Also, someone may use a duplicate card or any other fake device to withdraw cash. Therefore, we do monitor our ATMs closely to make sure that our machines are free from those devices” (Personal Banker, Santander Bank).

At Royal Bank of Scotland, the branch manager talked about the use of technology at ATMs and its security issues:

“All our machines are advanced in terms of latest technologies. If someone tries to make a wrong attempt by using some fake card, the machine will automatically shut down. If a genuine card holder insert a wrong pin number, after 3 attempts machine will retain his/her card. So, the customer has to collect his/her card from the branch by showing his/her ID. We update the
ATM software quite often and most of our ATMs are new having latest updates already installed” (Branch Manager, Royal Bank of Scotland).

The branch manager also gave the researcher an FSA booklet containing the security instructions for customers using the ATMs, including:

- Stand close to the machine and shield the keypad when keying in PIN
- Beware of those around you and the environment
- Avoid using your mobile phone or other distractions that may make you more vulnerable
- If your card gets jammed, retained or lost, report this immediately to your bank or building society (Branch Manager, Royal Bank of Scotland).

Another interview was conducted with the branch manager at Barclays Bank who explained why banks are not using biometric technology at ATMs:

“The real reason is that it will cost us too much and it will be really hard to implement and collect the data from all of our existing customers. For biometrics, we require huge databases and from the past survey of our customers, very few customers are in favour of biometric technology” (Branch Manager, Barclays Bank).

To conclude, ATMs are available in public places throughout the UK, where customers can get facilities without any service charges. Banks regularly update the software installed at these ATMs and they closely monitor these machines to ensure that the machines are operated properly.

5.3.4.9 e-CRM Facilities (Internet Banking, Mobile Banking, Phone Banking, and SMS Alerts)

In UK banks, several e-CRM services are available, used by customers on a daily basis. These e-CRM services have made things easy for customers; for instance, using internet banking, customers can easily check account details within a few minutes and
avoid making frequent visits to the branch. With the advance in technologies, nowadays e-CRM is simply a new way for banks to get to know their customers and maintain relationships with them using these channels.

For internet banking, the branch manager at Santander Bank said:

“It is sort of a virtual banking based on secured web connections, and accessed through user logins with encrypted password. Usually, transmission of data is secured by a separate internet protocol, with data encryption. Moreover, a device called Host Security Module (HSM) is used to encrypt passwords. Moreover, funds transfer in a single day, history logs etc., enhances its security. We guide our customers to follow certain security procedures in order to use internet banking safely by sending them different guidance notes and brochures. And yes it is safe if customers follow these procedures” (Branch Manager, Santander Bank).

At Barclays Bank, the branch manager talked about internet banking as:

“We do offer internet banking and yes, it is safe and we are really proud of this facility. We provide PIN sentry security device to our customers, that is a special way to secure our internet banking. PIN sentry technology is basically the latest technology adopted by Barclays Bank. Once a customer registers for internet banking, he/she has to insert his/her card in a device which will bring an 8-digit random code on its screen. So, each time the 8-digit code appears it is different, containing completely random numbers. When the user enters that pin number along with the other account details, our central CRM system further verifies that random pin number. Therefore, the user does not need to remember the security code to access his/her account information using the internet banking because the security code is different each time. Also, our customers can easily download the security software from our website that is similar to Norton antivirus software worth £50. However, our customers can download that software free of charge from our website. The software is secure to use for both Mac and Windows users. Since last year, with the use of
this new software, we have reduced the internet banking fraud by 80%. The software contains both anti-virus and spy-ware features” (Branch Manager, Barclays Bank).

The branch manager further talked about the security issues with internet banking as:

“In order to avoid security problems with internet banking, customers have to update their computers to get the latest security updates of the software we provide to them. These updates are important not only in terms of using internet banking securely against frauds, but also in terms of protecting their computers from any viruses. As we keep updating our security software quite frequently, we inform our customers from time to time and encourage them to install these latest updates to avoid any unforeseen problems” (Branch Manager, Barclays Bank).

Similarly, for phone banking, the premier relationship manager at Royal Bank of Scotland explained that:

“We do offer phone banking; through that we deal with all financial and non-financial related queries of our customers. With the help of our phone banking facility, customers can easily transfer funds to different accounts, for example from current account to savings account, or to other bank accounts. We understand the needs of our customers; therefore, we provide such facility 24/7 so that our customers get benefit from this service whenever they want” (Premier Relationship Manager, Royal Bank of Scotland).

To conclude, e-CRM facilities are provided by all major banks in the UK and most of the customers benefit from these services on a regular basis. Internet banking and phone banking are the most commonly used ones; internet banking, according to several interviewees, is secure these days, but customers have to install some security software to use it more securely. Phone banking is another commonly used e-CRM service through which customers can easily enquire about their account activities and
their account balances, etc. Other services such as mobile banking, SMS alerts etc., are also used and are popular among several banks’ customers in the UK.

5.3.4.10  Future of CRM in the Banking Industry of UK

The future of CRM in the UK banking industry seems very bright. From the interviews experience and from personal observations during the data collection process, it seems that the next generation of banking is going to be online and mobile banking. Banks in coming years will incorporate more advanced technologies, such as advanced data mining tools, more enhanced CRM features, advanced security features for internet banking, and better contact channels for customer service. In an interview at Santander Bank, the branch manager talked about the use of CRM in the banking industry in coming years. He explained that:

“CRM is a requirement of banks these days and we have to have it. It seems that banks are depending on it. Our central CRM system is constantly updated and we rely on it on a daily basis and we make sure to make proper use of it” (Branch Manager, Santander Bank).

At Barclays Bank, the personal banker expressed his views about the future of CRM in the UK banking industry:

“I can see that with the use of CRM, banks are getting more and more centralized. It is obvious that customers are the centre of attention in most of the decisions we make. In banks, CRM is the prime focus of every department and each department has a responsibility of making proper use of it which I do not see will change in the coming years. Each department is making the best use of it and the banking culture towards CRM is increasing. However, every one at the bank needs to know their role to understand the CRM system to win, which is the hard part but it is the most important part as well” (Personal Banker, Barclays Bank).
Similarly, while asking about how bank employees work together with the latest technologies, the branch manager at Lloyds TSB bank explained that:

“Well, the good thing is that our bank employees do not see the use of the CRM system as a separate part of their job any more; it is part of their job to use the system. If you ask someone about CRM, they would easily provide you the answer because that is what they do, and using CRM is a part of every single person at the bank and that culture would definitely increase in coming years (Branch Manager, Lloyds TSB Bank).

To conclude, CRM seems to be the basic requirement of UK banks and CRM culture in the banking industry is increasing; with the help of new technologies in coming years, CRM will definitely help banks to understand their customers’ activities and their needs more precisely.

5.4 Conclusions

In this chapter, we presented the first stage of data analysis using the within-case analysis approach in which we separately explained and analyzed the two case studies selected for this research. The results obtained from the interviews from both case studies were separately discussed and analyzed in the form of ten different themes i.e., CRM vision, CRM operation at the branch banking, CRM operation at the call centres, query response time using the CRM system, major products and services, maintaining relationship with business and individual customers, customer acquisition vs. customer retention, ATM operations and its issues, e-CRM facilities (internet banking, mobile banking, phone banking, and SMS alerts), and the future of CRM in the banking industry. These themes contained the overall operations of CRM within the banking sectors of the two countries, Pakistan and the UK.

The chapter also highlighted other available data analysis techniques that are mostly used for the interpretive case study approach. However, a cross-case analysis technique was selected for this study as this technique specifically applies to the
analysis of multiple cases and is more relevant if the case study approach consists of at least two cases, and this will be discussed in the following chapter.
Chapter 6

Cross-Case Data Analysis

This chapter presents the second stage of data analysis, *cross-case analysis*, between the two case studies that were separately explained and analyzed in the previous chapter. The cross-case analysis technique is useful for current research as it applies specifically to the analysis of multiple-case studies and helps researchers to analyze and discuss the results in a more structured way. Then, the four major components of an ideal CRM model (proposed as a frame of reference in chapter 3) are used to discuss these results more accurately; followed by some suggestions that are proposed by the researcher for each component of the CRM model by using the best practices of CRM. The chapter then presents the benefits of the socio-technical theory for banking industry. In the last part, the chapter presents some challenges and issues relate to the CRM adoption within the banking industry of Pakistan and the UK.

6.1 Cross-Case Data Analysis to Uncover the Similarities and Differences Between the Two Case Studies

The results gathered from the first stage of data analysis, *within-case analysis*, described in chapter 5, will be further analyzed, compared, and discussed in this chapter to identify the similarities and differences between the two main case studies i.e. (i) CRM operation in the banking sector of Pakistan, and (ii) CRM operation in the banking sector of UK. In the previous chapter, these results were presented separately and analyzed by different themes covering the overall operation of CRM in the banking sectors of Pakistan and the UK. The *cross-case analysis* technique
introduced in the previous chapter will be used to conduct the second stage of data analysis. Using this technique, the results from the first stage of data analysis will be further compared using a thematic analysis approach across the cases (Yin, 2009, p.156). In order to use Yin’s technique, we have designed different word tables for each theme containing the major similarities and differences between the two case studies; this is followed by a detailed comparative discussion for each theme. The cross-case analysis is also valuable in answering our first research question:

**R Q No. 1: What are the similarities and differences in CRM Operation between the banking Sectors of Pakistan and the UK?**

### 6.1.1 CRM: Vision

<table>
<thead>
<tr>
<th>Theme</th>
<th>Pakistani Banks</th>
<th>UK Banks</th>
</tr>
</thead>
</table>
| CRM: Vision | - No single definition of CRM was provided even within the same bank.  
- Different banks’ departments viewed CRM differently.  
- Some of the banks are at the initial stages of implementing the complete CRM system.  
- Others have installed some of its packages at the call centres. | - CRM definitions gathered were overall similar.  
- Similar views about CRM were gathered from different departments at different banks.  
- A complete CRM suite is already installed in most of the UK banks.  
- CRM is overall seen as a bank’s internal centralized system used by every department and every member of staff at the bank. |

Table 6.1: CRM Vision

To discuss the similarities and differences in CRM operation between the banks in Pakistan and the UK, we first need to talk about how different banks (especially different departments within the selected banks of both countries) view CRM. As seen in table 6.1, one of the major differences in the banking sectors of both countries regarding CRM vision is that in Pakistan, CRM is viewed differently by different banks. Even in the same bank, different departments view CRM differently. The majority of the banks in Pakistan view CRM as an automation of call centre...
operations rather a company-wide solution. One of the main reasons is that in Pakistan, CRM is not fully integrated across all the different channels in the banks. Some of the banks in Pakistan are in the initial stages of implementing the complete CRM system; others have installed some of the CRM packages and have started CRM operations at the call centres. IT departments in most of the Pakistani banks have a complete knowledge of CRM; whereas, most of the other departments are still not benefiting from the CRM system, and consequently viewed it differently.

On the other hand, in UK banks, CRM is overall viewed in a similar way by all the departments across different UK banks. They see it as an internal centralized system of the bank that is used by almost every member of staff working at the bank. However, each department has specific limitations to its use of the central system when viewing and updating customers’ details in that system. Customer information can, nevertheless, easily be seen by every member of staff at the bank. Therefore, CRM is overall viewed in the same way in different UK banks.

### 6.1.2 CRM Operation at the Branch Banking

<table>
<thead>
<tr>
<th>Theme</th>
<th>Pakistani Banks</th>
<th>UK Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRM Operation at the Branch Banking</td>
<td>- Branches are not fully integrated with CRM software.</td>
<td>- Complete CRM system is available at different banks’ branches.</td>
</tr>
<tr>
<td></td>
<td>- Each branch services its own customers.</td>
<td>- In each branch, CRM system is available and is already used by every member of staff.</td>
</tr>
<tr>
<td></td>
<td>- In some cases, main branches (or the bank’s head offices) are equipped with CRM modules.</td>
<td>- For any problems or queries, customers can contact any branch of their bank (during their opening hours) or the bank’s call centre (24/7) via the phone banking facility.</td>
</tr>
<tr>
<td></td>
<td>- For any problems, customers have to contact either the branch where the account was first opened or contact the bank’s call centre via phone banking.</td>
<td></td>
</tr>
</tbody>
</table>

Table 6.2: CRM Operation at the Branch Banking

As shown in table 6.2, the overall CRM operation at the branch banking level in Pakistan is different in several ways from UK banks. In Pakistan, most of the CRM
modules are used at the main branches of banks and at the head offices; the small branches are still not centralized and are not getting full benefit of CRM. At present, these small branches, especially those in the rural areas of Pakistan, only deal with their own customers. In short, they only provide basic account facilities to their own customers. In case of any problems with customers’ accounts, customers have to contact either the bank’s main branch, or the branch where the account was opened (because they keep the complete information on their customers), or even the bank’s call centre via phone banking.

On the contrary, in the UK almost every branch is equipped with a complete CRM system (no matter if it is a small or a large branch) and these branches are all centralized. In branch banking, almost every branch employee can easily view and update customers’ accounts. However, different departments have different responsibilities in amending customers’ accounts. In other words, each department has certain limits in using their bank’s central CRM system.

### 6.1.3 CRM Operation at the Call Centres (Customer Service Centres)

<table>
<thead>
<tr>
<th>Theme</th>
<th>Pakistani Banks</th>
<th>UK Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRM Operation at the Call Centres</td>
<td>- At present only a few CRM packages have been introduced and are being used only in the major banks.</td>
<td>- Fully integrated CRM system installed at call centres where all the banking facilities are available 24/7.</td>
</tr>
<tr>
<td></td>
<td>- CRM at call centres is only used in three different modules i.e. phone banking, complaint management, and customer base centre.</td>
<td>- CRM at call centres is available as a complete suite where all the major CRM packages are fully functioning across different channels.</td>
</tr>
<tr>
<td></td>
<td>- Mostly IT departments deal with CRM packages, hardware, and their update related issues.</td>
<td>- IT department takes responsibility for handling CRM-related issues, while the CRM software vendors deal with updates, hardware and software warranties, and security-related issues.</td>
</tr>
</tbody>
</table>

Table 6.3: CRM Operation at the Call Centres

In Pakistan, several banks have recently introduced some of the CRM packages at call centres and are planning to fully integrate CRM across all other bank channels.
(especially at the branch level), which according to them is a challenging task. According to several interviewees, CRM at call centres in Pakistan only works in three different modules, i.e. phone banking, complaint management, and customer base centre, as shown in table 6.3. Similarly, call centre agents deal with basic account-related queries and credit and debit card queries on a daily basis. These agents are fully trained and have a complete knowledge of the different CRM packages that are currently used at call centres.

