Quality of Banking Services in Libyan Banks

NOT TO BE TAKEN AWAY

Elmabrouk. A. Ambarik. Elmabrouk

A thesis submitted to
The University of Gloucestershire
In accordance with the requirements of the degree of
Doctor of Philosophy
In the Faculty of Business, Education & Professional Studies

September 2011
Abstract

Against the background of growing competition in the global marketplace, understanding customers, is a significant aspect of marketing. In the search for competitive advantage, there is a need to measure service quality to better understand its antecedents and consequences, and establish methods for its improvement.

In the Libyan economy, the banking sector is one of the most important. Its significance increased after the 2003 lifting of the United Nations sanction. This was followed by entry to the sector of a number of domestic and multinational firms. Despite this increased competition, domestic banks are still widely considered to suffer from low levels of service quality. The main purpose of this study is to evaluate the actual level of service quality provided by Libyan public commercial banks as perceived by their customers.

A modified SERVQUAL model was developed to measure service quality in Libyan commercial public banks. The resulting instrument is intended to help these banks to measure their service quality and focus on the service quality dimensions of most importance to their customers. It also aimed to gain an understanding of cultural and environmental influences on service quality in the Libyan banking sector, and their effect on banking management practices. It is also expected that this instrument, and its results, will contribute to future research into service quality.

The findings of the present study have produced some important results. Firstly, the level of service quality offered by the Libyan public commercial banks as it was perceived by their customers was relatively high. Secondly, the theoretical five-factor structure of the SERVQUAL model was not confirmed in the Libyan banking context, and the service quality structure in the Libyan context appears to be four-dimensional. Furthermore, the study offers suggestions to banking managers to allocate their resources more efficiently to the most important dimensions, i.e. reliability and tangibles, to improve service quality, since the factor analysis indicates that these are the most important dimensions to customers. Finally, reflections on the methods used to modify SERVQUAL to make it more sensitive to a particular cultural context have implications for future researchers in terms of methodology, method and data analysis.
Acknowledgment

I thank Allah for all the many blessings bestowed to me, particularly during my educational period in the United Kingdom.

I owe the deepest gratitude to my first supervisor Christine Williams, and my second supervisor Philippa Ward, for their help, patience, and encouragement during these years. They took an active interest in my research and they have been a constant source of inspiration, their contribution to my personal development extends far beyond this thesis. I am greatly indebted to Joseph Gumati for his illustration in the statistical side of this thesis, without him this would not have been possible.

My thanks also go to Cris Wassell and Lynda Chan, who are staff and members of the Language school at Gloucestershire University. Their kind help and friendship made me feel part of a big family.

My grateful thanks and gratitude go to the staff of Libyan Commercial Banks for their help. I also acknowledge all respondents who took the trouble to meet me and complete the questionnaire and offer data, suggestions and contributions during my data collection journey in Libya.

Thanks are also due to staff who work in the Park Campus and FCH campus Library for their kind help.

Many warm thanks are reserved for my parents, my brothers, sisters and my uncle who have supported me and prayed for my success during my PhD.

Especially, my thanks must go to my lovely family: my wife who has been very patient, supportive and helpful all the way through my research process and to our lovely child, Suhaib for all his silence and patience.

Finally, thanks and all the praise should go to Allah.
Declaration

I declare that the work in this thesis was carried out in accordance with the regulations of the University of Gloucestershire and is original except where indicated by specific reference in the text. No part of the thesis has been submitted as part of any other academic award. The thesis has not been presented to any other education institution in the United Kingdom or overseas.

Any views expressed in the thesis are those of the author and in no way represent those of the University.

Signed

Date...9/12/2011
Dedication

In the name of Allah most gracious most merciful

To my Father,
Who is my first mentor

To my Mother,
Who always inspires me with her prayer, love and wisdom

To my Wife
For her love, patience and sharing me every moment during this work. Without her, it would have been impossible for me to finish this work.

To my Son
Suhaib, for what he gives to me, his love, and inspiration

To my Brothers and Sisters
Who supported and encouraged me during my PhD journey
# Table of Contents

Abstract...................................................................................................................................................... i  
Acknowledgment........................................................................................................................................ ii  
Declaration.................................................................................................................................................. iii  
Dedication................................................................................................................................................... iv  
Table of Contents....................................................................................................................................... v  
List of Tables............................................................................................................................................. ix  
List of Figures............................................................................................................................................. x  

## Chapter 1 Introduction ............................................................................................................................ 1  
1.1 Introduction....................................................................................................................................... 1  
1.2 Background....................................................................................................................................... 1  
1.3 Importance of the Study................................................................................................................... 7  
1.4 Focus and Justification for the Study............................................................................................... 10  
1.5 Purpose of the Study....................................................................................................................... 11  
1.6 Research Methodology................................................................................................................... 13  
1.7 Structure of the Thesis..................................................................................................................... 13  
1.8 Summary......................................................................................................................................... 15  

## Chapter 2 Libyan Banking Background .............................................................................................. 16  
2.1 Introduction....................................................................................................................................... 16  
2.2 The Libyan Banking Sector............................................................................................................. 17  
2.2.1 The Central Bank of Libya (CBL).............................................................................................. 18  
2.2.2 Libyan Arab Foreign Bank......................................................................................................... 21  
2.2.3 The Libyan Commercial Banks.................................................................................................. 21  
2.2.3.1 The Public Commercial Banks............................................................................................. 23  
2.2.3.2 The Private Commercial Banks............................................................................................. 25  
2.2.4 Specialised Banks....................................................................................................................... 28  
2.2.4.1 The Development Bank.......................................................................................................... 29  
2.2.4.2 The Agricultural Bank............................................................................................................ 29  
2.2.4.3 The Real Estate Saving and Investment Bank ....................................................................... 29  
2.3 Non-Bank Financial Institutions..................................................................................................... 30  
2.3.1 Insurance Companies................................................................................................................ 30  
2.3.2 The Libyan Stock Market........................................................................................................... 30  
2.3.3 Foreign Exchange and Financial Services Company............................................................... 31  
2.3.4 Libyan Arab African Investment Company............................................................................. 31  
2.3.5 Social Security Fund.................................................................................................................. 32  
2.4 Central Bank Control over the Adoption and Enforcement of International Best Practices ........................................................................................................................................ 33  
2.5 Outlook for Islamic Banking Services........................................................................................... 34  
2.6 Banking in Libya – A Personal Perspective................................................................................... 37  
2.7 Summary......................................................................................................................................... 39  

## Chapter 3 Literature Review (An Overview of Service Quality)....................................................... 40  
3.1 Introduction....................................................................................................................................... 40  
3.2 The Nature of Services................................................................................................................... 42  
3.2.1 Characteristics of Services........................................................................................................ 43  
3.2.1.1 Intangibility............................................................................................................................... 44  
3.2.1.2 Inseparability............................................................................................................................ 44
7.2 Summary of the Research Findings ............................................................ 240
  7.2.1 The Findings Relating to the Actual Level of Service Quality As Perceived By the Customers of Public Commercial Banks in Libya .. 241
  7.2.2 The Results Relating to the Construct of the Modified Servqual Model within the Context of the Libyan Banking Industry .............. 242
  7.2.3 The Implications of the Findings from the Modified Servqual Model for Libyan Banking ................................................................. 246
7.3 Contribution to Knowledge ......................................................................... 249
7.4 Recommendations of the Research ............................................................. 254
7.5 Limitations and Directions for Further Research ........................................ 260
  7.5.1 Limitations of the Study ...................................................................... 260
  7.5.2 Directions for Future Research ............................................................ 263
7.6 Conclusion .................................................................................................. 267