However, at call centres in UK banks, CRM is available as a complete suite where all the major CRM packages are installed and updated on a regular basis. The CRM packages that are currently used at call centres are similar to those used at the branch banking level. The only difference between branch banking operations and the call centre operations in the UK banking sector is that the branch banking mostly deals with more general queries (such as account opening, cash withdrawals, etc.) and has limited opening hours. The call centre agents deal with all types of customer complaints and queries and are operated 24/7 (agents working in different shifts).

At the call centres of different banks across Pakistan, it is mostly IT departments that deal with the hardware, software, and update-related issues of the CRM packages that are currently used. In UK banks, IT departments take responsibility for handling CRM-related issues and provide facilities to the different departments; however, according to several interviewees, CRM vendors usually deal with software updates, hardware and software warranties, and other security-related issues. Likewise, vendors are also responsible for providing training to the bank’s internal IT staff for the operations of different CRM packages at the call centres.
6.1.4 Query Response Time using the CRM System

<table>
<thead>
<tr>
<th>Theme</th>
<th>Pakistani Banks</th>
<th>UK Banks</th>
</tr>
</thead>
</table>
| Query Response Time using the CRM System | - Queries are dealt with at both branch level (during their opening hours), and at the call centres (24/7).  
- Call centre agents try to resolve customers’ general queries within OCS (one call service).  
- It takes longer sometimes because of internet connectivity issues.  
- Internet bandwidth problems. | - Queries are dealt with at branch level and also at the bank’s call centre.  
- Usually, 90% of the customers’ queries are resolved straight away via call centres and at branch level. CRM system ensures that the query goes to the right department.  
- Two CRM applications are specifically used for queries, i.e. RMS and CMS.  
- No issues with internet connectivity. |

Table 6.4: Query Response Time using the CRM System

As we can see from table 6.4, in Pakistan and UK banks, query-related issues are generally dealt with at both branch level (during their opening hours), and at the banks’ call centres (24/7). However, in Pakistani banks, because of not having a centralized CRM system, branch banking only deals with general account-related queries; while in UK banks, branch banking deals with all sorts of customer queries. Similarly, most of the call centres in both countries usually try to resolve their customers’ queries within a single call. However, sometimes it takes longer than usual, depending on the type of query, possibly 48 hours to 72 hours. The call centre representatives usually make a service call to their customers once the query has been resolved completely.

However, for query resolution, the other major difference is that in some Pakistani banks, sometimes it takes even longer for a query to be resolved. For instance, if a customer’s account is in a branch which does not share customer information across different channels (i.e. the customer’s branch does not have the CRM system installed), then it takes even longer than usual for the query to be completely resolved. However, the call centres of UK banks have the central CRM system installed (at branch level and at call centres) to ensure that the query goes to the right agent in the right department in order to resolve it promptly. Secondly, in UK branch banking and
at call centres, two CRM specific packages are used for query purposes: a complaint management system (CMS), and a request management system (RMS) (i.e. CMS system is used for customers’ complaints and (RMS) system is used for customers’ product request).

Another problem is internet connectivity, common in most of the banks of Pakistan. When such a problem occurs, call centre agents usually request their customers to contact them later because customers’ data is spread across different departments and the call centre agents require full access to those different departments in order to completely check the previous details of their customers. However, no such issues related to internet connectivity were seen in the UK banks.

6.1.5  Major Products and Services

<table>
<thead>
<tr>
<th>Theme</th>
<th>Pakistani Banks</th>
<th>UK Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Products and Services</td>
<td>- Different products are designed to facilitate different types of customers.</td>
<td>- Variety of products are available that are offered to all types of customers.</td>
</tr>
<tr>
<td></td>
<td>- Minimum account balance requirement at different banks.</td>
<td>- No minimum account balance requirement.</td>
</tr>
<tr>
<td></td>
<td>- Loans and mortgage facilities are mostly available for business customers because of specific requirements.</td>
<td>- The advisors using a bank’s central CRM system perform a credit check for each customer to see the credit worthiness and to check how much each customer is entitled to borrow.</td>
</tr>
<tr>
<td></td>
<td>- No credit scoring technique is used.</td>
<td></td>
</tr>
</tbody>
</table>

Table 6.5: Major Products and Services

For products and services, banks in both Pakistan and the UK offer a variety of products to their customers to facilitate all types of customers. For account products, banks in both countries offer different types of accounts such as current accounts, savings accounts, term deposit accounts, business accounts, etc.; these banks also offer other types of products such as loans, mortgages, home financing, auto loans, insurance products, etc. Mostly, these products are offered based on each customer’s monthly income. Similarly, each account product has set criteria. For example, the basic account offered by almost every bank in Pakistan has a minimum account
balance requirement of Pk. Rs. 5000 (equivalent to around 40 UK Pounds). Banks usually put some charges on customers’ accounts if that balance is not maintained even for a single day. In UK banks, there is no minimum balance requirement for a basic account.

As shown in table 6.5, another difference is that in Pakistani banks, products such as loans, mortgages, etc., are mostly offered to the business customers, because of the specific requirements for these products; there is no credit scoring technique in most of the Pakistani banks. Therefore, it is hard for individual customers to even apply for a loan. However, using the central CRM system, UK banks perform a credit check for each customer (both individual and business customers) to see their credit worthiness. Based on the results, banks offer loan entitlement for each customer.

6.1.6 Maintaining Relationships with Business Customers and Individual Customers

<table>
<thead>
<tr>
<th>Theme</th>
<th>Pakistani Banks</th>
<th>UK Banks</th>
</tr>
</thead>
</table>
| **Maintaining Relationships with Business and Individual Customers** | - Depending on the customer’s overall worth, banks categorize different types of customers.  
  - Bank managers usually contact business customers.  
  - Individual customers are contacted by call centre agents. | - Using the central CRM system, customers are divided into two different channels, a business channel (for business customers), and an individual retail channel (for individual customers).  
  - For the business channel, business advisors/relationship managers deal with business customers.  
  - For individual retail channel, personal banking advisors deal with day to day customers. |

Table 6.6: Maintaining Relationships with Business and Individual Customers

Another comparison is how banks in both countries maintain relationships with their business and individual customers. Usually, different banks have adopted different strategies to fulfil the requirements and satisfy the needs of both types of customers. In Pakistan, based on the individual customers’ account balances, most of the banks have categorized their individual customers in three different levels: lower level,
middle level, and higher level. In each level, customers’ receive different facilities from their bank (i.e. lower level customers have a limited number of facilities while higher level customers receive better facilities). In some ways, some of the higher level customers receive the same facilities as the business customers. These facilities include: better interest rates, increased credit card limit and better rates on insurance products. For business customers, bank managers deal with them and approach them by visiting them in case of any account-related problems even advertising new products to them. However, UK banks treat individual and business customers completely differently. As shown in table 6.6, most of the UK banks consider that the needs of these two categories of customers are totally different. Therefore, each bank has designed two different banking channels, the individual retail channel (for individual customers), and business channel (for business customers). In the business channel, business advisors or relationship managers deal with business customers. Depending on the size of the business, each relationship manager (RM) handles a certain number of business customers. For the individual retail channel, personal banking advisors deal with day to day customers. In this way, UK banks usually maintain relationships with their customers.

6.1.7 Customer Acquisition vs. Customer Retention

<table>
<thead>
<tr>
<th>Theme</th>
<th>Pakistani Banks</th>
<th>UK Banks</th>
</tr>
</thead>
</table>
| Customer Acquisition vs. Customer Retention | - CA: TV channels, newspapers.  
- No trend of sending brochures to customers’ home address.  
- CR: loyalty programmes have recently been introduced, operated by different departments.  
- Each customer’s discount entitlement is different, estimated according to the customer’s account history. | - CA: marketing departments design strategies to attract and approach new customers via print media, electronic media, web marketing, information packs to customers’ home addresses, etc.  
- CR: each UK bank has a loyalty department that approaches customers differently, providing different loyalty offers to retain them.  
- The loyalty offers are designed according to each customer’s preferences and are based on each customer’s previous history with the bank. |

Table 6.7: Customer Acquisition vs. Customer Retention
Customer acquisition and retention are two of the most important components of CRM for any bank. Based on these components, banks further decide how they approach new customers, and on the other hand, how they retain their existing customers that are valuable to the bank. For customer acquisition, banks in Pakistan usually attract new customers using two main channels i.e. via electronic media (T.V channels), and via print media (newspapers). According to them, these are the commonly used channels to attract new customers as well as to inform our existing customers about bank’s new products. However, UK banks use different marketing techniques to approach new customers such as web marketing, via print media, electronic media, information packs to customers’ home addresses etc. These channels are also used to inform existing customers about the bank’s latest products because banks aim to approach the customers by all means. Similarly as seen in table 6.7, for customer retention, different loyalty programs have recently introduced in most of the banks in Pakistan that are operated by different departments. In some Pakistani banks, loyalty department operates these loyalty programs. However, in UK banks, each bank owns a loyalty department that approach customers differently by providing different offers to retain them. To them, each customer’s discount entitlement is different and the loyalty offers are designed based on each customer’s preferences and are offered based on each customer’s previous history with the bank.

6.1.8 **ATM Operations and its Issues**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Pakistani Banks</th>
<th>UK Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ATM Operations and its Issues</strong></td>
<td>- ATM service providers usually deduct some service charges from customers’ account balance every time customers use ATM.</td>
<td>- No service charges from customers to use ATM facility.</td>
</tr>
<tr>
<td></td>
<td>- Banks usually charge an annual fee of Pk Rs. 330 for providing ATM card.</td>
<td>- No annual charges for ATM card.</td>
</tr>
<tr>
<td></td>
<td>- Security issues such as pin code hacking, on spot thefts, old machines etc., are all related with the use of ATM service in Pakistan.</td>
<td>- Few security issues, otherwise the ATM machines are advanced in terms of latest technology.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- ATMs’ software keeps update regularly and most of the ATMs are new with latest updates installed.</td>
</tr>
</tbody>
</table>

Table 6.8: ATM Operations and its Issues
As seen in table 6.8, for ATM operation in Pakistan, two ATM networks are available i.e. One link, and MNet. These networks have recently collaborated to facilitate customers of all the major banks in Pakistan. However, there are some specific charges that these service providers deduct from the customers’ account each time customers use ATM service. For each service using ATM, charges are different; for example, for cash withdrawals, customers have to pay a standard charge of Pk Rs. 15 each time customers withdraws the cash using ATM. That amount usually deducts automatically from customers’ account. Similarly, for other services using ATM, charges are different. Also, mostly banks charge an annual fee of Pk Rs. 330 to provide basic cash card to their customers.

However, in UK banks, ATM facility is available free of charge to all the customers of different banks across UK. Banks also provide credit, debit, and cash card facilities to their customers without any annual charges. These cards are offered based on each customer’s credit history. For example, credit card limit or overdraft limit offered to each customer is different that is based on each customer’s previous credit history. Banks using their centralized CRM system easily estimate the credit entitlement of each customer.

On the other hand, there are several security issues with the use of ATM service in Pakistan. These security issues were shared by several interviewees during the interviews from five different banks. Some of the common issues addressed by the interviewees are: pin code hacking, on spot thefts, ATM card misplacements, machines run out of money, card gets stuck in the ATM machine etc. Some of these security issues were also addressed by several employees in UK banks during the interviews; however, according to them, ATMs are new and advanced with latest updates installed on them. Also, these machines are closely monitored by the bank staff to check if they are not misused. UK banks also provide security instructions to their customers in order to make them use these machines properly.
6.1.9 e-CRM Facilities (Internet Banking, Mobile Banking, Phone Banking, and SMS Alerts)

<table>
<thead>
<tr>
<th>Theme</th>
<th>Pakistani Banks</th>
<th>UK Banks</th>
</tr>
</thead>
</table>
| e-CRM Facilities | - Internet banking is not offered by most of the banks because of issues with internet security.  
- Banks feel that the internet security in Pakistan is not up to the international standards.  
- Other services such as: SMS banking, internet funds transfer (IFS) using ATM, phone banking etc., have recently started but are not much popular. | - Internet banking is offered by most of the banks and it is secure.  
- Using internet banking, transmission of data is secured by a separate internet protocol with data encryption.  
- Some banks even provide special devices and software to their customers to use internet banking more securely.  
- SMS banking, phone banking, mobile banking etc., are all commonly used. |

Table 6.9: e-CRM Facilities (Internet Banking, Mobile Banking, Phone Banking, and SMS Alerts)

e-CRM simply means doing business over the web or through different other electronic channels; with the use of e-CRM services, banking is not only face-to-face communication with customers anymore. Now days, both Pakistani and UK banks offer several e-CRM related facilities to their customers such as: internet banking, mobile banking, phone banking, SMS alerts etc. With the help of these facilities, customers can easily transfer funds between different accounts 24/7 without even visiting their bank’s local branch.

In Pakistani banking sector, some of these e-CRM related facilities have recently been introduced. For example, SMS banking is a service provided by few Pakistani banks to their credit card customers. Every time when a customer uses his/her credit card, the automated system sends a message to the customer’s cell phone with the details about the current usage of credit card. Customers can subscribe or unsubscribe that service any time. Phone banking is another service offered by Pakistani banks through which customers can easily receive all the updates regarding their accounts while having phone conversation with their banks’ call centre agents. Similarly, these e-
CRM services are also offered by almost every UK bank and are mostly used by customers on a daily basis.

However, as seen in table 6.9, internet banking service is not offered by banks in Pakistan. Banks consider it not being safe because, there are no set standards of internet security provided by the government level in Pakistan. On the contrary, in UK banks, internet banking is offered by almost every bank. According to the several employees of UK banks, internet banking is a safe way to do banking; it is based on secured web connections and is accessed through user logins with encrypted password. The data transmission is secured by a separate internet protocol, with data encryption. Moreover, a device is used called HSM (Host Security Module) to encrypt customers’ passwords. Some of the UK banks offer security software to their customers (free to download from the bank’s website) to use internet banking more securely; others provide a special device called PIN sentry security device that generates 8 digit random numbers used as a password each time customer logins. Hence, UK banks are proud of their internet banking facility and this service is popular in several banks’ customers.

### 6.1.10 Future of CRM in the Banking Industry

<table>
<thead>
<tr>
<th>Theme</th>
<th>Pakistani Banks</th>
<th>UK Banks</th>
</tr>
</thead>
</table>
| **Future of CRM in the Banking Industry** | - At present, CRM is seen differently by different people at banks. Only IT and call centre staffs have complete knowledge of CRM.  
- Majority of the banks nowadays are completely aware of the importance of CRM. Banks feel that CRM is the future in the banking industry of Pakistan.  
- However, there are some constraints from the government level that needed to be resolved to incorporate CRM properly within the banking industry of Pakistan. | - CRM is a requirement of banks in UK and it seems like banks are depending on it.  
- CRM is used by every member of staff at banks and they all have a complete knowledge of CRM.  
- Banks are working on improving its performance that could help employees to use the central system more easily.  
- CRM receives higher support from both government level and from higher management level to implement CRM policies within banks. |

Table 6.10: Future of CRM in the Banking Industry
As seen in table 6.10, at present, CRM is seen differently by different banks in Pakistan. One of the main reasons is because CRM is not integrated across the different channels of banks and across different departments of the banks. Currently, only IT and call centre employees are dealing with different CRM packages running at the banks. Therefore, they are the only ones having complete knowledge of CRM. However, in UK banks, CRM is overall viewed similar across all the departments at different banks because making proper use of CRM system is a part of their job at the banks. Therefore, almost every member of staff is completely aware of using CRM system.

In Pakistan, while comparing with the past few years, CRM culture is increasing and it looks like banks nowadays are completely aware of its importance. To them, CRM is the only way banks would survive in the marketplace. Therefore, in coming years, it looks like CRM culture would definitely increase in the banking industry of Pakistan. However, there are some issues related with the adoption of a complete CRM system in the banking industry of Pakistan such as: lack of support from the government level, strict policies from the State bank of Pakistan, issues with the internet connectivity, employees’ awareness about new technologies etc. These issues require consideration in order to increase CRM culture and adoption of CRM successfully. Similarly, with the advancement in technology, UK banks aims to further improve the overall performance of their central CRM system that would help bank employees to use the system more easily while contacting their customers. To them, using CRM is a part of every single person at the bank and that culture would definitely increase in the years to come.

6.2 Discussions and Suggestions Using the Components of an Ideal CRM Model

In the previous section, we analyzed and discussed the major similarities and differences between the CRM operation in the banking sectors of Pakistan and the UK. The comparison was based on the cross-case analysis technique using similar themes in order to compare the overall CRM operation in the selected banks of the
two countries. In this section, we will further discuss the results from the two case studies using the components of an ideal CRM model proposed by Liu (2007) and also propose some suggestions. The purpose of selecting and presenting an ideal CRM model in this study was to build up an appropriate frame of reference for investigating CRM activities in the banking sectors of the two different countries. As seen in chapter 3, the CRM model used in this study was typically designed for banks covering the bank’s architecture and different CRM activities in an ideal CRM-enabled bank. Therefore, the interview questions used for data collection were designed to cover the four major components of the same CRM model: contact channel management, enterprise-wide management, customer data management, and IT management. The following discussions and suggestions are based on these four components of an ideal CRM model.

6.2.1 Contact Channel Management

Contacting different types of customers through various channels is always considered as the initial step of any CRM-enabled bank. The more contact channels available for customers, the better it is for banks to maintain long-term relationships with their customers. Parvatiyar and Sheth (2001) claimed that, prior to the CRM-era, banks used to interact with their customers primarily through the sales and marketing personnel. The old system required customers to visit the bank for transactions and the bank employees used to interact with them face-to-face to provide details about their new products. Today, most of the banks interact through a variety of channels that include: through sales and service personnel, call centre agents, internet websites, and marketing department.

Knox, et al., (2003, pp.26-29) and Liu (2007) explained that every contact between a bank and its customers is a chance for the business to learn more about the customers and to deepen the relationship between the two. Previous studies of CRM failure in banks have shown that such banks offer fewer contact channels to their customers and failed to provide consistently high standards of service across different contact channels. Therefore, it is extremely important for banks to offer multiple contact channels because with the availability of different channels, banks would easily gather
valuable information from their customers (through different sources); they also gather information about customers’ requirements, e.g. products they require, customers’ common queries, how each customer wants to be contacted, etc. Such information can be stored in the bank’s central database in each customer’s profile, for further analysis. In this way, the information collected from different customers also helps banks to offer different products based on the requirements of each customer.

The results from various interviews have shown that in Pakistan, the contact channels offered by banks vary in different cities. For example, in rural areas, banks still have the old concept of branch banking as the only contact channel, while in the large cities, several banks have introduced various CRM-based contact channels for their customers, such as phone banking and ATM, and have opened call centres. However, the operation of these channels is limited to the larger cities. Similarly, internet banking channel is still not offered by most of the Pakistani banks because of security issues. However, banks have recently introduced a few e-CRM related services such as sending SMS alerts to customers’ cell phones for their account transactions, and these are becoming very popular with some customers. One of the reasons for banks offering different contact channels in different cities is that they are still not ready to invest in CRM-related contact channels in smaller cities. According to these banks, CRM software requires a huge amount of investment and banks are still not ready for it. Therefore, looking at the current environment, the number of contact channels these banks offer varies in different cities across Pakistan and the concept of centralized banking is still not available. However, they are aware of the importance of CRM and are positive towards its implementation (especially at the branch level) across the country in years to come. They would need to offer more contact channels, especially in the rural areas, and link them with the CRM system in order to facilitate all types of customers throughout Pakistan.

On the other hand, the results from the selected UK banks have shown that these banks offer a variety of contact channels to their customers, such as phone banking, internet banking, e-mail, branch banking, kiosks, etc. These channels are offered in all the cities across UK and the banks are all centralized. During the interviews in four
major UK banks, several interviewees explained that UK banks offer all types of contact channels because they want to approach their customers through different ways. Customers are also aware of the availability of different channels, and each customer wants to approach the bank according to his/her own preference.

To suggest the importance of CRM-based contact channels to the banking industry (especially to the banks in Pakistan in our case), Mukerjee (2007, p.64) proposed and emphasized the customers’ preferences. The author suggested that an ideal CRM system in banks takes into consideration the needs of each type of customer and also acknowledges the fact that different customers have different preferences. Banks must introduce more contact channels and offer access to their customers through a variety of these channels, including retail premises, internet banking, phone banking, and ATMs. In this way, a particular customer can use the channel that he/she finds most convenient. For example, an elderly person may prefer to use branch banking or phone banking while a business customer may prefer to use internet banking. Therefore, multiple channels should be offered to the customers. Mukerjee further claimed that the secret to a good CRM is to offer greater value after offering multiple channels. For example, some banks offer 8 AM to 8 PM banking at retail outlets, in addition to enhancing the features of the internet website to offer more value to customers.

Similarly, the idea of multi-channels will also help customers to lodge complaints and requests for any bank product. For example, using the bank’s website, customers can easily lodge complaints and also request any product using the same channel. However, there are several issues with these channels that require consideration in order to successfully integrate different channels within the banks. Table 6.11 covers some of the issues concerning multi-channels at banks.
<table>
<thead>
<tr>
<th>Type of Channel</th>
<th>Issues of Consideration</th>
</tr>
</thead>
</table>
| **Branch Banking**             | - Continuous training to all the personnel working at branches to ensure uniform customer interaction.  
                                |   - Provide service to the customers based on their value to the business.              |
| **Internet Banking**           | - Ensuring updated data on the site (by incorporating customer transactions conducted through other channels).  
                                |   - Ensuring that customers’ transactions are done in a secure manner.                  |
| **Call Centres/ Telephony**    | - Proper training and customer orientation for all the agents.                           
                                |   - Ensuring updated data on customers (by incorporating customer transactions conducted through other channels).  
                                |   - Dependence on verbal communication may result in customer dissatisfaction.          |
| **Kiosks/ATMs**                | - Technology must be minimal to ensure high customer acceptance.                         
                                |   - Location should not cause customer inconvenience.                                  |

Table 6.11: Issues Concerning Multi-channels at Banks (Source: Mukerjee, 2007, p.64)

### 6.2.2 Enterprise-Wide Management

This second component of the model includes the main CRM activities within the bank using the front-office and back-office systems. Usually at banks, the front-office system contains several CRM-based components and different strategies that are used by bank employees while contacting the customers. The back-office system contains the bank’s internal operations where bank employees investigate their customers’ data more precisely and plan their approach to each customer differently. Several researchers have emphasized the importance of these two systems. For instance, Peppard (2000) studied the CRM issues in financial institutions such as banks, from the enterprise-wide perspective, and emphasized the importance of the integration of contact channels and front-office and back-office systems. Similarly, Liu (2007) recommended that banks must integrate their front-office and back-office systems from the customers’ point of view and redesign business processes from the outside in. If banks are unable to integrate their front-office and back-office systems, then the problem of mismatch or inconsistency can lead to losses from a failure to retain or keep customers.
6.2.2.1 Front office system

As already explained in the previous chapters, front-office system, in other words operational CRM, contain different customer-facing and customer-service functions. Front office can similarly refer to the client-facing activities in front of the back office. Ideally, some of the CRM-based front-office tools used in banks are: cross-selling/up-selling, marketing automation, campaign management, lead management, etc. As we know from the analysis results, CRM is not used as a complete suite across different banks in Pakistan. During the interviews at the Pakistani banks, several bank employees talked about the importance of front-office systems. For instance, one of the IT managers at Bank Alfalah explained it as:

“The performance of the front-office system can easily be measured by looking at the overall performance of a bank because front-office systems are used while interacting with the customers. Therefore, we are planning to introduce more advanced CRM-based components in the near future to enhance the performance of our front-office system. Also, our plan is to fully integrate CRM components used in the front-office with the back-office system” (IT Manager, Bank Alfalah Ltd.).

Looking at the overall results from the selected Pakistani banks, currently these banks are using some of the CRM-based components in the front office and are planning to introduce more in future.

On the other hand, our interview results have shown that the UK banks have already installed most of the CRM-based components in the front office, currently used by different departments based on the requirements of each. For example, sales force automation (SFA)-related components are used by sales personnel, while campaign management and marketing automation-related components are mostly used by marketing employees. Also, UK bank employees were positive about the overall performance of their front-office CRM components.
However, in an ideal CRM-enabled bank, numerous front-office CRM components are available for different departments of the bank. Based on the ideas of Liu (2007), here we recommend and discuss some of these significant components that are suitable for banks in both Pakistan and the UK when interacting with their customers. These components were also proposed by several researchers and their views about some of these components are:

- **Sales Force Automation (SFA):** As already explained in chapter 2, sales force automation (SFA) is a CRM component designed to facilitate the sales process. It is an application of computerized technologies to support salespeople and sales management in the achievement of their work-related objectives. Its hardware includes desktop, handheld devices, and call centre telephony technology. All SFA software is designed so that pertinent customer-related data can be captured, stored, analyzed, and distributed to the sales people in order for them to become more effective and efficient in the pursuit of their objectives (Buttle, 2009, p.396).

- **Lead Management:** It is a sales force automation capability for tracking and monitoring sales prospects and a bank’s interactions with them, as well as enforcing sales tactics and automating key tasks. It also enables telemarketing staff to pass leads along to the appropriate sales channel (Dyche’, 2002, p.293).

- **Campaign Management:** This CRM component is widely deployed in business to customer environments especially for customer acquisition. The marketing managers design, execute, and measure marketing campaigns with the support of CRM technologies. These campaigns include multimedia campaigns across direct mail, e-mail, fax, outbound telephony, and even SMS platforms. The CRM technology also assists in selecting and grouping potential customer targets, tracking contacts, measuring campaign results, and learning from these results to produce effective and efficient campaigns for future (Buttle, 2009, p. 251).
Marketing Automation: Similarly, marketing automation is another CRM-based front-office component used to automate marketing processes such as customer segmentation, customer data integration (CDI), and campaign management. The use of a marketing automation component makes these processes much more efficient and makes some new processes possible because previously these processes were done manually by the marketing staff at the banks (SearchCRM.com, 2010).

6.2.2.2 Back-office system

The back-office system or analytical CRM is considered as an internal system of a bank. Back-office also means the internal operation of a bank that is not accessible or visible to the general public. In banks, the CRM system is usually part of that internal system; the system involves different CRM components to analyze each customer’s data separately with great care. The CRM components used at both front-end and back-end also help banks to design customer-based strategies. According to Liu (2007), ideally, the bank’s back-office system should include and combine some other systems such as: ERP system, CRM system, supply chain management system, and knowledge management system. These systems are also referred as enterprise systems and were described by Turban and Volonino (2010) in their work. However, in order to understand these systems more precisely, the authors in their recent book define these terms as follows:

- Enterprise Resource Planning (ERP) System: The software that integrates the planning, management, and use of all resources in the entire enterprise (Turban and Volonino, 2010).

- Customer Relationship Management (CRM) System: The entire process of maximizing the value proposition to the customer through all interactions, both on-line and traditional (Turban and Volonino, 2010).

- Supply Chain Management (SCM) System: The management of all the activities along the supply chain, from suppliers, to internal logistics with a
company, to distribution, to the customers. This includes ordering, monitoring, and billing (Turban and Volonino, 2010).

- **Knowledge Management (KM) System**: KM is the process that helps organizations to identify, select, organize, and transfer important information and expertise that are part of the organization’s memory and that may reside in unstructured form within the organization (Turban and Volonino, 2010).