References ........................................................................................................... 270
Appendices .......................................................................................................... 301
  Appendix 4.1: The Original SERVQUAL Scale ............................................. 301
  Appendix 4.2: The English Version of the Study Questionnaire ................. 303
  Appendix 4.3: The Arabic Version of the Study Questionnaire .................... 308
  Appendix 4.4: A Summary of the Feedback of the Pilot Study ..................... 312
  Appendix 5.1: Correlation Matrix (Items of the Service Quality Scale) ........ 315
  Appendix 5.2: Reliability of the New Service Quality Dimensions for This Study ....................................................................................... 317
  Appendix 7.1: A Full List of the Items That Was Used in This Study .............. 318
  Appendix 7.2: A Visual Representation of the Source and Factor Analysis Loading of the Modified SERVQUAL Items ........................................ 319
List of Tables

Table 3.1: Service Quality Dimensions ................................................................. 80
Table 3.2: Summary of Research on Dimensions of Service Quality ................. 83
Table 3.3: Summary of Studies on Service Quality in the Banking Sector ........... 120
Table 4.1: Characteristics of Social Research Paradigms .................................... 131
Table 4.2: The Strengths and Weaknesses of Positivist and Interpretivism ........... 141
Table 4.3: Categories of Research .......................................................................... 144
Table 4.4: Qualitative vs. Quantitative Research ................................................... 145
Table 4.5: Advantages and Disadvantages of Interviews and Questionnaires ....... 147
Table 4.6: The 15 Additional Items Selected From Prior Studies in Arabic Contexts ......................................................................................... 152
Table 4.7: Population of the Study (Banks) ............................................................ 157
Table 4.8: Sample of the Study (Banks) ................................................................. 157
Table 4.9: Sample Distribution According to Age, Gender and Educational Level .................................................................................................. 172
Table 5.1: The Sample Distribution According to Age, Gender and Educational Level .................................................................................................. 172
Table 5.2: Sample Distribution According to Banks Used By Customer, Customer Visits to Bank and Customers’ Main Bank .............................................. 173
Table 5.3: Cronbach’s Alpha Test ........................................................................... 175
Table 5.4: Unrelated Mann-Whitney Test Comparing Service Quality Perception in Women and Men ................................................................. 177
Table 5.5: Kruskal-Wallis Test: Age of Respondents ............................................. 177
Table 5.6: Kruskal-Wallis Test: Customers’ Education ........................................... 178
Table 5.7: Measures of Central Tendencies and Standard Deviations (Averages) for Reliability Variables ................................................................. 181
Table 5.8: Measures of Central Tendencies and Standard Deviations (Averages) for Assurance Variables ........................................................................ 186
Table 5.9: Measures of Central Tendencies and Standard Deviations (Averages) for Responsiveness Variables ............................................................ 189
Table 5.10: Measures of Central Tendencies and Standard Deviations (Averages) for Empathy Variables ........................................................................ 192
Table 5.11: Measures of Central Tendencies and Standard Deviations (Averages) for Tangibles Variables ........................................................................ 195
Table 5.12: Descriptive Statistics of Perceived Service Quality ............................. 197
Table 5.13: Guidelines on Factor Loadings and Sample Sizes Needed .................. 199
Table 5.14: Reliability Analysis of the Service Quality Scale for the Study Sample 200
Table 5.15: Kmo and Bartlett’s Test ....................................................................... 202
Table 5.16: Eigenvalues and Proportions of Variance ........................................... 203
Table 5.17: Factor Loading Structure for the Study Sample ................................... 205
Table 5.18: Reliability of the New Factors to the Study Sample ............................. 209
Table 6.1: Customer Perceptions Regarding the Reliability Dimension ............... 216
Table 6.2: Customer Perceptions Regarding the Assurance Dimension ............... 218
Table 6.3: Customer Perceptions Regarding the Responsiveness Dimension ....... 220
Table 6.4: Customer Perceptions Regarding the Empathy Dimension ................. 222
Table 6.5: Customer Perceptions Regarding the Tangibles Dimension ................. 223
Table 7.1: Summary of the Mean Values of Customers’ Perceptions of Service Quality ........................................................................................................ 241
Table 7.2: Summary of the Results Relating to the Construct of the Modified SERVQUAL Model ......................................................................................... 243
List of Figures

Figure 2.1: The Structure of Libyan Commercial Banks ............................................ 23
Figure 3.1: Caruana’s Model ...................................................................................... 59
Figure 3.2: Basic American Customer Satisfaction Index Model .............................. 60
Figure 3.3: Grönroos’ Service Quality Model ........................................................... 66
Figure 3.4: Physical Elements in Service Production ................................................. 69
Figure 3.5: Gap Analysis Model ................................................................................ 72
Figure 3.6: Determinants of Perceived Service Quality ............................................ 76
Figure 3.7: Extended Model of Service Quality ....................................................... 78
Figure 5.1: Reliability Dimension: Boxplot (8 Items) .............................................. 180
Figure 5.2: Assurance Dimension: Boxplot (6 Items) ............................................. 185
Figure 5.3: Responsiveness Dimension: Boxplot (8 Items) ..................................... 188
Figure 5.4: Empathy Dimension: Boxplot (7 Items) ............................................... 191
Figure 5.5: Tangibles Dimension: Boxplot (6 Items) .............................................. 194
Figure 5.6: Eigenvalues Scree Plot ......................................................................... 203
Figure 7.1: Customer Perceptions of the Importance of Service Quality
  Dimensions ........................................................................................................ 248
Chapter 1 Introduction

1.1 Introduction

The aim of this chapter is to provide a rationale for conducting this study, and to give a general introduction to the thesis. In terms of this chapter, it is divided into eight sections: Section 1.2 offers a background to the study. Section 1.3 outlines the importance of this study. Section 1.4 outlines its focus and justification. The purpose and aims of the study are given in section 1.5, and section 1.6 briefly introduces the research methodology. A summary of the subsequent seven chapters that comprise the thesis is illustrated in section 1.7. Finally, a brief summary of this chapter is given in section 1.8.

1.2 Background

Initiatives aimed at improving service quality are very common in all sectors of economies, and service industries are developing to become important targets for investors (Zeithaml and Bitner, 1996). Service companies are trying to find ways to improve and provide superior quality service to keep their existing customers and capture new ones. At the same time, service quality and customer satisfaction are two of the concepts most regularly studied by managers and academics (Shemwell, Yavas and Bilgin, 1998). All companies want to satisfy their customers, for this assures both the short-term and long-term survival of their enterprise (Wang, Lo and Hui, 2003).

Peters (1988) indicates that customers, even if they buy tangible products, are concerned with far more than just the technical specification of their purchases, and that in the long term perceptions of care and responsiveness are even more important than the tangible components of products.
Every organisation competes to some extent on the basis of its service. In a comprehensive and widely referred to study, the American Management Association surveyed over 3000 international respondents: 78 per cent identified improving quality and service to customers as the key to competitive success, and 92 per cent indicated that providing superior service was one of their key responsibilities, regardless of job position (Greenberg, 1990). In spite of this, few organisations conduct research to analyse the differences in the actions of companies or business units that consistently deliver superior service quality compared to the much larger number of firms that fail to do so (Whiteley, 1991). Hart and Casserly (1985) noted that, given the strategic importance of service quality, there was surprisingly little attention paid to it, and that marketing and management texts in general fail to address the topic. Quinn and Gagnon (1986) provided a serious concern related to the importance of service in the US economy "it will take hard dedicated work not to dissipate our broad-based lead in services, as we did in manufacturing. Many of the same causes of lost position are beginning to appear. Daily we encounter the same inattention to quality, emphasis on scale economies rather than customer concerns, and short-term financial orientation that earlier injured manufacturing" (Quinn and Gagnon, 1986, p.97).