The interview results from the selected banks of Pakistan and UK shows that more or less banks in both countries are using these enterprise systems at the back-office i.e. Pakistani banks are using a few packages while UK banks are using them as a complete suite in the back office. By using these back-office enterprise systems, different departments can easily share any type of customer-related information with each other. Also, using these enterprise systems, different bank employees can easily collaborate and communicate with each other using the same system. Several bank employees explained that the back-office system is used as the main communication channel through which different departments easily share the common queries of their customers. For instance, using the bank’s internal system, branch offices contact call centre agents to enquire about customers’ previous queries and how they were resolved, because it is usually the call centre agents who deal with customers’ query-related issues. However, in some Pakistani banks, the problem seen was that some parts of the bank’s internal system (or some packages of the back-end system) were not available in small branches, especially those in the rural areas. Employees of those branches usually contacted the main branch (the bank’s head office) when they required any information, using some other sources such as e-mail, telephone, etc. Therefore, it is important for banks in both countries to fully integrate these back-office systems across all the branches in order to share information more precisely.

### 6.2.3 Customer Data Management

As cited in Liu (2007), this third component of an ideal CRM model was described by Reynolds (2002, p.169) as:
Understanding and managing customer relationships depend on the proper integration of a wide variety of customers’ data. An approach to define data requirements starts with what a company knows, defines what it wants to do with the gathered information, and then defines what it does not know.

In organizations, especially in banks, customers’ data gathered at the front office using the bank’s different contact channels further records into the bank’s central database (data warehouse) where different CRM applications are used to filter out any unnecessary or repetitive information while the valuable information remains in each customer’s profile and can be further used by different departments of the bank. Thus, the customer data management platform is considered as the bank’s most valuable component, as it enables different departments to access customer data, perform analysis on each customer’s profile using a variety of analysis methods, and then approach them differently, based on each customer’s overall worth to the bank. According to Liu (2007), the customer data management component can be divided into two areas: the database, and customer analysis. These areas are discussed in the following sections using some of the results from the selected banks of Pakistan and the UK. Also, some suggestions are proposed for these banks, using the ideas of different CRM practitioners.

6.2.3.1 Database

Ideally, in an organization, a database process involves data gathering, recording, filtering, segmenting, extracting, and retrieving. Based on some of the examples from the interviewees, in this section we discuss how banks in Pakistan and the UK collect and integrate their customers’ data. In Pakistani banks, the IT Manager at Habib Bank Ltd talked about how most of the banks in Pakistan record and retrieve customers’ information:

“The information that customers provide at the time of opening an account is usually stored in our central database. That information is updated in the bank’s database on a regular basis. By using customers’ information from the central database, different departments such as marketing, sales, credit card
department etc., contact each customer differently about the availability of our new products” (*IT Manager, Habib Bank Ltd.*).

Likewise, the branch manager at the Bank Alfalah discussed how the department handles customers’ data in the data warehouse:

“At our bank, the systems and operations department is responsible to manage customers’ data. The department works closely with the IT department to operate and manages customers’ accounts. The department is also in charge of making customers’ data available to all the relevant departments so that every department can easily view customers’ details at our bank” (*Branch Manager, Bank Alfalah Ltd.*).

In UK banks, the IT manager at Santander Bank presented similar views about how customers’ data is stored, retrieved and updated; he also discussed how long the bank keeps customers’ records in the database. He explained the process more precisely as:

“The information we collect from our customers is usually stored in our central database (data warehouse). Such information can be easily retrieved by every department of our bank, such as call centre employees, marketing staff, sales staff, and branch employees, etc., at any time. We record our customers’ information (their account activities, etc.) under their profile starting from the day when they open an account. From the information collected, certain things stay the same; other details are updated. For instance, if a customer stays with us for 10 years, his/her initial information such as name, surname, date of birth, etc., would obviously stay the same but the other information will be updated on a regular basis. We also aim to update our customers’ background information at least once a year” (*IT Manager, Santander Bank*).

The above examples from the interviews show that banks in both countries keep records of their customers’ previous and latest information. Using several tools and techniques, they acquire and keep hold of valuable information on their customers. To suggest improvements for these banks of Pakistan and the UK, Mukerjee (2007,
p.103) recommended that the databases where all the customers’ information is usually stored should fulfil the following capabilities:

- **Robust**: The database should be robust and enable transactions as and when desired by the users. Also, the robustness should ensure that there is no loss of data, etc. during the transaction process.

- **Scalable**: The database should be such that as the customer volume grows and the number of customers increases, it should be able to manage the increased load. Therefore, before selecting the database, adequate consideration should be given to the issue of the future projections made by the bank with regard to the customer base, number of users expected to use the IT systems, etc.

- **Secure**: The database must always be secure and the security should always be considered. For instance, if the credit card numbers of the customers are stored in the database, users querying the database should not be able to get hold of such sensitive data since the database would become vulnerable to hackers (Mukerjee, 2007, p.103).

### 6.2.3.2 Customer Analysis

This approach to customer data management focuses on how banks analyze their customers’ data. Liu (2007) argues that customer analysis is useful for banks to identify the value of each customer, identify the targeted customers to balance the relationship, and calculate the cost/revenue/actual contributions of each customer. In this section, using some of the interview results, we will discuss the concept of customer analysis that helps banks to identify each customer’s value to the bank, and also the concept of customer loyalty (i.e. customer retention).

In Pakistan, it is seen from the interview results that banks mostly analyze the overall value of each customer based on their account balance. In Pakistani banks, the overall value of each customer is obtained using some CRM-based analytical tools. For instance, the branch manager at Bank Alfalah explained this concept as:
“Using our bank’s internal system, we categorize our customers in three different levels, i.e. lower level, middle level, and higher level. These three levels have a different account balance limit for customers. Similarly, customers’ value to the bank is different in each level, i.e. lower level customers get fewer benefits because they are less valuable to the bank, while higher level customers receive better offers because of their higher value to the bank. If a customer’s balance increases and goes up to the higher level, we contact that customer and further inform him/her about the extra benefits he/she can get if he/she maintains such balance in his/her account. Similarly, if a customer wishes to close the account, by looking at the value of that particular customer using the bank’s internal system, different loyalty offers are generated and offered in order to keep our existing customer” (Branch Manager, Bank Alfalah).

Likewise, UK banks are proud of their central CRM systems and several banks’ employees explained that using it, customers are usually divided into two different groups, business and individual. The CRM system analyzes each customer’s data carefully and then automatically generates offers to fulfil the requirements of different types of customers.

The above discussion shows that banks in Pakistan and the UK usually maintain relationships with their customers based on their overall value to the bank. The value of each customer is usually obtained by carefully analyzing each customer’s information stored in the database. The CRM system used at these banks has several data analysis components which help in defining segmentations based on customers’ income class, geographical area, profession, etc. Such classification further help banks to maintain relationships with each customer differently.

6.2.4 IT Management

This is the final component of an ideal CRM model discussed in this section. All the bank services (including several CRM components) are managed using a variety of IT equipment, including computer hardware (used at the branch banking level) and
different equipments used at the call centres. According to Liu, (2007), a proper CRM system requires banks to invest in its IT infrastructure and in specialized software to record, track, and analyze customers’ interactions. The IT management component in banks is critical when putting different management strategies into practice. For example, looking at the ideal CRM model, IT management is essential for the other three components i.e. IT hardware and software used at contact channels helps bank employees to easily communicate with their customers. Similarly, IT hardware and software are also used for information sharing between front-office and back-office systems. Likewise, with the help of several IT hardware and software, banks can easily store and retrieve their customers’ valuable information, which further helps them to analyze the value of each customer.

Several bank employees (especially the IT personnel) in the selected banks of Pakistan and the UK explained that in order to use several CRM packages efficiently, banks need to have the latest IT equipment installed (both hardware and software). Most of this latest IT equipment was seen at different call centres during the interviews and their performance and features were explained by the IT managers at the different banks. Therefore, in this section, we discuss and propose some of this equipment currently used in the banks of Pakistan and UK. These IT equipments were also discussed and proposed by Bergeron (2002), who stressed the importance of these IT systems and suggested that their performance is important in order to use CRM successfully. The equipment most commonly used at call centres includes:

- **Computer Telephony Integration (CTI):** This is the real-time integration of voice and computer data that allows email and phone data from the same customer to be routed to a particular call centre representative. This technology allows customers to place an order through the web and to later call a call centre agent to check the status of the order or to modify the order. Without CTI, agents either have to have two computers at their desk, one with the record of on-line transactions and one with a record of phone-in orders, or switch between two programs on their computer (Bergeron, 2002).
- **Private Branch Exchange (PBX):** This is a privately owned and operated central switching device used at most of the call centres. The PBX connects a call from a customer to a particular representative. It supports modern, electronic telephones, with data displays, programmable buttons, call forwarding, and other features. An advantage of using a private switchboard instead of a public one is greater flexibility, cost savings, and the ability to select from a wider range of features and telephones (Bergeron, 2002).

- **Automatic Call Distribution (ACD):** This is an alternative to a PBX that answers calls and puts them in a specified order in a line of waiting calls. An ACD can be programmed; for instance, to transfer calls to the representatives in a predefined order or to representatives with most idle time. ACD devices are used at call centres and are more expensive than PBX (Bergeron, 2002).

- **Interactive Voice Response (IVR):** An IVR is a telephone interface to a computer system driven by either voice responses or telephone keypad entries. IVR menu-driven responses replace human telephone operators, allowing customers to retrieve their bank account balances, request product information, or validate their credit card, etc., all automatically without the help of a representative (Bergeron, 2002).

Throughout banks in Pakistan and the UK, computer hardware equipment (that are also part of the IT management components) are used to support different CRM packages to run efficiently at banks’ front-office systems (while gathering data from customers) and at back-office systems (while integrating customers’ data and sharing such data between different departments) of banks.

The back-end applications, including programming languages, are also used at these banks to support CRM software. For instance, the call centre staff at several Pakistani and UK banks mentioned some of these supporting programming applications, e.g. HTML, JAVA, XML. The banks’ IT staff also explained that with the help of up-to-date computer hardware and the back-end applications, customer information can
easily flow between front-office and back-office systems. Some of the computer hardware used at these selected banks includes:

- **Backup Hardware**: Used to archive both customers’ and banks’ data on to a CD-ROM, DVD, a hard drive or other media. For the larger call centres, server-based automatic tape back-up hardware is used.

- **Network Hardware**: All modern computers used in branch banking and at call centres use a network of some type to connect these computers to databases, printers, and with each other. Networks can take on a variety of physical configurations, most of which use the Ethernet standard to communicate among devices. The most common elements of a computer network to plan for include: cables, firewall, hub, modem, network card, router, server machine, and several wireless devices.

- **Security Systems**: The security systems are commonly used at banks to protect and secure customers’ personal and financial information. A popular way to keep prying eyes from specific data is to encrypt it such that only those bank employees with access to the decryption key can have access to the customers’ information (Bergeron, 2002).

To conclude, this section presented some discussions and suggestions based on the results obtained from the two case studies. These results were also discussed using the four major components of an ideal CRM model (originally proposed as a frame of reference in chapter 3) in order to analyze and discuss these results more precisely. The CRM model used in this study is helpful as it gives guidance and an in-depth view of how CRM should work within different departments of the banks. Similarly, some suggestions were also proposed in this section, using examples from some well-known CRM practitioners. In the next section, we discuss the concepts and design principles of the socio-technical theory and propose how these design principles are useful for banks in both countries i.e. Pakistan and the UK while using the latest technology (i.e. CRM).
6.3 Benefits of Socio-technical Theory for Banking Industry

RQ No. 2: How would the design principles of socio-technical theory benefit the banking industry while using the latest technologies (CRM) in the increasingly changing work environment?

To suggest how socio-technical design principles would benefit the banking industry while using latest technologies i.e. the CRM system, we first need to consider the changing nature of work in organizations under the impact of these latest technologies. Several social scientists have expressed their views and predicted the future of organizations (especially the financial institutions). For instance, as seen in (Mumford, 2006), George Soros, an international financier, believes that capitalism is becoming unstable and it is changing rapidly. Because of this, organizations have adopted the latest technologies and are more focused on chasing money while ignoring their focus on social and political factors. The social objectives such as providing employment, take second place while the organization’s major focus is on its consolidations, short-term targets, and increasing its profits. For instance, there is a lot of competition within the banking industry and several banks have adapted the latest technologies in order to compete and sustain their position in the marketplace. Employee-related problems such as job satisfaction, job security etc., are their lowest priorities. The author sees two possible scenarios for organizations in years to come; the first scenario is that global capitalism will survive and will dominate the world economy even more than it does today; severe competition will prevent companies from paying much attention to social concerns. The second scenario is that the system will collapse and that political groups will seek to take over the multinationals and restore national wealth (Soros, 1998; Mumford, 2006).

Other social scientists have different views about global capitalism. For instance, Scott (1999) presented two different scenarios; the first is that economic activity will be internationalized (it will become borderless). The author’s second scenario is that there will be regional economic growth, which means that companies will then become global and will move round the world to find cheap labour and new business opportunities (for instance, several western banks nowadays have opened their
branches and call centres in different other countries such as India and Pakistan where they can easily find cheap labour in order to cover the global market); and the most successful companies will retain their national allegiances. However, as seen in Mumford (2006), Stenberg (1999) argued that even with the growth of information technology, despite many companies having a global market vision, manufacturing industry will remain extremely important. Information technologies cannot be created without manufacturing technologies to produce the necessary hardware; for example, the latest computer hardware is an essential requirement for banks to make proper use of the CRM systems (Mumford, 2006).

Similarly, Castells (1996) believes that there is a major restructuring going on within organizations. Many organizations are moving from hierarchies to networks and from centralized to decentralized structures in which parts of a company are run as semi-autonomous units. The British Department of Trade and Industry (DTI) proposed two alternative scenarios, *wired world* and *built to last* for the organization of the future (DTI, 1999). The first scenario is that networks of self-employed individuals will come together using the internet to work on common projects based on temporary contracts. The wired world is a world of portfolio work in which individuals develop sets of skills and a knowledge base and sell those skills to other individuals or companies. Because many of the new *knowledge workers* will be self-employed, the *job for life* concept will disappear and individuals will have to become skilled at selling themselves, running their own lives and protecting their knowledge. Hence, in this concept, people will not be looking for jobs; they will rather be looking for customers. Because people working as individuals rather than as members of teams have little job stability, it is believed that systems of social support and protection will need to be created.