While product and price remain important competitive elements, it is not sufficient for companies to compete solely on these elements, not least because increasing technical sophistication makes product differentiation difficult. The distinguishing factor is rarely product superiority. Instead, the key is service and attention to the customer. Service is now the standard by which customers measure an organisation’s performance. Service is not a competitive edge; it is the competitive edge (Desatnick and Detzel, 1993). A very good example is the personal computer company Dell’s customer services strategy: Dell does not claim to sell the best or the cheapest computers, but the combination of
speed, efficiency and reliability in its supply chain give it advantages over its competitors, especially in terms of business-to-business sales.

There have been many empirical studies, which have identified the enormous advantages high quality service can confer. First, there is evidence of a positive relationship between perceived quality and an organisation's performance (Buzzel and Gale, 1987). Second, service quality is considered a critical determinant of competitiveness (Lewis, 1989). Furthermore, attention to service quality can help an organisation to differentiate itself from other organisations and through this gain a lasting competitive advantage (Morre, 1987). High quality of service is considered an essential determinant of the long-term profitability not only of service organisations, but also of manufacturing organisations (Margolies, 1988). In some manufacturing industries, service quality is considered a more important order winner than "product quality". So, while cost considerations remain important, it is vital that organisations consider providing superior service as key to their profitability.

Buzzel and Gale (1987) state that firms, which are perceived to have high levels of service quality generally enjoy a higher market share, higher return on investment and asset turnover than companies with low perceived quality. This has led to the conclusion that in the long term, the most important factor affecting business performance is the quality of "goods" and "services" offered by the organisation, relative to its competitors. For service companies, the quality of the service they deliver is vital to their competitiveness, but measuring such quality remains a subjective and intangible task.

Despite this, successful service organisations tend to be those which commit resources and time to achieving high quality service. Excellence in service provision has become
one of the most important initiatives through which organisations differentiate themselves from their competitors, in order to win new customers and new business, (Treacy and Wiersema, 1993; Berry, Parasuraman and Zeithaml, 1994). The role that service industries play in the world economy is becoming more and more important, and as a result, interest in how service quality can be improved is common to most service organisations (Zeithaml and Bitner, 1996).

Customers find it relatively easy to assess product quality, but the characteristics of services make this less straightforward. By their nature services are heterogeneous, intangible, and perishable and they are often produced and consumed at the same time (Parasuraman, Zeithaml and Berry, 1985; LeBlanc and Nguyen, 1988). For this reason, it has been difficult for researchers in this area to arrive at a consensus concerning the definition and measurement of service quality, and as a result of this ambiguity, service quality initiatives of many kinds are widespread across all economies, and organisations employ a range of different approaches to improve the quality of their services according to the prevailing orthodoxies of their industry, sector or national origin, (Sureshchandar, Rajendran and Kamalanabhan, 2001). Moreover, in spite of the existing ambiguity over a definition of service quality, many researchers and practitioners have stressed the importance of developing a universal concept and measurement of service quality, and this has been outlined in various studies and research conducted in a range of sectors (Shahin, 2006). This drive to measure and improve service quality is no less important in the developing economies, because in a globalised world international companies are moving into new sales regions with their highly developed service offerings, representing intense competition to domestic service organisations.

In terms of the struggle for a share of world markets, Libya is in competition with every other nation, and it registered strong economic performance and growing prosperity
over the early years of this century, achieving solid performance in growth, and outcompeting a number of economically similar countries in its region (Porter and Yergin, 2006). However, in spite of these strides, the desire of the Libyan state that the country should be capable of competing at an international and not simply regional level means that the improvement of the quality of Libyan goods and services is attaining the status of a national imperative. As an economy grows, it becomes a tempting target for large corporations seeking growth opportunities, and so effectively, to offer a competitive challenge to international organisations seeking opportunities in Libya. Libyan companies need to understand and apply the complex modern techniques of measuring and improving service quality concepts and instruments.

The Libyan economy has seen major changes over recent years (Porter and Yergin, 2006). Among these changes there have been many economic reforms, based on reviews of existing practices. These have led to the implementation of a set of policies and measures designed to restructure the national economy and enable it to provide a favourable environment and investment climate to encourage domestic and foreign investments. The government has recognised that this should be matched by a significant contribution in terms of the development of infrastructure and the diversification of the economy away from a reliance on oil-derived incomes (Central Bank of Libya, 2008). Within this framework, there has been a series of measures which have evolved to promote investment and attract foreign capital, with the aim of securing its contribution to the implementation of investment projects, productive activities and services. There are also ongoing efforts and initiatives to effect the development and updating of Libya's banking system, with the introduction of open competition leading to a situation where commercial banks will attain the status of vital elements of the national economy, providing the essential services of functioning as a reliable and
trustworthy store for savings and a major source of investment for economic activity. So far, these efforts have resulted in an increase in economic activities, and this is reflected in the service sector of the Libyan economy, which in 2008 achieved an above average growth rate of 6.1%, compared to figures of 5.6% and 5.9% in 2007 and 2006 respectively (Central Bank of Libya, 2008).

The banking and financial services sector is an important part of Libya’s economy, and its significance is growing. It is a sector which has become more competitive in recent years relative to the situation that previously existed, because of initiatives by the government to begin a phased withdrawal of the industry from state-ownership into private ownership. Alongside this, the state has introduced measure to liberalize access to the banking industry in terms of acquisitions and mergers to encourage major international corporations to enter this sector. As in most liberalized economies, it is intended that commercial banks will be the main axis of the financial and banking sector in Libya, and it is expected that these policies will result in an increase the in the number of domestic and foreign investors active in the Libyan economy. Therefore, commercial banks are currently attempting to consolidate their market share, which has enjoyed growth rates over the previous years (Central Bank of Libya, 2008). Prior to the changes in the banking system outlined above, one of the only ways the management of these commercial banks could differentiate themselves from their competitors was through their service quality; though overall, based on international criteria, such banks still suffer from the relatively low levels of service quality provided to their customers in areas such as access to new technology, the speed of their transactions, and the range of financial products available (Wali, 2004; Shehoumi and Toumi, 2007; Abdelmalek, 2008 and Kumati, 2008).
1.3 Importance of the Study

A widely held conceptual understanding of service quality is that it represents the gap between the expectations of customers of service, and their perception of the service after it is performed (Grönroos, 1984; Parasuraman et al., 1985; Zeithaml, Parasuraman and Berry, 1990; Lehtinen and Lehtinen, 1991 and Williams, 1999).

The majority of service organisations recognise that it is imperative that they deliver high quality service in order to achieve success for their business. There has been interest among researchers around service quality for more than two decades (Webb, 2000), and as a result there is a rich and varied literature dealing with this crucial issue from a range of different perspectives (e.g. Grönroos, 1982, 1984; Parasuraman, Berry and Zeithaml, 1985, 1988; Saleh and Ryan, 1991; Cronin and Taylor, 1992, 1994; Briggs, Sutherland and Drummond, 2007).

In terms of marketing, service quality is important because it determines a customer’s evaluation of the service provided, which in turn determines customer satisfaction. Without customer satisfaction, all other things being equal and assuming a competitive market, there is a low probability of repurchase, and therefore service quality can be said to influence business success directly. Inherent in the improvement of service quality are the interactions between employees, managers and customers, and successful service companies are generally those which best understand their customer’s wants and needs (Waite and Stites-Doe, 2000). Furthermore, managers operating in the financial services sector are likely to be especially aware that they can achieve competitive advantages and boost profitability through a concentration on service quality (Petridou et al., 2007). As a result, it is vital that everyone in a bank, from its senior management down to individual employees, understands what the constituents of service quality are,
and how they can be achieved, and measured (Lewis, 1989; Bowen and Hedges, 1993; Asubonteng, McCleary and Swan, 1996).

Many researchers have pointed to the advantages in terms of performance that can accrue from the provision of high quality service, such as customer satisfaction, customer loyalty, responsiveness to demand, customer retention, market share growth and productivity (e.g. Berry, Parasuraman and Zeithaml, 1985; Reichheld and Sasser, 1990; Capon, Farley and Hoenig, 1990; Bolton and Drew, 1991; Berry and Parasuraman, 1991; Anderson, Fornell and Lehmann, 1994; Rust, Zahorik and Keiningham, 1995; Lassar, Manolis and Winsor, 2000; Roberts, Varki and Brodie, 2003; Jabnoun and Al-Tamimi, 2003).

There has also been a multitude of studies that have found that have identified a clear link between enhanced corporate performance and improvements in service quality. According to Woldie and Dogan (1996), the benefits in terms of corporate performance include: higher customer retention rates, i.e. customer loyalty; more new customers; higher market share; improved employee morale; lower staff turnover; fewer mistakes; a defence against price competition; reduced advertising and promotion costs; lower operating costs; increased productivity; improved financial performance and increased profitability.

In the banking sector of today, efforts to improve service quality are mostly customer-focused (Lynn, Lytle and Bobek, 2000), because increasingly service organisations are recognizing the need to provide quality throughout the service delivery process in order to avoid any negative effects that poor quality service might have on the business (LeBlanc and Nguyen, 1988).
Over recent years, the subject of service quality has increased in importance to the banking sector, and a reduction of the size of its customer base has resulted in a decreasing market share for many banks, thereby affecting a portion of the banking industry (Bowen and Hedges, 1993). The current emphasis of service quality has the potential to contribute substantially to reversing the decrease in market share that some banks might be experiencing, and therefore, achieving superior service quality levels is a vital goal for retail banking operations. This is particularly true for commercial banks operating in environments where they are being subjected to levels of competition and openness they have never previously encountered, as is the case in Libya.

This research is therefore intended to give a cross-sectional view of customer perceptions of the service quality of Libyan public-sector commercial banks at a time when both the banks and their customers were experiencing a period of rapid and significant change.

The importance of this study, from a research perspective, lies in its inclusion of the customers of retail banks in Libya, and because it makes suggestions and recommendations with regard to measures to improve the service quality of these banks. Brown and Swartz (1989, pp.93-94) state "... from a marketing perspective, both parties (management and customers) are very important and must be considered if a more thorough understanding of service quality is to be gained ... the provider (management) would design, develop, and deliver the service offering on the basis of his or her perceptions of customers' expectations". Hence, this research employs the perspectives of customers to assess levels of service quality, with the aim of enabling managers in the commercial banking sector to provide improved service levels to their customers. Clearly, enhanced service quality has the potential to achieve benefits for both the banks which provide it, and their customers who receive it. Amongst these
benefits are the following: competitive advantages, productivity improvement, work
development, reduced costs and higher profits, higher employee satisfaction and a
consequent improvement in productivity, customer satisfaction, and customer loyalty.
These advantages have a beneficial effect on both the banking sector and its customers,
and it is intended that this study can make a contribution to innovation in the field of
banking service quality

1.4 Focus and Justification for the Study

While there has been a considerable amount of research into the issues of service quality
of concern to this study in developed economies, there remains a gap in the existing
knowledge concerning service quality in the financial services sector in developing
economies, of which Libya is an example (Yavas, Bilgin and Shemwell, 1997; Angur,
Nataaraajan and Jaheera, 1999; Sureshchandar, Rajendran and Anantharaman, 2002;
Sureshchandar, Rajendran and Anantharaman, 2003). Importantly, Libya is also a
transition economy attempting to transform from a state dominated command economy
to a more open, liberalized economic system on the capitalist model. Therefore, the
initial motivation to conduct this study was stimulated by the absence of any empirical
evidence in terms of previous efforts to measure and evaluate service quality in the
Libyan banking sector. In particular, the study aims to help commercial banks to
improve the quality of their service. The motivation for this study derives from the
observations of previous researchers and practitioners in Libya who have pointed to what
they believe to be the weakness in the standard of service quality provided by these
banks, and the emphasis they placed on the necessity of further research in this area
(Wali, 2004; Shehoumi and Toumi, 2007; Abdelmalek, 2008; Kumati, 2008). This
study seeks to investigate whether Libyan customers believe the level of service they
have been experiencing from Libyan public commercial banks is low, and how far Libyan conceptions of service quality coincide with those adopted in more developed economies with different cultural contexts.

The Libyan government has an aim to develop its non-oil sector by the promotion of private sector investment, and the support of small and medium size enterprises; this aim is intended to achieve economic diversification and produce new jobs. Based on this, the management of Libyan banks has developed a sense of the importance of quality within the banking service as one of the fundamental requirements for improving bank marketing operations. However, banking management still lacks the scientific standards and the necessary information through which this can be realised. The second motivation for this study therefore is to contribute to establishing this standard and providing some of the necessary information. It will supply benchmarks of information about the clients’ evaluation of Libyan banks (especially, about the quality level of banking services, and to what extent these banks understand their customers’ wants and needs).

The third motivation of this study is to provide empirical data which fills certain gaps in the literature in general, and especially banking literature about service quality, through the use of the SERVQUAL model. At the same time, the outcome will to be of practical importance for those who work in the Libyan banking sector.

1.5 Purpose of the Study

As previously mentioned above, research conducted in developing economies in general, and in Libya in particular is scarce. As a result, the principal aim of this study is to investigate the level of service quality of Libyan public commercial banks from the viewpoint of bank customers, and to examine the extent to which it is possible to use a
modified SERVQUAL model to identify whether the five dimensions of the SERVQUAL model exist in the context of the Libyan banking industry. To achieve that aim this study uses the SERVQUAL model developed by Parasuraman et al. (1985, 1988 and 1991). There is also a need to develop, in parallel, management understanding of the issues around service quality. This study has employed a modified SERVQUAL model to record the perceptions of Libyan bank customers of the service they receive in order to draw conclusions about the nature of service quality in the Libyan context, the future needs and wishes of bank customers, and the directions that bank managers should be taking to ensure the future competitiveness of the businesses they work for.

The following paragraphs offer specific summaries of the aims of the study. This study sets the following aims:

- The first aim of this study is to investigate the actual levels of service quality perceived by customers of Libyan banks using an existing (modified) SERVQUAL instrument.

- The second aim of this study is to test the extent to which it is possible to use a modified SERVQUAL model, and to identify whether the SERVQUAL model is a five-dimensional construct within the context of the Libyan banking industry.