The second scenario proposed by the DTI as an alternative to *wired world* is the *built to last* company. These are stable, relatively large companies not very dissimilar to the successful organizations of today. Their core objective is to grow through the collection of knowledge which means that these companies place a high value on the development of knowledge and they are anxious to keep the employees who possess this. Such companies are therefore likely to offer long-term contracts and job stability.
According to DTI, it is possible that a new global economy will contain representatives of both the *wired world* and *built to last* companies. The strategy adopted by any organization will depend on the nature of its objectives and markets. The success of both scenarios is highly dependent on the relationship between employer and employees. For instance, in banks, employer wants employees to be loyal and dedicated to the company, whereas employees are interested in their job assurance, a decent salary, and promotion opportunities. Maintaining such relationships is extremely important as it would affect the overall performance of the organization (DTI, 1999; Mumford, 2006).

Over the last decade, there has been a major change in the overall environment within the banking industry in which technology has played a major role. With the help of the latest technologies, several banks have become global. These banks have opened their branches in different countries across the globe; their core objective is to spread their business internationally to generate better revenues. They are least concerned with maintaining relationships with their employees. On the other hand, looking at the employers’ behaviour, employees have started looking for better job opportunities in other organizations. They prefer changing job when a better opportunity arrives in a different organization. As a result, it seems that the job for life concept has disappeared and if the situation remains the same in future, it will affect the overall performance of the banks in a long run. With the proper implementation of socio-technical theory concepts within the banking industry, such problems could be rectified and it would further help bank employers to maintain better relationships with their employees. In this way, employees will become loyal and would work together with higher management for the success of the organization.

Another change in the work environment with the use of the latest technologies in banking is discussed by Mumford (2006). She believes that that the advent of computers in the banking industry has introduced a new, more constrained form of routine work which requires data to be input manually so that it can be processed electronically. This needs concentration and accuracy and talking on the job is not possible. For instance, the call centre jobs in banks these days are more stressful as they require call centre employees to constantly answer or make calls to their
potential customers. Often, the numbers of calls handled are electronically monitored and the kind of responses the agents make is carefully listened to by their supervisors. Even worse, it is now thought that constant use of the telephone can affect an operator’s hearing, leading to deafness.

Several other researchers have discussed the changing nature of work in organizations, especially in banks. To summarize, maintaining better relationships both internally (employer with employees) and externally (bank with customers) is always considered as an advantage for banks to participate in the future and to sustain their position in the marketplace. The proper use of CRM systems helps banks to maintain relationships with customers but in order to maintain relationships between employer and employees, banks need to adopt the design principles of socio-technical theory within the organization in order to enhance their performance.

The design principles of socio-technical theory benefit the banking industry in several ways; for instance, the theory encourages the concept of job design/redesign within the organization so that work will be equally distributed among several work groups and the boundaries of each work group will also be determined. Other aspects of the theory, such as employees’ training and job satisfaction, are also popular concepts of the theory that are essential for banks. In the following sections, we discuss and propose some of the benefits of socio-technical theory for the banking industry.

6.3.1 Job Design/Redesign

According to Mills (2007), to understand what job design is and why it is important for organizations such as the banking sector, we have to first clarify the components of a work system. A work system comprises three components:

- **People**: those who are employed in an organization (such as bank cashiers, call centre agents, branch managers, etc.);

- **Technology**: machines (such as computer hardware/software) and computer systems (such as CRM, ERP, SCM);
Materials: the physical substances or information symbols on which a work system acts.

The way these three components are combined maps out the required activities of the work system. Mills suggested that for organizations, there are a number of ways to design jobs that can be used to fit the work that people do more closely to their demonstrable social and psychological needs as human beings.

Similarly, Sprague and McNurlin (1993, p.542) discussed that in this increasingly competitive and time-driven world, management is becoming more concerned with improving employees’ productivity. Many of the sales claims for new information technologies promise to raise the productivity of employees significantly. These technologies by themselves, however, can not provide the productivity gains that are the centre of attention. Management should not be led to expect this of technology. Instead, it is the employees, perhaps with the help of technology, who can provide the big gains. Similarly, the key to increased productivity is people. Technology can help people to do their jobs better if they are willing to use it. However, many employees have not been impressed with the computerized systems because they have had to adapt to the computer rather than the reverse. Too often they have had to follow the dictates of a computerized application rather than use the computer as a tool to augment their own work style. Increased productivity depends on the employees’ attitudes to their jobs and the feelings they have about how management is treating them. The authors proposed that in an organization such as banking, jobs should be designed according to the requirements of employees because the employees’ involvement in job design is important as it will cover the problems they are facing while interacting with customers using the latest technologies. For example, call centre employees at bank interacts with the customers 24/7 using up-to-date technologies, i.e. CRM systems. Therefore, involving them in the job design phase will cover their issues.

In general, job design and the impact of technologies on jobs is a complex issue. Most of the previous studies have given attention to the technical and economic issues and focused on the positive side of technology, such as faster access of data to increase
productivity, but the side effects of a new system can be quite different from what is anticipated. As cited by Nadin, et al., (2001), Hendrick (1997) argues that most of the approaches related to job design and the implementation of new technologies are technology centred. These approaches often fail to consider the implications for the personnel involved. The result is a suboptimal work system, not only in terms of productivity but also in terms of the psychological and physical well-being of employees. Organizations need to design a work system approach that considers the needs of employees and also covers the critical dimensions of the technology, personnel, and the external environment. The authors proposed a socio-technical viewpoint as a suitable approach to cover the overall needs of an organization.

Ideally, socio-technical theory has been a successful tool in designing jobs for nearly half of the 20th century. The main goal of this approach is to design jobs so as to increase employees’ work motivation. High on the list are factors such as job variety, discretion, participative decision making, continuous feedback, training, career advancement and recognition (Mumford, 2003). Similarly, Mills (2007), views socio-technology as an ideal job design approach for banks and referred to it as a role-content approach. The role-content approach was further explained by the author as: “different workgroups in a bank working independently using the technology (CRM) to complete the same task; each workgroup should be equally responsible for the completion of the task”.

Similarly, as seen in Sprague and McNurlin (1993, p.553), Dr. James Taylor, an American social scientist, presented a new approach to job design in the work system using the ideas of socio-technical theory by considering the latest technological factors. His approach is useful to job design in the banking environment as most of the work in banks nowadays is done using computer systems. Taylor distinguishes between a computer-automated system and a computer assisted system. In the former, the computer sets the work pace by feeding work to the employees. In the computer-assisted system, the employees set the work pace and use the computer as they need it. By using the socio-technical approach, Dr. Taylor attempts to achieve a computer-assisted system. He explained that the socio-technical design work is generally performed by a group of employees under the supervision of a socio-technical
consultant. His approach has been successfully implemented in several organizations in which some of the employees used computers while others did not. Taylor describes the job design process using the socio-technical theory ideas in five different steps: 1) scanning the work group, 2) technical analysis, 3) variance control, 4) social system analysis, and 5) the socio-technical design. The author recommends that if employees are given the authority to schedule their own work within the group, the workload can be balanced by them, not assigned by the supervisors.

Most recently, an article in (Openlearningworld.com, 2010) presented several approaches to job design and proposed socio-technical theory as a suitable approach, amongst several others; it connects both technical and social aspects while designing jobs. The article proposed that redesigning work in the banking industry using the socio-technical systems methods requires the combined efforts of bank employees and higher management in analysing significant job operations. Jobs are not only designed to be essentially motivating; rather, they are designed so that the work is done. Each individual’s goal should be to ensure that the bank’s objectives are met. However, this is accomplished by concentrating only on critical job aspects, by forming work teams consisting of members who have the necessary qualifications to accomplish the tasks and by allowing work groups the independence to manage their own work process. The thrust of the socio-technical approach to job design is that both the technical system and the social system should be considered when designing jobs. According to this concept, jobs should be designed by taking a holistic or systems view of the entire job situation, including its physical and social environment. Using the socio-technical approach, the following guidelines have been developed for designing jobs:

- A job needs to be reasonably demanding for the individual in terms other than sheer endurance and yet provide some variety (not necessarily novelty);

- Bank employees need to be able to learn on the job and to keep on learning;

- Bank employees need some minimum area of decision making that they can call their own;
➤ Bank employees need some minimal degree of social support and recognition at the workplace;

➤ Bank employees need to be able to relate what they do and what they produce to their social life (Openlearningworld.com, 2010).

6.3.2 Provide Training to the Employees in New Technologies

Training, in other words learning in the workplace, is another essential concept of socio-technical theory identified by several socio-technical researchers in their work while proposing suggestions and solutions to numerous organizations. Nowadays, with increasingly advanced technology, it is extremely important for banks to provide training to their employees because banks sell services that incorporate new procedures, often based on technology, and aimed at providing greater benefit to the client and greater profit to the bank (Heap, et al., 1995, p.183). Secondly, making proper use of CRM systems in banks also requires employees to be well trained in terms of the latest technology. For instance, as seen in Goldenberg (2002, p.135), ISM (ismguide.com) previously published that for every $1 a bank spends on CRM automation technology such as: hardware, software, and communication equipments, it should budget $1.50 for training over the life of the project (which is typically around five years). The training costs are spread over the life of the project; for example, if the technology costs are $1 million, then the training costs should be $1.5 million, but that amount is spread over five years (or depending on the duration of the project). The idea of this discussion is that banks should never underestimate the importance of providing training to employees in order to make proper use of CRM. Goldenberg (2002, p.136) further talked about the different forms of training usually available for banks using the CRM system: initial user training, train the trainer, system administrator training, periodic training. These types of training are also proposed by the researcher in this section and are discussed below:

➤ Initial User Training: This type of training is a requirement for almost every bank employee. If the bank ends up purchasing off-the-shelf CRM software, initial user training is usually included or can be negotiated into the overall
price of the software. If the bank is developing the CRM software in-house, training programmes can be designed and arranged by the IT department to educate the bank employees about the major features of the new software. The main objective of initial user training is to provide bank employees (users) with an overview of the new system, then to go into individual system functions and features. After each section of the training, it is best practice to ask employees (users) to complete a hands-on test to show that they have understood how to use that section of the system effectively.

- **Train the Trainer:** This type of training is essential for those banks that prefer to do their own training, or when there are so many system users that it becomes difficult to train them all at once. The objective of this session is to bring together internal trainers so that they may learn how to use the system and then how to teach other bank employees (users) to use the system.

- **Systems Administrator Training:** If the bank’s CRM software is purchased from an external vendor, this type of training takes place between the vendor and the bank’s assigned system administrator(s). If the CRM software is built in-house, it is still critical that the system administrator(s) receives proper training in its use.

- **Periodic Training:** The bank employees already trained on the CRM system and who use the system shortly thereafter are likely to retain much of their training. Nonetheless, the most seasoned learner benefits from periodic training, particularly if new updates of the CRM software are installed that include advanced functions and features. Therefore, it is recommended for banks to arrange periodic training sessions for employees at least every six months after the system has been properly installed and implemented (Goldenberg, 2002, p.136).

Another researcher named Bergeron (2002, p.73) recommended and explained the importance of computer-based training (CBT) for bank employees (especially customer service representatives). The author believes that the customer service
representatives tend to be the least trained of corporate employees, in part because of the expense and time involved; however, teaching them about the use of latest technologies, especially the use of computerized CRM systems, can be simplified through computer-based training. Similarly, CBT can be useful to help and support personnel in order to learn and review how to perform routine maintenance on the CRM hardware and software, such as how and when to create data archives, etc. Although it is expensive to design and develop CBT programmes in-house there are several commercial packages available that are affordable enough to be used to supplement classroom training.

6.3.3 Employees’ Job Satisfaction would bring Customer Satisfaction

Consideration of employees’ job satisfaction is also important for banks and several socio-technical researchers have claimed that it has a major role in the success of an organization. For instance, Mumford (2006) suggested that the most important concept that socio-technical design contributes is its value system. This concept tells us that even though technology and organizational structures may change, the rights and needs of the employees would always get as high a priority as those of the non-human parts of the system. In banking, it is clear that by using the latest technology, banks have moved from traditional banking, (i.e. dealing with customer queries at branch level, cash in and out over the counter, etc.,) towards a CRM-oriented approach, (i.e. solving customers’ problems over the phone through call centres, e-mails, and other electronic sources where the customer’s data is retrieved and updated through highly advanced computer systems). These computers are equipped with the latest CRM applications through which agents can easily retrieve customer account information within seconds while talking to them over the phone. By looking at the detailed account information, these advisors aim to provide the best available solutions to their customers. Also, such technology has made things easy for customers; for example, using the internet, customers can easily buy any product from any desired bank. Hence, with the help of technology (especially the internet), customers have become more sensible and more demanding (when it comes to buying any product from the bank) and are completely aware of their importance to the bank. Secondly, the technological change in the work environment, especially in the
banking industry, has on one hand provided employment for many but on the other hand, it also results in unemployment for those who have insufficient skills to participate in the future world.

Banks, dealing with demanding customers by using the latest technologies, have increased pressure and stress on many employees in the work environment. For example, compared with 9 to 5 branch banking, call centres these days are offering 24/7 banking facilities, so employees are working hard in day and night shifts to satisfy their customers’ demands and achieve their targets. Therefore, it seems that the concept of employees’ job satisfaction, which is considered as one of the basic principle of socio-technical theory, is not seen in the banking industry.

Several IS researchers have proposed suggestions for organizations, especially for banks, and discussed the importance of employees’ job satisfaction. For instance, Buttle (2009, p.355), believes that several banks nowadays have realized that happy employees make happy customers make happy shareholders. Among them is an Australian bank called Westpac Bank, shown in figure 6.1. The bank believes that if its employees are satisfied in the workplace, they will deliver excellent service to their internal and external customers. This in turn will drive up customer retention rates and improve the bank’s overall performance. Therefore, the author suggests that banks must take positive initiatives to maintain good relationships with their employees.