- The third aim of this study is to draw conclusions from the study data regarding the current state of customer perceptions of service quality, their implications for Libyan banking in a state of enormous change, and what they can reveal about service quality in a particular cultural context.
1.6 Research Methodology

This study assesses customers' perceptions of the levels of service quality provided by commercial banks in the context of the dimensions of service quality devised for use in the SERVQUAL model to assess service in the sector. Chapter 4 provides an introduction to the research philosophy and the design of the research instrument, with discussion of the implications of these elements on the methodology of the study; a methodology which employs a questionnaire based on SERVQUAL to measure only customers' perceptions of service quality in the context of the Libyan commercial banks. The Central Bank of Libya (2005) oversees and holds resources on behalf of the Libyan commercial banking sector, which for the purposes of this study includes the four main public commercial banks, (Gumhouria Bank; National Commercial Bank; Wahda Bank and Sahara Bank) and a small number of private commercial banks (Commerce and Development Bank; Aman Bank For Commerce and Investment; Al-Wafa Bank; Alajmaa Alarabi Bank). A non-random sample was selected from the customer base of these Libyan public commercial banks, and a total of 540 questionnaires were distributed to the customers of public commercial banks. The total number of usable questionnaires returned was 404. Following analysis of the data a comprehensive discussion and interpretation of the results was made.

1.7 Structure of the Thesis

The organisation of this thesis consists of seven chapters. There follows a brief description of each chapter:

Chapter One: Provides an introduction to the study, with a focus on providing the reader with a broad understanding of the study's development, together with the background of the thesis. It sets out the structure of the thesis and specifies its aims.
Chapter Two: considers the Libyan financial sector in greater detail; in particular, the Libyan banking sector, which is the subject of this study. Issues such as the commercial banking environment and non-bank financial institutions, and the evolution of the banking system in Libya are discussed, which leads to some general observations of the customer experience of Libyan public commercial banks. There is also a brief introduction to all the commercial banks operating in Libya at the time of the study.

Chapter Three: consists of the literature review of this study. It considers literature from several fields which proved relevant to the study and provides an overview of the characteristics of services and definitions of the concepts of quality and service quality, the relationship between service quality and customer satisfaction, and a discussion of developments in the conceptualisation of service quality, including such dimensions and models of service quality that have proved most useful and influential. This chapter also includes the relevant literature related to service quality in the banking sector.

Chapter Four: presents the research methodology, including a detailed discussion and explanation of the research design and the instrument designed to collect the research data. The presentation of methodology identifies specific issues of which it was necessary for the researcher to be aware, and explains the reasons for employing the methods for data collection selected, and describes the analysis applied to the data following its collection.

Chapter Five: this chapter presents the analyses of the quantitative data obtained through the research instrument.

Chapter Six: offers a comprehensive discussion of the analyses of the quantitative findings presented in chapter five.
Chapter Seven: presents the recommendations the researcher feels will be of value to bankers and researchers in Libya and elsewhere, together with the conclusions to the research. Subsequently the limitations and the contributions of the study are discussed, and there are several suggestions for future research directions.

1.8 Summary

This chapter provided an introduction to the research topic and described the key factors which motivated the study. The study's importance was outlined, and the focus and justification of the study were outlined, leading to the purpose of the study. Following this, the methodology adopted for this study was briefly presented, followed by a summary of the structure of the thesis. The following two chapters offer a review of the background of Libyan banking and the relevant literature which has contributed to the construction of the thesis.
Chapter 2  Libyan Banking Background

2.1 Introduction

The banking sector plays an important role in the economy of any country because banks perform a number of vital functions, such as: the mobilisation of savings, playing an intermediary role, between savers and borrows, facilitating the flow of payments, allocation of credit and control of financial discipline for borrowers. Furthermore, electronic bank techniques allow the banks to offer various new types of banking services to suit customers' needs, such as paying bills, updating credit data and drawing and transferring money. Moreover, banks are social organisations that are influenced and affected by what occurs in the general environment they operate in, and they are no more immune to the effects of culture, politics and social change than any other institutions. Banks have to balance the demands of groups such as shareholders, employees, customers and government departments in order to remain profitable and retain their customers (Oxford Business Group, 2010).

Therefore, the success of any economy depends to a large extent on the efficiency and effectiveness of the banking sector which is responsible for the completion of all financial transactions. The banking sector can therefore be considered as a financial intermediary between individuals and institutions, and a link between individuals and institutions in other countries.

The purpose of this study is to measure service quality in the Libyan public commercial banks. Hence, the aim of this chapter is to provide background information concerning the commercial banking environment and non-bank financial institutions in Libya. This chapter is divided into seven sections. The Libyan banking sector is described in section
two. Non-bank financial institutions are discussed in section three. Section four briefly outlines how the Central Bank of Libya manages the process of adopting and enforcing international best practices. The outlook for Islamic banking services in Libya is shown in section five. Banking in Libya - a personal perspective is presented in section six. A summary of this chapter is given in section seven.

2.2 The Libyan Banking Sector

The Libyan banking sector is crucial to the future success of the Libyan economy, especially following the government's 1993 decision to begin a gradual policy of banking sector privatization. The Libyan state sees deregulation of the banking sector as being key to the stimulation of economic activity in all other non-oil sectors of the economy. At the present time, the banking makes an important contribution to the economy of Libya, especially in the non-oil sectors, in terms of both investment in projects which represent increases in GDP, and by providing employment to the increasing proportion of the nation's six million people not protected by the benign employment conditions of the public sector (Central Bank of Libya, 2006). In accordance with the objectives of this study, the following sub-section will present a brief introduction to Libya's banking sector as a whole, with particular reference to its public commercial banks.

The Libyan commercial banking sector is divided into four different groups, which are: The Central Bank of Libya, Commercial Banks, Specialized Banks, and the Libyan Arab Foreign Bank (Central Bank of Libya, 2006). This section presents a summary of the different banking institutions found in these groups, with an emphasis on the commercial banks, which are the principal focus of this study, and from whose customers the research sample is drawn.
2.2.1 The Central Bank of Libya (CBL)

The Central Bank of Libya is Libya's national banks, and has authority over bank regulation and the activities of the state-owned commercial banks: it therefore undertakes supervision of the banking system and regulates credit. It was established in 1955 under the provisions of Law No. 30 (1955), and commenced operations in April 1956.

The CBL was originally established with a total capitalisation of one million Libyan dinars (LYD). Subsequently, its capital has increased to one hundred million LYD by 1981, reaching 500 million LYD by 2006. Originally, it was intended that the government should have only part-ownership of the bank, to the value of 700,000 LYD, while 300,000 LYD were to be offered for public subscription (El-Ghmati, 1979). However, following successive moves to take control of the levers of the economy, the CBL eventually became 100% state owned, and now constitutes the monetary authority in Libya and performs the functions of a central bank, while nominally holding the status of an autonomous institution.

The bank operates within the economic policies set by the national government, and it general affairs are managed by the Board of Directors, headed by the Governor as Chairman. This board is responsible for implementing of the policies of the bank, the management of its affairs, and for representing the bank in all negotiations and agreements with other parties. The Board also consists of the Deputy Governor as Vice-Chairman, and six other members, who are typically drawn from organisations with interests in the nation's financial and economic activities (El-Ghumati, 1979 and CBL, 2000). The bank has its headquarters Tripoli, and there are three branches in Benghazi to serve the interests of commercial banks and the public in the Eastern area of Libya,
while there is another located in Sabha city to undertake similar functions in the southern area of Libya; recently, a further branch has been established in Sirte city, which is intended to meet the same needs in central area of Libya (Central Bank of Libya, 2002).

Broadly speaking, any central bank is responsible for ensuring that the economic policies of the government are carried out, and that regulations concerning financial transactions are complied with. As a result, the CBL is an important lever in the government’s control over the economy in Libya, and it is responsible for the maintenance of monetary stability in Libya, and for achieving levels of sustained growth in the economy, particularly in the non-oil sector, in accordance with the government’s general economic policy for the country. The CBL, while nominally independent, must balance the government’s wish to retain control over the economy with its parallel though inconsistent wish to liberalize it, and attempts to achieve this by drafting policies for the opening of the financial market and the promotion of competition among the other banks of Libya, in order to prepare them for the arrival of foreign competition. The CBL also has responsibility for promulgating the rules and guidelines for the conduct of banks (Central Bank of Libya, 2006).

Since its inception in 1956, the CBL’s responsibilities have included the issue of the nation’s currency, maintenance of the deposits of both federal and provincial governments, and oversight of ordinary commercial banking activities.

The major development in the CBL’s functions came in 1993, when Law No. (1) was issued which modified the its responsibilities, and its functions within the banking system. Following this modification, the functions of the CBL include the maintenance of international liquidity, and the regulation of domestic money and credit expansion in
line with government monetary policy. The role of the CBL is to aid the Libyan state to achieve its economic development objectives, while also encouraging modernisation and expansion within the banking sector. Following the Libyan government's decision to move towards a more open economic system, the CBL was empowered by Law No. 1 of 2005 (Article 5), which promulgates the following duties and responsibilities for the CBL:

- Issuing and regulating banknotes and coins.
- Managing the State's reserves of gold and foreign exchange.
- Maintaining and stabilising the Libyan currency internally and externally.
- Taking appropriate actions to deal with foreign and local economic and financial problems.
- Regulating the quantity, quality and cost of credit to meet the requirements of economic growth and monetary stability.
- Supervising commercial banks to ensure the soundness of their finances, controlling the efficiency of their performance and protecting their depositors and shareholders' rights.
- Acting as a reserve bank to Libya commercial banks.
- Acting as a bank and fiscal agent to the state and its public organisations.
- Advising the state on the formulation and evaluation of financial and economic policy.
- Supervising foreign exchange transactions.
- Issuing and managing all state loans.
- Carrying out any other functions or transactions normally performed by a central bank, as well as any tasks charged to it under the laws of banking, currency and credit or any international agreements to which the state is a party.
2.2.2 Libyan Arab Foreign Bank

The Libyan Foreign Bank was founds as a result of Law No. 18 of 1972 with the aim of supporting the Libyan state's international investments. Among the stipulations of this law were that the bank should reserve a minimum capital of ten million Libyan Dinars, to be held by the Central Bank of Libya. Acting as the overseas arm of the Central Bank it carries out its functions by operating through subsidiaries or affiliates in more than 30 foreign countries. Subsequently, the capital of the bank has increased continuously, reaching US$ billion in 2009. It has interests in many investments, including holding stakes in 23 other African and Arab Banks, added to which it has invested in projects in certain European countries such as, the UK, France, Spain and Italy (Central Bank of Libya, 2006).

2.2.3 The Libyan Commercial Banks

Libyan commercial banks have a growing influence on the Libyan economy due to the financial support and facilities they provide to both individuals and to organisations.

According to Article (50) of the Libyan law No 4 of 1963, a commercial bank is identified as:

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

In an updated form, article (65) of Law No 1 of 2005 defines a commercial bank as an institution that accepts deposits in current demand accounts or time deposits, grants loans and credit facilities, and engages in any of a range of other specified banking activities, as follow:-
- The cashing of checks made out to and by customers.
- Services relating to documentary credits, documents for collection and letters of credit.
- Issuance and management of instruments of payment including monetary drawings, financial transfers, payment and credit cards, traveller's checks, etc.
- Sale and purchase transactions involving monetary market instruments and capital market instruments to the credit of the bank or its customers.
- The purchase and sale of debt, with or without the right of recourse.
- Lease financing operations.
- Foreign exchange transactions in spot and forward exchange markets.
- The management, coverage, distribution, and transaction of banknote issues.
- The provision of investment and other services for investment portfolios, and the provision of investment trustee services, including the management and investment of funds for a third party.
- Management and safekeeping of securities and valuables.
- Provision of trustee or financial investor services.
- Any other banking activities approved by the Central Bank of Libya.

Under the supervision of the CBL, commercial banks in Libya are divided into two types, public and private commercial banks (Central Bank of Libya, 2008). A summary of these banks is shown in figure 2.1 below and the following sections give fuller description of each bank:-
2.2.3.1 The Public Commercial Banks

The history of formal banking services in Libya dates back to the mid-nineteenth century and the period of Ottoman control over Libya. Alongside banking institutions established to invest in agricultural activities, certain Italian banking companies began to establish presences in Libya in the late nineteen century as a precursor to that country's colonial ambitions for Libya. By 1911, Ottoman control of Libya had collapsed and the Italian banks in the country assumed control of the whole of Libyan economic activity. Following Italy's military defeat in World War II, Libya came under the control of British military forces, with banking services provided by Barclays Bank, which assumed authority for issuing currency and overseeing financial transactions. Following Libya's independence in December 1951, it took control of its own currency, while granting licences to several foreign banking institutions to either continue or begin activities in Libya. A Libyan National Bank was established in 1956, but commercial banking services continued to be provided by companies such as the
Tunisian-Algerian Bank, the Egyptian Bank, the British Bank of the Middle East and Bank of America. The Central Bank of Libya was established in 1963 to replace the National Bank, but the major change to banking policy came in 1969 following the Al-Fateh revolution. This major political upheaval instituted a period of radical reform of economic activity along socialist lines, with the nationalization of the most productive elements of the economy and public ownership of all commercial banks. However, the commercial banks within Libya encountered certain difficulties and barriers during their transformation to nationalization of all foreign banks, and as a result, according to Law No. 153 of 1970, all banks operating in Libya became wholly owned by the State. This law divided these banks into five companies, called the Al-Umma Bank, the National Commercial Bank, the Gumhouria Bank, the Sahara Bank and the Wahda Bank, which offered services to both members of the public and Libyan organisations (Central Bank of Libya, 2006).

Later, the Central Bank announced in October 2007 that it would merge Umma Bank and Gumhouria Bank into a single entity (Gumhouria Bank); that process was completed in 2008. Following a merger with Al-Umma, Gumhouria became the largest bank serving the local market, with a total of $21bn of assets on its balance sheet, which makes it the fifth-largest bank in North Africa (Oxford Business Group, 2010).

Combined together, the public commercial banks own in excess of 300 branches across Libya. This wide spread of branches has lead to increased competition among these banks, however, the range of products and rates of interest they can offer are still tightly controlled by the CBL, and public commercial banks are somewhat insulated from competitive stress from their privately owned rivals due to the government’s insistence on paying all salaries into accounts held by public commercial banks. Since the vast majority of the Libyan population depends for at least part of its income on public-
sector salaries, this gives the public commercial banking sector a huge customer base which it has to do little to attract. The combined capitalisation of the banks was 1105.8 million Libyan dinar, and their total assets were 73405.1 million Libyan dinars in 2008 (Central Bank of Libya, 2008).