![Service-Profit Chain at Westpac Bank](source: Buttle, 2009, p.356)

Figure 6.1: The Service-Profit Chain at Westpac Bank (Source: Buttle, 2009, p.356)
Buttle (2009, p.357) describes another study, by the Institute of Employment Studies, which found that: “the employees’ job satisfaction and their job commitment is connected to the bank’s profitability in three different ways, i.e. directly through employee behaviours, indirectly through customers’ satisfaction, and indirectly through a reduction in staff absenteeism and turnover” (Barber, et al., 1999).

However, a recent survey about employees’ job satisfaction conducted by the Society of Human Resource Management (SHRM, 2009) has revealed the top five issues of job satisfaction from the employees’ perspective. These are: job security, benefits, compensation or pay, opportunities to use skills and abilities, and feeling safe in the work environment. The survey also mentions that: “the employees’ job dissatisfaction can contribute to the multiple organizational problems and is associated with turnover and absenteeism, which ultimately cost the organization in terms of low performance and decreased productivity” (SHRM, 2009). Therefore, it is important for banks to consider these issues in order to maintain good relationships with their employees.

6.3.4 Health and Safety, and Employees’ Stress-Related Issues

The design principles of socio-technical theory also encourage the concept of employees’ well-being in the work environment. An article by Matheson (2006) explains that it is essential for banks to consider employees’ issues right from the beginning of technology innovation and not after the implementation; employees’ needs and problems should be considered alongside technological justification. For banks, employees’ health and safety-related issues should be one of the important concerns at the planning stage of CRM implementation. Nowadays, the intense use of computers in banks imposes risks from VDU (video display unit) exposure, of radiation, risks to vision, stress related problems; and physical injuries such as RSI (repetitive strain injury). The article suggests that the implementation of technology in banks requires planning for proper ergonomics so that the risks associated with computer-based technologies are avoided. Addressing ergonomics issues will also result in methods of designing machines, operations, workstations, and environments so that they match human capabilities and limitations. Furthermore, information on
health and safety issues should be incorporated during the employees’ training sessions.

Similarly, the nature of work these days in banking, especially the call centre-related work, has a significant impact on employees’ stress and stress-related outcomes, as it does in other work settings (Frenkel et al., 1998; Holman et al., 2002). Previous research on job design in call centres has demonstrated that low control, lack of variety, and high demands are important predictors of stress (i.e. anxiety, depression, emotional exhaustion, etc.) and stress-related outcomes such as absence (Karaseck and Theorell, 1990; Terry and Jimmieson, 1999; Deery, Iverson and Walsh, 2001). Also, Holman, et al. (2003) stated that employees’ performance monitoring is an important factor that has attracted attention because of its assumed effect on stress. Previous studies have shown that two kinds of arguments are available for performance monitoring. The arguments in favour of monitoring are that employees benefit because they can improve their performance and also develop new skills (Grant and Higgins, 1989) which in turn helps the call centre representatives to cope better with demands (Stanton, 2000). On the other hand, the arguments against performance monitoring are that it is threatening to the call centre employees because the information gained may affect employees’ remuneration or even co-worker relationships (Alder, 1998). Employees’ monitoring is also considered to be a demand in itself (Smith et al., 1992); the threat of monitoring and the consequent feeling of increased demand are thought to negatively affect employees’ well-being.

The authors proposed some suggestions, that the managers must take positive initiatives towards employees’ well-being since the managers have a greater opportunity to determine the work conditions for employees. In other words, bank managers must adopt a proactive approach towards employees by trying to reduce stress through the design of call centre work. Similarly, as the causes of well-being in banks’ call centres are similar to the causes in other organizations, the old rules are still useful in a new work environment. Therefore, many of the job or systems redesign methods including socio-technical methods can be usefully applied in a call centre setting (Parker and Wall, 1998).
The socio-technical methods can be effectively used on technologies, on job design, and on performance monitoring systems, particularly during their design and implementation phases. In terms of performance monitoring, the author suggested that it seems imperative that it should be a part of a system that aims to develop employees’ skills and performance and that these should be closely linked to coaching. Another suggestion would be to minimize the number of criteria used when monitoring employees’ performance to reduce the perception that it is intense (Holman, et al., 2003).

To conclude, this section presented some benefits of socio-technical theory for the banking industry while using the latest technologies (i.e. CRM). The benefits and suggestions of the theory were proposed based on the ideas of several socio-technical and IS researchers. Similarly, the following section covers several issues and challenges from CRM adoption in the banking industry of both Pakistan and the UK.

6.4 Challenges and Issues from CRM Adoption in the Banking Industry

RQ No. 3: What are the challenges and issues from CRM adoption in the banking industry of Pakistan and the UK?

The adoption of a CRM culture within the banking industry is highly dependent on the overall adoption of the IT culture as a whole within the country. Today, developed countries like the UK are enjoying innovative technologies, tailor-made systems, and have a high level of IT maturity within their organizations, especially within banking. Because of such a high level of IT maturity, most of the IT projects in organizations are well managed (Kundi and Nawaz, 2006). Compared with the developed countries, developing countries such as Pakistan are still dealing with several technological issues and the biggest one is the lack of IT alignment within its organizations.

Results from the current research have shown that CRM operation in UK banks is different from that of Pakistani banks. In UK banks, CRM is used as a complete suite
of packages fully integrated across all the different bank channels; while in Pakistan, only a few CRM packages have been introduced in some of the country’s leading banks, and these are integrated with only a few contact channels such as phone banking and call centres. Currently in Pakistan, some of the main challenges and issues with CRM adoption in the banking industry are related to the lack of IT resources, poor internet infrastructure, lack of support from higher management and from the government level, and inflexible policies from the State Bank of Pakistan.

In general, Pakistan has made sustained efforts to bring its IT sector up to par with the other leading players, but compared to the other countries, there is still a long way to go in achieving the desired goals (Kundi, *et al.*, 2008). In terms of overall IT adoption, according to the latest e-readiness rankings 2009 report (Economist Intelligence Unit, 2009), written in co-operation with the IBM Institute for Business Value, out of 70 countries, Pakistan lies in the 66th position while UK is 13th. As shown in table 6.12, the report also shows that there is a huge gap between the developed and developing countries especially in comparison with Denmark, the USA and the UK. India, Sri Lanka and Pakistan are far behind in the race for e-readiness of IT advancement (Kundi, *et al.*, 2008; Economist Intelligence Unit, 2009).

<table>
<thead>
<tr>
<th>2009 E-readiness Rank (of 70)</th>
<th>2008 Rank</th>
<th>Country</th>
<th>2009 E-readiness Score (out of 10)</th>
<th>2008 Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>Denmark</td>
<td>8.87</td>
<td>8.83</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>Sweden</td>
<td>8.67</td>
<td>8.85</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>USA</td>
<td>8.60</td>
<td>8.95</td>
</tr>
<tr>
<td>13</td>
<td>8</td>
<td>UK</td>
<td>8.14</td>
<td>8.68</td>
</tr>
<tr>
<td>58</td>
<td>54</td>
<td>India</td>
<td>4.17</td>
<td>4.96</td>
</tr>
<tr>
<td>63</td>
<td>60</td>
<td>Sri Lanka</td>
<td>3.85</td>
<td>4.35</td>
</tr>
<tr>
<td>66</td>
<td>64</td>
<td>Pakistan</td>
<td>3.50</td>
<td>4.10</td>
</tr>
<tr>
<td>68</td>
<td>70</td>
<td>Iran</td>
<td>3.43</td>
<td>3.18</td>
</tr>
</tbody>
</table>

Table 6.12: E-readiness Annual Rankings and Scores, 2009 (Source: Economist Intelligence Unit, 2009)
Similarly, table 6.13 reveals the readiness of both developed and developing countries with respect to six different factors: connectivity, business environment, social and cultural environment, legal environment, government policies and vision, and consumer and business adoption.

<table>
<thead>
<tr>
<th>Category Weight</th>
<th>Overall Score</th>
<th>Connectivity</th>
<th>Business Environment</th>
<th>Social and Cultural Environment</th>
<th>Legal Environment</th>
<th>Govt. Policy and Vision</th>
<th>Consumer and Business Adoption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>8.87</td>
<td>9.50</td>
<td>8.03</td>
<td>8.53</td>
<td>8.10</td>
<td>9.65</td>
<td>8.90</td>
</tr>
<tr>
<td>Sweden</td>
<td>8.67</td>
<td>9.10</td>
<td>7.85</td>
<td>8.63</td>
<td>8.50</td>
<td>9.15</td>
<td>8.63</td>
</tr>
<tr>
<td>USA</td>
<td>8.60</td>
<td>8.25</td>
<td>7.65</td>
<td>9.03</td>
<td>8.70</td>
<td>9.55</td>
<td>8.60</td>
</tr>
<tr>
<td>UK</td>
<td>8.14</td>
<td>8.85</td>
<td>7.03</td>
<td>7.93</td>
<td>8.10</td>
<td>8.00</td>
<td>8.48</td>
</tr>
<tr>
<td>India</td>
<td>4.17</td>
<td>2.45</td>
<td>5.89</td>
<td>4.90</td>
<td>5.60</td>
<td>5.25</td>
<td>2.88</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>3.85</td>
<td>2.50</td>
<td>5.62</td>
<td>4.70</td>
<td>5.95</td>
<td>3.80</td>
<td>2.55</td>
</tr>
<tr>
<td>Pakistan</td>
<td>3.50</td>
<td>2.85</td>
<td>4.81</td>
<td>3.13</td>
<td>5.60</td>
<td>3.80</td>
<td>2.45</td>
</tr>
<tr>
<td>Iran</td>
<td>3.43</td>
<td>3.50</td>
<td>4.22</td>
<td>5.23</td>
<td>3.00</td>
<td>2.65</td>
<td>2.48</td>
</tr>
</tbody>
</table>

Table 6.13: Overall Score of Developed and Developing Countries for E-readiness with Reference to Six Different Factors (Source: Economist Intelligence Unit, 2009)

As we can see from table 6.13, Pakistan is lagging behind in the IT adoption race, compared to the UK. The overall e-readiness score of Pakistan is 3.50 as compared to the UK’s 8.14. Also, looking at the overall e-readiness scores, other developing countries such as India and Sri Lanka are in a better position than Pakistan, having overall scores of 4.17 and 3.85 respectively (Kundi, et al., 2008; Economist Intelligence Unit, 2009).

There are many other challenges and issues that, if not addressed properly by banks, could restrict the adoption of CRM within the banking industry. Similarly, if these issues are addressed, they can be considered as CRM facilitators. Some of these issues are discussed in the following sections.
6.4.1 Political and Governmental Issues

“The political stability of the government ensures a peaceful and conducive political environment for successful computerization in the country; this further encourages foreign investment and business activities to grow” (Kundi et al., 2008). During the interviews in UK banks, several bank employees explained that the political environment in the UK is very strong and stable, and the government policies are in favour of technology adoption in organizations, especially in the banking industry which is considered as most up-to-date in terms of technology adoption. In Pakistan, however, the overall political environment seems unstable, law and order is poor and turbulent, and this discourages investors from investing aggressively in the IT sector (Kundi, et al., 2008). Similarly, several bank employees during the interviews in Pakistani banks believed that because of negligence of the IT industry at the governmental level, several basic problems such as inconsistency of electric power, poor internet bandwidth, security issues with e-transactions (which involve services such as internet banking and mobile banking), disconnection issues because of faulty cables installed, etc., are barriers to implementing a complete CRM system within the banking sector of Pakistan. These issues require serious consideration in order to integrate CRM across all the channels and to improve its performance within the banking industry of Pakistan.

6.4.2 Technological Issues

Technology plays a major role in successful CRM implementation. Ideally, in banks, technology includes computer hardware, software, and different telecom products. The use of technology in banks starts with capturing the data from customers, storing the data in the central database (data warehouse), processing the data using several data mining tools and techniques, and then generating desired outputs so that each individual customer will be approached differently according to his/her needs and demands. Therefore, it is essential for banks to be up-to-date in terms of technology as it also supports several CRM packages and components that run across different bank channels. Secondly, technology (especially computer hardware and the different telecom products used in the call centres and at branch banking level) needs to be
current and advanced because the CRM packages provided by vendors require frequent updates only supported by the latest hardware.

The UK bank employees during the interviews expressed similar views about the use of technology in banks. According to them, it is very expensive to implement technology and keep it up-to-date because each bank has many branches. For instance, if we think about the thousands of branches of the different banks in the UK, then obviously it is very expensive for each bank to implement the latest technologies and maintain the same level of standard across all its branches. However, these employees from different UK banks seemed quite happy with the current use of technology. According to them, with the use of the latest technology, things can be done a lot quicker; technology is also useful because customers’ demands nowadays have increased. In order to meet these demands, banks require the most recent and accurate information about their customers, which they can easily share across different branches through different channels. Therefore, the real reason for UK banks having the latest technology is to maintain the long-term relationship with their customers by providing better customer service in order to get customers’ satisfaction.

However, in Pakistan, the use of technology varies between different banks’ branches, i.e. banks in the large cities have the latest computers with CRM packages installed, while banks in rural areas are still dealing with a lot of technological issues such as old computers with no internet facility. Similarly, in Pakistani banks, few CRM packages are used at present, with a limited number of available contact channels. Therefore, Pakistani banks need to adopt the latest IT facilities in order to integrate CRM across all the channels because CRM software requires the latest IT equipment. Furthermore, with the help of the latest technologies, front-office staff at branch banking level, especially in the rural areas of Pakistan, can easily help customers with their queries, which reduces the work load of people in the back office. In this way, the back-office people will spend more time looking at customers’ records to offer them better products via different marketing campaigns.
6.4.3 Cultural Issues

Recent studies in the CRM area have shown that the organizational culture is a predictor of CRM success (Buttle, 2009, p.75). CRM does not only require investing huge amounts on technology and its implementation within the banks, it also requires developing a CRM culture within the banks. This is because bank employees are going to benefit from such a technology; so, they must know how to make proper use of it. In UK banks, CRM is used by almost every member of staff and they are completely familiar with the use of CRM systems. To them, it is a part of their job to use the system. However, each employee’s job is different while using the CRM system. However, in Pakistani banks, apart from a few bank employees who use the CRM system and are aware of its importance, most of the other employees still believe that CRM is only software that is operated and dealt with by the IT staff, and that other departments have nothing to do with it. Therefore, it seems that there is a huge need to increase the CRM culture within the banking industry of Pakistan. Also, the government policies towards banks should be designed so as to support the CRM culture within the banking industry.