After these banks underwent nationalisation, all their business was transferred to the public sector. As a result, the public commercial banks (state-owned) played a key role in the financing of many public sector companies concerned with infrastructure projects, but they were not shareholders. Recently, the banks have been allowed to participate or buy shares in these companies (Kumati, 2008).

To keep up with the rest of the world, the CBL is trying to introduce the SWIFT system of transferring money through the use of global technology. This can be done only by the use of modern technology and communication systems (Kumati, 2008).

It seems that the adoption of new technology is currently a part of the CBL’s initiative to improve confidence in the banking sector, but it has failed to produce any tangible results as a consequence of the weak communication infrastructure in the country, and poor internet provision (Kumati, 2008).

2.2.3.2 The Private Commercial Banks

The public commercial banks had almost domination of banking activities in Libya until 1993, in which year the Central Bank of Libya issued Law No. This encouraged the development of commercial banks within the private sector. In 1994, the Bank of Commerce and Development began operations, making it the first private commercial bank in Libya. In addition to this bank, three further private banks have since been
established. These banks are the Aman bank for Commerce and Investment, the Alajmaa Al-Arabi bank and the Al-Wafa bank.

It is significant that it has been the privately owned banks which have been fastest to introduce new banking services and to upgrade their networks, these privately owned banks have been among the most dynamic in rolling out retail banking services and upgrading their networks, with a particular focus on urban areas. The Bank of Commerce and Development, for example, is the largest of the private banks and was the first to offer online banking services, Visa cards, mobile-banking and Western Union money transfer services. These banks are also beginning to offer Islamic banking services and products in all their branches soon (Oxford Business Group, 2010).

Therefore, it is clear that the preoccupation of the private Libyan banks is to gain a competitive advantage through improved banking services and higher standards of speed and accuracy. These banks are trying to fulfil the roles of commercial banks on a par with those of other commercial banks worldwide. The private commercial banks' strategy is concentrated on providing what Libyan customers seek from a bank and what foreign investors are looking for in terms of banking services (Kumati, 2008). The banks provide loans, discount bills, process cheques and issue letters of credit, (LCs), provide bills for collection and issue providing foreign and local letters of guarantee.

The private commercial banks seek to be at the forefront of high-technology banking services. In addition to conventional banking services and the services provided to some major local and foreign companies, the banks provide a range of distinctive new services to their personal banking customers: phone banking, travellers' cheques in Libyan dinars, safe-deposit boxes, internet services, touch-screen services, drive-in banking and automatic teller machines (ATMs). However, the number of customers
who have so far found private commercial banks to be a more attractive proposition is relatively small, for the reasons stated above: government insistence on paying salaries into public commercial banks; mistrust of the banking system in general; and a general ignorance of the benefits that new technology could provide to Libyan customers.

Libya’s private banks enjoy a reputation for offering high quality, and for providing their customers with superior products and fast, efficient services. The banks do this for several reasons: first, and most important to keep their customers happy; second, to attract more customers to their banks; third, the limited services offered by the public commercial banks gives opportunities for the private banks to offer more diverse and efficient services, (Kumati, 2008). Thus, they provide modern services like ATM machines, money transfers and travellers’ cheques, as well as internet banking. A further advantage is the provision of valuable financial advice to their client (Kumati, 2008).

As a result private commercial banks by their very existence have created competition within the Libyan banking sector, not only in terms of banking services, but also in terms of persuading the managers of the public commercial banks to pay greater attention to their financial statements, and their profits and losses. However, private banks do not maintain superior accounting as a spur to public banks, but to attract both foreign and domestic customers and to manage their own companies more efficiently and effectively (Kumati, 2008).

The quality of the assets held by private commercial banks is relatively strong, especially in comparison to the public commercial banks, and even by international standards. Most loans are of good quality, including real estate loans secured by mortgages, and the banks have their focus trained on long-term facilities (Kumati,
2008). However, some Libyan bankers point out that the rapid horizontal expansion of the private commercial banks in the form of opening new branches and agencies may lead the banks to lose control of their resources in the future (Kumati, 2008). All commercial banks, both public and private, need to understand what it is that their customers want from a bank, and whether the majority of Libyan customers want improved technology, Islamic services or flexible investment options: it is quite likely that a demand exists for all three, but in what proportions. It is hoped that the perceptions of service quality presented in the research will provide the so-far dominant public sector with the necessary information to keep their customers satisfied, and retain their trust through future improvements.

2.2.4 Specialised Banks

As well as commercial banks, the Libya also has three specialist banks, each with the aim of developing a different key sector of the economy. Article 65 of Libyan Banking Law No. 1 (2005) stipulates that the principal goal of the specialised banks is to finance and grant credit to specific activities designed to enhance the development of the country as a whole, and as they do not accept simple demand deposits. The Libyan Central Bank provided for three distinct specialist banks: the Agricultural Bank, Bank for Real Estate Investment and Savings, and the Development Bank. These banks operate in key strategic areas of the economy and support the achievement of specified economic goals. They supply the sectors for which they were designed with the necessary loans to implement projects designated and owned by the Libyan Government, and sometimes to private sector projects (Central Bank of Libya, 2006).
2.2.4.1 The Development Bank

Law No. 8 of 1981 established this bank, and it started operating later that year, beginning with an authorized capital of 100 million dinars, fully financed by the Libyan government (Otman and Karlberg, 2007). The bank’s purpose is to offer loans to finance projects aimed at enhancing industrial and productive capacity to the nation, as support to Libya’s process of development, and with the goal of improving the nation’s industrial output to diversify sources of revenue.

2.2.4.2 The Agricultural Bank

Before oil was discovered in Libya, the economy was primarily an agricultural one. Since the discovery of oil, the Agricultural Bank has used wealth generated in Libya’s oil fields to attempt an agricultural revolution in the national economy. The bank was established in 1955 and commenced operating in 1957 with a capital of one million Libyan Dinars, funded by the government. This was subsequently increased to 450 million in 2002 and then 454 million Dinars in 2005, the money used to support and improve agricultural activities by offering credit and subsidies to increase crop yields, in addition to providing emergency assistance at times of agricultural crisis such as drought (Central Bank of Libya, 2006).

2.2.4.3 The Real Estate Saving and Investment Bank

This bank founded in accordance with Law No. 2 (1981) and funded with authorized capital of 100 million dinar, provided by the government (Central Bank of Libya, 2006). According to the law, half of the bank’s capital was to be invested in industrial projects and the remainder in the construction industry (Otman and Karlberg, 2007). This bank attempts to support and improve the construction industry in Libya by granting loans for
large scale construction projects, and by issuing debentures and investment certificates, in addition to setting up and managing construction projects on its own behalf and that of others. It also purchases real estate and properties for development and establishes or buys construction companies it needs to achieve its aims, or participates in their operations (Central Bank of Libya, 2006).

2.3 Non-Bank Financial Institutions

Non-bank financial institutions are an important part of the financial sector of Libya's economy (Central Bank of Libya, 2008). In the main they take the form of funds endowed with sovereign wealth surpluses, and are entrusted in particular with investing surplus oil revenues. Some of these institutions are described below:

2.3.1 Insurance Companies

The first national insurance company to be registered in Libya was the Libyan Insurance Company; established in 1964, with a capital of one hundred thousand Libyan dinars, it was a pioneer in the field of Libyan owned and managed insurance institutions, and in recent years, the Libyan insurance industry, now subject to the invigoration of an open market and the competition offered by foreign companies, has seen significant development, thereby reflecting the overall growth witnessed in the national economy as a whole. By 2006 there were five insurance companies operating in Libya: These companies were; the Libyan Insurance Company, United Insurance Company, African Insurance Company, Sahara Insurance Company and Libo Insurance Company.