Similarly, during the interviews in Pakistani banks, it was noticed that the top managers in different banks have a politicized role; they are appointed through political means. Caudle et al., (1991) and Kundi et al., (2008) believe that having a politicized role in the organization means that the appointed person will serve at the pleasure of the elected officials and must deal with the political influences and the needs of multiple interest groups. This shows that the government officials are much more concerned with the policy agenda setting process rather than management functions.

On the other hand, wide evidence from a number of prior studies indicates that the success and failure of a CRM project depends on the senior management’s support in the organization; and the organizational culture even affects business performance (Deshpande, et al., 1993). In UK banks, however, several bank employees explained that jobs in UK banks are offered based on each person’s qualification and work experience. Therefore, in Pakistani banks, the culture needs to be changed and higher
management should be appointed according to their past performance, work experience, knowledge of banking policies and also of the overall bank environment.

6.5 Conclusions

In this chapter, we presented the second stage of data analysis using the cross-case analysis technique in which the results from the first stage of data analysis were further compared and analyzed to uncover the similarities and differences between the two case studies. The cross-case analysis technique was found useful for the current research as it applies specifically to the analysis of multiple-case studies while helping the researcher to uncover the similarities and differences between the two case studies in a more structured form. Then, by using the four major functional areas of an ideal CRM model (already proposed as a frame of reference in chapter 3), the results from the two case studies were further analyzed and discussed, and some suggestions were proposed in terms of how CRM should work within the banking sector in an ideal case. The chapter also proposed some suggestions using ideas from several CRM practitioners. The chapter presented the benefits of the socio-technical theory for banking industry and it also covered the challenges and issues relate to the CRM adoption within the banking industry of Pakistan and the UK. The chapter also gave the answers to our main research questions.
Chapter 7

Conclusions and Future Work

7.1 Conclusions

In this thesis, we have presented the research work based on studying and analyzing the current operation of customer relationship management (CRM) system within the banking industry of developed and developing countries. In developed countries, the UK banking sector has been selected whereas for the developing countries, Pakistani banking sector has been selected for the purpose of current research. This research work was conducted using the qualitative case study research approach using two case studies i.e. CRM operation in the banking sector of Pakistan as case study one, and CRM operation in the banking sector of the UK as case study two.

To study the overall operation of CRM within the banking industry of the two countries, a semi-structured interviews style was selected and used as a main source of data collection; using this technique, several interviews were conducted with the employees of different banks. Similarly, the data analysis in this study was performed using the cross-case analysis technique so as to analyze the obtained results from the two case studies more precisely. A cross-case analysis technique was selected as this technique was found ideal for comparing the results obtained from the two case studies in a more structured way. By using the cross-case analysis technique, the research targets were successfully achieved and the major similarities and differences in CRM operation between the banking sectors of the two countries were also addressed. Furthermore, this research work has also provided answers to the major
research questions and also addressed some challenges and issues associated with the CRM adoption in the banking industry of the two countries.

In chapter 1, we introduced the area of customer relationship management (CRM) and highlighted its potential in the banking industry. Secondly, we presented the CRM adoption issues in both developed and developing countries and also mentioned the reasons why CRM is not properly implemented in the banking industry of developing countries context. A brief overview of the banking environment in the UK and Pakistan was presented and we also discussed the reasons of conducting CRM research in the banking sectors of Pakistan and the UK. The research aims and objectives and the major research questions were also described in this chapter. Then, we presented an overview of the research approach and the data analysis technique used to conduct this study. At the end of the chapter, we presented the original contributions of this study and the structure of this thesis in which we described the contents of each chapter.

Chapter 2 provided the background of CRM by presenting some remarkable work previously done by several researchers in this area. The chapter started with some basic definitions and concepts such as: customer, customer relationship management (CRM), and the concepts of relationship marketing (RM) considered as the origin of CRM. Then, some major types of CRM i.e. operational, analytical, collaborative, and strategic were thoroughly discussed. Then, we focused on the use of CRM in the banking industry which includes its advantages and benefits and we also presented previous work done by several researchers in CRM for banking industry. The current operational issues associated with the CRM adoption in the banking sectors of Pakistan and the UK were also discussed in that chapter. In that section, based on the findings from the initial investigations, we highlighted some of the major problems with regard to the CRM implementation in Pakistani banks. Then, the major components of CRM that are mostly used in a CRM-enabled bank are presented based on the designed taxonomy containing several components of CRM which are broadly classified into four major operational areas of a bank i.e. (i) Marketing, (ii) Sales, (iii) Service and Support, and (iv) IT and IS. Ideally, in banks, CRM is implemented across these four operational areas. Several CRM components in each operational area
were thoroughly presented as these components are considered important for achieving CRM goals within the banking industry.

Similarly, some well-known vendors of CRM were discussed i.e. SAP, Oracle’s Siebel Systems, and Salesforce.com. According to the recent results published in Gartner studies (Gartner, 2009), among several other popular CRM vendors, these software vendors are considered the top three for generating large revenues by providing complete banking solutions. Finally, in the last part of chapter 2, some renowned success stories of CRM implementation in the banking industry were also presented.

Chapter 3 provided a theoretical framework in which we presented and discussed an ideal CRM model for banking industry previously proposed by Liu (2007) in his work. The selected CRM model was found useful for this study as it gives proper guidance and in-depth view of different CRM activities within a bank. Several other CRM models were also presented in this chapter; however, Liu’s model was proposed as a frame of reference in this study as it is specifically designed for banks and the model projects all the functional areas of CRM within a bank. The model also contains most of the CRM components and the banks’ contact channels which were thoroughly discussed in chapter 2. Similarly, the model comprises four major functional areas of CRM within a bank i.e. contact channel management, customer data management, enterprise-wide management, and IT management. A brief description of each functional area of the model was presented. The CRM model was later on used by the researcher in the analysis chapter and the results from the two case studies were discussed and some suggestions were also proposed using the same model.

Similarly, the chapter also presented an overview of several research theories that are useful for a social science research and we also discussed the purpose of using a social theory for this study. Moreover, the chapter introduced socio-technical theory as the main theory used in this study through which the results from the two case studies were analyzed and the theory proposed some suggestions to the banking sector in order to make proper use of CRM system while considering the human factors. A
detailed description of the theory along with its design principles, and its contributions towards several organizations were also presented. The chapter also contained some discussions about several other social theories that were initially considered for this study.

In chapter 4, we described the available research approaches that are useful to conduct a research study i.e. quantitative and qualitative approach. In the quantitative approach, we presented two main research strategies i.e. survey and laboratory experiments. On the other hand, for qualitative research approach, action research, ethnography, grounded theory, and case study research strategies were thoroughly described in this chapter. A qualitative research approach was selected for this study as this research did not require any quantitative data; it is highly focused on studying and analyzing the current CRM operational issues in the banking sectors of Pakistan and the UK. Therefore, a qualitative research approach was found useful to the nature of this research. Then, we covered the three research paradigms (research philosophies) that are generally used in IS research i.e. positivistic, interpretive, and critical research. An interpretive approach was selected for this study as this approach is more focused towards the understanding of social context of information systems and it gives more freedom to a researcher to interpret and analyze the data based on his/her own understanding to the actual problem.

Furthermore, an interpretive case study research approach with multiple-case studies were selected for this research as this approach was found suitable to present the CRM operation in the banking sectors of the two countries by presenting two different case studies. A complete description of the available data collection techniques that are useful to conduct a multiple-case study research were also described in this chapter. Finally, the data collection techniques which were used by the researcher for this study were also presented at the end of the chapter.

Chapter 5 presented the first stage of data analysis of the two case studies using within-case analysis approach in which the researcher separately presented and analyzed the results of the two case studies. As described in the previous chapters, the selected case studies for this research are: (i) CRM operation in the banking sector of
Pakistan as *case study one*, and (ii) CRM operation in the banking sector of the UK as *case study two*. The obtained interviews’ answers from different banks of both countries were presented and analyzed in the form of these two case studies using ten different themes i.e. CRM vision, CRM operation at the branch banking, CRM operation at the call centres, query response time using the CRM system, major products and services, maintaining relationship with business and individual customers, customer acquisition vs. customer retention, ATM operations and its issues, e-CRM facilities (internet banking, mobile banking, phone banking, and SMS alerts), and the future of CRM in the banking industry. These themes were emerged from the CRM literature and from the interview questions that were mostly discussed during the interviews with several banks’ officials in the two countries. Similarly, these themes were designed to be similar for both case studies so as to obtain the similarities and differences in the CRM operation between the two case studies more accurately.

The chapter also provided discussions about several other data analysis techniques that are usually used for an interpretive case study research i.e. pattern matching, explanation building, time-series analysis, logic models, and cross-case synthesis. However, the *cross-case analysis* approach was selected for this study as this technique specifically applies to the analysis of multiple-case studies and is considered more relevant if a case study approach consists of at least two cases. Hence, this technique was selected and using this technique, the results obtained for the two case studies were presented, analyzed, and discussed.

*Chapter 6* provided the second stage of data analysis using the cross-case analysis approach in which the obtained analysis results from the first stage of data analysis (i.e. within-case analysis) in chapter 5 were further compared and analyzed to uncover the similarities and differences between the two case studies. The results were first presented in the form of different word tables (using some key words for each theme) in which we highlighted and uncovered the major similarities and differences in CRM operation between the banking sectors of Pakistan and the UK. Similarly, we also analyzed and discussed the major CRM operational issues in each theme in terms of the current CRM performance in the banking industry of both countries. Then, we
further discussed and analyzed these obtained results by using the four major functional areas of an ideal CRM model (already proposed as a frame of reference in chapter 3). Some suggestions were also proposed using the same CRM model. The model was found useful to discuss results and propose suggestions and it helped to cover the overall CRM operational issues within the banks.

Moreover, the chapter presented answers to our main research questions. Similarly, the benefits of the Socio-technical theory for banking industry were also presented. In the last section, we also covered the challenges and issues associated with the CRM adoption within the banking industry of Pakistan and the UK.

7.2 Research Contributions

The original contributions of this study (as already presented in chapter 1) will be further categorized in the following sections in terms of theory, methodology, and practice.

7.2.1 Theoretical Contributions

In this research, we have studied several social theories that are useful for a social science research. The socio-technical theory was then selected for this study to analyze the research findings and propose suggestions to the banking industry. The theory was selected as it provides a comprehensive and structured view of how different departments should work within a bank (i.e. the social system) while using different technologies such as CRM, ERP, and SCM (i.e. the technical system).

Secondly, over the past several years, socio-technical theory has been seen as a successful tool of designing jobs for organizations (i.e. banks in our case) while using the latest technologies (i.e. CRM); the main purpose of this approach is to redesign jobs within the organization so as to increase employees’ work motivation while using these latest technologies (Mumford, 2003). Therefore, using the design principles and the ideas of the theory, we answered one of the research questions by proposing
several benefits of the theory for the banking industry. The researcher believes that by considering these socio-technical ideas, banks could improve their use of CRM system. These ideas are:

- The idea of job design/re-design,
- The idea of providing training to the bank employees’ in the new technologies (CRM),
- The idea of employees’ job satisfaction that would bring customers’ satisfaction,
- The idea of health and safety, and employees’ stress-related issues.

7.2.2 Methodological Contributions

This study has made some methodological contributions as well. This research should be considered the first of its kind to be conducted in the area of CRM within the banking sectors of both Pakistan and the UK by using the qualitative research methodology with case study research approach. However, several other research methodologies and research strategies were initially considered and were thoroughly studied. The selection of a research methodology was initially considered as a big issue because in the field of IS, two research methodologies are available i.e. quantitative research and qualitative research. The researcher had the choice of selecting either a quantitative or a qualitative research methodology in order to conduct this study. The quantitative research methodology was not found suitable for this study as this approach is more convenient if the requirement of research is to gather statistical data and to analyze such data using some mathematical modelling tools (such as using SPSS software etc.). On the other hand, the qualitative research approach is appropriate if the researcher intends to cover a lot of social and cultural aspects of the desired research area.

Upon considering the pros and cons of both research methodologies, the qualitative research methodology was found suitable as this research covers a lot of social and cultural aspects of the CRM such as how CRM system is currently used by the leading banks of both Pakistan and the UK, and what are the cultural differences
between the two countries in terms of CRM adoption, and how different banks in both countries perceive it (either as a technology or a strategy) in order to attract new customers while maintaining relationships with the existing customers. As a result, the qualitative research methodology was found suitable and was selected by the researcher for this study.

Secondly, after selecting the qualitative research methodology, another issue was with the selection of the research strategy. In the qualitative research path, the researcher came across with four different research strategies i.e. action research, case study research, ethnography, and grounded theory. As the banking industry was already selected to be the organization from which the researcher was required to collect the data, the case study research strategy was found the suitable choice among other three research strategies. Reason being that the case study approach allowed the researcher to conduct an extensive and in-depth study of the CRM within the banking industry while being an outsider (not a part of the organization). Furthermore, as this research was focused on studying and analyzing the current operation of CRM within the banking sectors of two different countries i.e. Pakistan and the UK; the multiple-case studies approach was also found appropriate for this study. Using this approach, two case studies were designed.

Similarly, the researcher believes that the selection of a case study research approach was an appropriate move towards this study as this approach provided a structured way to present the CRM operational issues in the banking sectors of the two countries in the form of two different cases. Secondly, this approach has provided the researcher a series of different steps to approach the research problem i.e. (i) identify the cases, (ii) collect the data by conducting several interviews, (iii) write a detailed description of the cases by using the collected data, (iv) analyze the data (focus on the key issues), and (v) perform the comparison between the two cases and further report the meanings of the cases.

Furthermore, in the data collection process, the semi-structured interview technique was found suitable to collect the required data from different banks. The use of several other data collection techniques was not possible in the case of this research as
banks do not usually provide access of their information to the public as they keep sensitive information of their customers. Therefore, using the above techniques, the researcher has successfully uncovered the similarities and differences in CRM operations between the banking sectors of the two countries and provided answers to the main research questions. Similarly, the researcher has also presented the comparative results that were also analyzed, and discussed in this thesis. Lastly, the researcher has also identified the future directions of the research in the area of CRM.

7.2.3 Practical Contributions

The practical contributions of this research are:

- Multiple contact channels that are mostly offered by banks in Pakistan and the UK to their customers were studied and thoroughly presented. Mostly in banks, CRM is operational at these contact channels: branch banking, phone banking, ATM, and internet banking. Also, several CRM components that are mostly used in banks were explained and discussed. These CRM components were presented based on the designed taxonomy containing several components of CRM that are mostly used in four major operational areas of a bank: (i) Marketing, (ii) Sales, (iii) Service and Support, and (iv) IT and IS.

- Several CRM models (previously designed and proposed by numerous CRM researchers) were presented and discussed and the CRM model was selected and its components were thoroughly discussed. This model was designed by Liu (2007) and was particularly designed for banks to view the overall CRM activities within the banks. The model was used as a frame of reference and using the four different components of the model, the results obtained from the two case studies were thoroughly analyzed and discussed. Furthermore, some suggestions were also proposed using the same CRM model.

- Several data analysis techniques were discussed and a cross-case analysis technique was selected and the obtained results from the two case studies were analyzed using this technique. A cross-case analysis technique was selected as
this technique was found ideal for comparing the obtained results from the two case studies in a more structured way.

- The results gathered for the two case studies were first presented and analyzed separately in each case study in the form of ten different themes using a within-case analysis approach. Similarly, these results (themes) from both case studies were further compared using the cross-case analysis approach to uncover their similarities and differences in terms of the overall CRM operation between the banking sectors of Pakistan and the UK.

- The challenges and issues associated with the CRM adoption within the banking industry of Pakistan and the UK were thoroughly discussed. Some of these major issues presented in this study are:
  - Political and Governmental issues,
  - Technological issues, and
  - Cultural issues.

### 7.3 Research Limitations

As in any research, this study is not without limitations. However, a great care was taken in structuring this research so that these limitations would not affect the outcomes and the contributions of this study. Describe below are the major limitations that came across while conducting this study.

#### 7.3.1 Limitations in terms of Information Access from Different Banks

Although, this research has studied and analyzed the current use of CRM system within the banking industry of Pakistan and the UK and successfully obtained the similarities and differences by comparing the results obtained from two different case studies. However, it is not possible to say that the comparative analysis has covered almost every issue in terms of CRM operations in the banking sectors of the two
countries. It is because the available data collection sources to conduct this study were semi-structured interviews, personal observations, and by collecting organizational records. Therefore, the results obtained in this study are solely based on these data collection techniques. Other data collection techniques were not possible because banks do not usually provide access of their information to the public as they keep sensitive information of their customers. However, all possible efforts were made to conduct as many interviews possible from employees working in different departments of these selected banks and the researcher also gathered some accessible records from these selected banks that were found relevant to this study.

7.3.2 Authenticity of the Collected Data from Different Interviewees

Other limitation is the difficulties associated with the data collection process while conducting several interviews with employees in different banks of the two countries. There exists no practical way whereby the researcher can ensure that the authenticity of the collected data from different banks and the honesty of the interviewees while answering the interview questions. Additionally, before conducting several interviews, the researcher ensured that the interview questions must be designed to be more simple and concise so that the interviewees would clearly understand the exact context of each question. However, there is no possible way the researcher can ensure that the interviewees always understood the true context of each question in the way the researcher want the interviewees to understand it. Therefore, given these considerations, there is a possibility that the interviewees may have provided answers that may have deviated from the reality.

7.3.3 Limitations in terms of Selection of Different Banks in Pakistan and the UK

Another limitation came across during the selection process of different banks in both Pakistan and the UK for data collection. The banks participated in this study were selected based on their willingness to participate for this research, rather than being selected on a random basis. Similarly, these banks were also agreed to share information about the current use of their CRM system. Therefore, there is no assurance that these banks are the representative of several other banks in both
countries (i.e. the way these banks operates the CRM system does not actually mean that other banks in both countries operates the CRM system in the same way).

7.4 Future Work

Although, we have successfully achieved the aims of this project; however, there are several directions in which future research work could be required. Listed below are few suggestions which could be used for future work.

7.4.1 Designing of a New CRM Model

As the objectives of this study were successfully achieved using the existing CRM model which was previously proposed by Liu (2007). Similarly, using the components of the same CRM model, we have analyzed and discussed the results from the two case studies and also proposed suggestions for different banks in both countries. The existing CRM model was selected for this study as this research did not require designing of a new CRM model. Also, several CRM models were already available that were proposed by some renowned researchers of this area and the model selected for this study was particularly designed for the banks and was found ideal for comparing results obtained from the two case studies. However, using the obtained results from the two case studies, there is a possibility to design a new CRM model which covers the weaknesses collected from the obtained results of the two case studies. In this way, the new CRM model could be used in future as a frame of reference by the researchers while studying and analyzing the CRM operational issues within the banking sectors of both developed and developing countries.

7.4.2 Studying and Proposing Suitable Method for Banks to Acquire CRM Applications

As this research was not focused on the identification of different CRM applications (also referred to as software or systems) used at the selected banks; this research work only required studying and analyzing the operational issues of the CRM system within
the banking sectors of Pakistan and the UK. Therefore, another future work could be to further investigate which CRM vendor provides best solutions to the banks by studying and analyzing the performance of different available CRM vendors that are currently used in the banks.

Furthermore, another future work could be to perform an in-depth study about different available methods that are useful for banks to acquire CRM applications and suggesting the best available method for banks to acquire CRM applications as different banks acquire CRM applications using different methods based on their requirements and their budget. Turban and Volonino (2010) in their recent work proposed three major options available for banks to acquire CRM applications i.e. buying (outsourcing), lease (rent), and develop (in-house). A short description of these methods is presented in the following sections.

7.4.2.1 Buying the CRM Applications from Vendors

According to Turban and Volonino (2010), this option is also known as *turnkey approach*. Buying an existing CRM application can be cost-effective and time-saving strategy compared with in-house application development. Before considering buying option, banks must ensure that all critical features of current and future needs are available in the selected CRM package. Otherwise, such packages will quickly become obsolete. The buying option is especially attractive if the CRM vendor allows for modifications. However, this option may not be considered attractive in case of high obsolescence rates or high package cost.

7.4.2.2 Lease (Rent) the CRM Applications

Leasing a CRM application is another option available for the banks which can result in substantial cost and time savings. In those cases where an extensive maintenance is required or where the cost of buying is very high, leasing is very advantageous. Similarly, leasing is also advantageous if a bank wants to experiment with a CRM package before making a heavy up-front buy investment (Turban and Volonino, 2010).
7.4.2.3 *In-house Development (In-sourcing)*

The third method for banks to acquire CRM application is to develop or build the application in-house (in-sourcing). Although in-house development can be costly and time consuming; it may lead CRM applications that better fit a bank’s strategy and vision. In-house developed CRM applications have advantages over the purchased ones because the purchased CRM applications are sometimes not very easy to modify and requires huge business process changes during the implementation process. However, in-house development is a challenging task as most CRM applications are novel, and may involve a huge change within banks (Turban and Volonino, 2010).
References


Appendix A

Sample Interview using the Interview Guide
Sample Interview

1. Customer Relationship Management (CRM) In general

a. What is CRM? Describe its primary use?

- CRM stands for “Customer Relationship Management”. It is primarily used at retail and consumer banking. Basically, CRM consists of different processes a bank uses to track and organize its contacts with its current and prospective customers. CRM packages are used to support these processes. Using CRM system, information about customers and their interactions can be entered, stored, and accessed by employees working in different departments of our bank. Typical CRM goals are to improve services provided to the customers, and to use customers’ contact information for targeted marketing.

b. What information does the CRM system collects from the bank customers?

- The CRM system collects and maintains all sorts of customers’ information. Such as personal details of customers, their financial history, birthdays, anniversaries etc.

c. How your bank uses the customers’ information?

- From the collected customers’ information, we identify the customers’ needs, their likes and dislikes etc. We then try to find out the better way to provide improved services to our customers.

d. How does the CRM system helps banks to grow?

- CRM system helps banks to grow in lots of different ways. For instance, CRM system has various analysis tools which help in defining different segmentations based on customers’ income class, geographical areas, professions etc.
e. *What is the CRM workflow?*

- CRM system is usually provided to the sales staff who maintains database of customers. Based on the recorded data, MIS reports are generated for management. Further, such data helps a bank in making future strategies towards customers.

e. *Which phase in CRM process you think is most important?*

- Each phase in CRM process is important: from data gathering, to analyzing the collected data, and to offering improved products and services to the customers.

g. *Who is interacting with the customers using the CRM system?*

- Bank managers and personal bankers at the branch level, and call centre agents via phone banking.

h. *Which department is responsible for handling CRM software packages at your bank?*

- IT department is usually responsible for technical support. However, retail and consumer department owns this software.

i. *How do banks select CRM? Tendering Process?*

- Advertisement is made for tender. Applications received. Evaluating all the applications and deciding on the best solution provider by keeping an eye on the cost.

j. *Is CRM really useful in the banking sector? Please explain?*
Yes, it is useful for risk management as well as smooth operations of banks’ businesses.

k. If CRM is mostly used in banks then why banks are so advanced in terms of technology adoption while comparing with several other organizations?

Because banks deals with the financial services and keeps detailed information about customers.

l. Which CRM packages are currently used at your bank? Are they really useful?

It is in-house developed software. Yes, we trust our internal system.

m. SAP vs. Siebel?

N/A

n. Cost of CRM software? Any estimate?

N/A.

o. How do you see the future of CRM at your bank?

Very bright. However, CRM adoption requires huge support from the higher management and from the government level.

2. Products, Services, and e-CRM Facilities

a. What type of accounts does your bank offer?

Consumer products like current and savings accounts, personal loans, auto loans, mortgages, credit and debit cards etc.
b. While comparing Business customers vs. Individual customers, does your bank provide different facilities and services?

- Absolutely, our bank provides services as per each customer’s overall value and needs.

c. What is the procedure of getting a loan/financing? How the CRM system helps the process?

- (i) Filling an application Form, (ii) Data from application is recorded into the CRM system, (iii) Reports are generated to assess the risk profile of customer, (iv) Depending on that, loan is approved and limit is assigned in the system with subsequent maturity plan.

d. Does your bank offer credit/debit cards? What are their interest rates?

- We do offer credit and debit cards. Normally, cards are approved on the basis of each customer’s overall worth. Interest rate is charged on a daily basis, and calculated on a number of days of credit balance.

e. Does your bank offer an overdraft facility? Its interest rate? How the CRM system helps the process?

- Overdraft is a short term financing facility, given to high net worth client, usually business concerns, to make their payments, even they do not have credit in their account by over drafting their account. Yes, we do offer overdraft facility based on each customer’s credit history.

f. Does your bank offer an internet banking facility? Is it safe?

- Yes, we do offer this facility to our customers. It is safe, if the customer follows the instructions booklet provided by the bank.
g. **What are the security issues with the internet banking?**

- Password hacking is the common issue because of anti-virus software not installed on customers’ personal computers. However, our internet banking is secure and we do recommend our customers to install the anti-virus software provided by our bank.

3. **ATM Facility and its Issues**

a. **What are the security issues while using ATM machines?**

- ATM is an automatic teller machine used to dispense cash. But now days, cash deposit, bills payment, funds transfer are also done through it. Customers are equipped with a debit card and security pin to use ATMs. It is up to the customers to ensure that they keep their personal items to themselves and not let any third-party person make use of them.

b. **What are the NCR charges?**

- NCR is a company that provides hardware equipments for ATMs. No idea about the charges.

4. **Customer Service/ Call Centres**

a. **Does your bank own a call centre? Is it providing 24hrs service?**

- Call Centre is usually a support staff whose job is to facilitate customers about their different queries and helps customers to maintain their accounts with the bank. Yes, our bank owns a call centre and it provides service 24/7.

b. **UAN No.? Toll Free No.?**
c. **While dealing with customers’ queries, how long a query resolution takes to resolve completely? What is its procedure using the CRM system?**

- It depends upon the nature of problem. Usually, account activation, card activation is done at spot. But there may be some time lag involved in complex queries. In that case, we register customers’ complaint and provide them the complaint number for future correspondence or to track the complaint resolution in future.

d. **What are the major products and services offered by the call centre staff to the customers? Do they offer any different products comparing to the branch banking?**

- Mostly, the call centre agents provide similar accounts facilities such as corporate banking services, SME banking services, consumer banking services etc. However, they mostly deal with customers’ queries.

e. **How your bank approaches different customers? Emails? Or letters?**

- By courier mails as well as via e-mails. Depends on the customers’ preferences.

f. **How do you inform your customers about your bank’s new products? How CRM system helps while approaching customers?**

- Usually through brochures and unsolicited e-mails.
Appendix B

Sample Letter for Interviews
To Whom It May Concern

This is to confirm that Mr. Shahzeb Ali Malik is a PhD Student at Manchester Business School, University of Manchester, U.K. His PhD project is in the area of CRM and his PhD title is “On the Use of Customer Relationship Management (CRM) in the Banking Industry: A Qualitative Cross-Case Analysis between the Banks in Pakistan and the UK”. His research is based on the qualitative case study research and for that, he requires to conduct the comparative analysis in CRM operation between the banking sectors of Pakistan and the U.K. In order to fulfil the requirements of his research, he has to do some interviews from different banks in Pakistan and the UK.

Is it possible for your bank to let Mr. Malik interview a few members of staff. The results of this study will be presented in the form of PhD thesis, but any information that could result in your personal identification will remain confidential. If you have any questions about this study, I will be happy to talk with you.

Yours Sincerely

Trevor Wood-Harper
Professor of Information Systems
and Organisational Change