2.3.2 The Libyan Stock Market

Following many initiatives and a great deal of effort, the Libyan stock market was established on the 3rd of June, 2006 by order of General People's Committee No. 134,
with a capital of 20 million Libyan dinars, to facilitate the development of modern financial and monetary institutions and to enhance their contribution to economic activity, (Central Bank of Libya, 2006). The establishment of a stock market was key to the government’s project to gradually privatise major public institutions, including the public commercial banks.

2.3.3 Foreign Exchange and Financial Services Company

Established by the General Peoples’ Committee decision No. 611 of 1994 and the Secretary of the General People’s Committee for Economy and Commerce decision No. 327 of 1994 with a capital of 7 million Libyan dinars, the Libyan Foreign Exchange and Financial Services Company is a joint stock company, (Central Bank of Libya, 2006). It has seventeen branches and agencies in Libyan cities. The company began operating in 1994, and its responsibility is to conduct foreign exchange and financial services operations with Libya, such as:-

- Issuing and marketing of traveller’s cheques.
- Buying and selling of securities and shares and other banknotes.
- Selling and buying of foreign currencies.
- Issuing of credit cards and other means of payments.
- International and local transfer of money.
- Ownership of movable assets and real estate that the company needs to carry out its activity.

2.3.4 Libyan Arab African Investment Company

This investment arm of the government is also a Libyan joint-stock company; established according to the provisions of General People’s Committee decision No.
660 of 1990, it is designed to make investments of Libyan surplus funds in African countries, with the exception of other Arabic African countries, (Central Bank of Libya, 2006). Its investment portfolio currently includes projects in more than 25 African countries. The company’s principal aims are twofold: to produce revenues for its shareholders, alongside a more political aim of encouraging inter-African trade, and encouraging a greater exchange of technology, and closer integration of African nations’ economies, at both a regional and global level, especially in sectors such as agriculture, industry, mining, fishing, maritime transport, trade and financial investments.

2.3.5 Social Security Fund

The Social Security Fund was established in 1980 to meet the government’s aims with regard to social security. Libyan citizens are automatically members, and the fund’s principal aim is to focus on securing the basic needs of its insured members and the members of their family should the need arise, and providing with a level of security and reassurance to concerned citizens in times of hardship or illness (Central Bank of Libya, 2006). As a result, the fund is charged by law with achieving certain objectives, and operates through 16 branches and 57 offices distributed throughout the country. Among the most notables of its objectives are:-

- To show sensitivity in terms of the needs of insured members so they can be reassured as to their future and the future of their family in order to achieve stable employment for the insured as a catalyst for further constructive work.
- To meet the basic needs of insured members and their families by providing a steady income during the period of disruption of his/her capacity to work temporarily or permanently.
2.4 Central Bank Control over the Adoption and Enforcement of International Best Practices

In terms of modernising the banking sector, the Central Bank of Libya (CBL) is central to the state's efforts to enforce a range of controversial policy changes considered to be necessary to move Libya from an economy dominated by a single productive sector (oil) and a politically controlled and overmanned public sector to a more diversified, economically open economy (Oxford Business Group, 2010).

The CBL is no longer the holder of the resources of the rest of the banking sector. Although it retains substantial influence over domestically owned banks, its focus has shifted away from ownership and operations towards supervision and enforcing compliance with best practices within the banks.

CORE FOCUS: By 2009-2010, the focus of the CBL was on improving the strength of Libya's banking infrastructure, and assuring that the commercial banks were adequately capitalized. Domestic banks have been encouraged to upgrade their IT and payment systems to improve the flow of financial capital across the system and to speed up settlements for both businesses and individuals. In particular, the CBL has been applying pressure to banks to complete the implementation of real-time gross settlement, automated clearing house, automated check processing and the introduction of automatic teller machines (ATM), while simultaneously working to develop the strength of the banking system.

Due to these initiatives, many novel financial products are now available, and there has been a gradual movement towards 24-hour banking supported by real-time settlement, eliminating the former time delays that hampered financial transactions in the past. At
the time of writing, it is expected that the banking sector will introduce internet-based banking facilities in the near future.

The CBL has placed great emphasis on the importance of Libya's smaller, private commercial banks training their staff, believing that this will allow them to form alliances with strategic foreign partners to enable the transfer of technology and knowledge. In addition, the CBL has also been focusing on improving the communications and internet infrastructure within the banking system, which necessitates the introduction of reliable, high-speed technology solutions such as fibre-optic broadband and satellite links (Oxford Business Group, 2010).

2.5 Outlook for Islamic Banking Services

It is often observed that although Libya is an Islamic country, it does not have, nor has it ever had, an Islamic banking system. Libya is currently accelerating its efforts to embrace the principles of Sharia-compliant banking, the central principle of which is that interest shall neither be charged nor paid on loans or savings, with a number of domestic and foreign players expressing an interest in developing this under-served niche.

The nascent Islamic banking sector is beginning to gain some regulatory support, and there is a considerable body of evidence that many Libyan citizens would like to be able to open closely regulated Sharia-compliant banking accounts. According to the Oxford Business Group (2010), some conventional banking sector sources have confirmed that the banking industry as a whole would benefit from growth in Sharia-compliant product lines, because a substantial proportion of customers prefer non-interest-bearing products. It is also possible that this distaste felt by customers for the investment
products available from the public commercial banks could be influential on perceptions they report with regard to service quality.

Initial experimental work conducted by the national commercial bank and Gumhouria bank suggests that the main challenge for Islamic products has been an absence of regulatory and accounting definitions that would help customers differentiate between conventional and Sharia-compliant products. A recent study examining the efforts of these two pioneering banks found that there were important gaps in regulatory, accounting and human resources areas that hampered the effective implementation of Islamic Banking in Libya (Oxford Business Group, 2010).

In his presentation of an empirical piece of research, to the Second Conference of Islamic Finance Services in 2008, Al Amin Khalifa Toul cited a “lack of coordination between Libyan banks and institutions that govern the financial and Islamic banking services, and the poor training of staff” as the main areas that will need to be addressed to expand this sector of the industry. The study pointed out that there was still a shortage of dedicated training programmes within the banks and that the country needs to develop a supervisory body to regulate Sharia-compliant products. “The objective in the near future is to create educational and training institutions to accommodate large numbers of trainees”, the study recommended.

Al Amin’s study argues that an independent regulatory body is necessary to oversee the legal aspect of Islamic transactions, in order to provide legitimacy to contracts between customers and the banks. In contrast to conventional banking, it is of importance in Sharia banking to clearly define the status of the collateral and profit sharing agreed to secure the transaction. According to Salem Rehouma Hoty, as cited in OBG (2010), a speaker at the Islamic Conference of Islamic Financial Services in 2009 said that “the
laws in Libya were not designed to accommodate Islamic banking systems”. Although the laws of the Libyan banking system were based on socialist principles, it seems that Libyan customers favour banking products, which are founded on Islamic principles.

Libya’s lack of any tradition with regard to Islamic banking means that, as pointed out in several studies conducted by Libyan researchers, there is a lack of expertise around this area. In other countries that have introduced Islamic banking, the governing boards have usually tended to invite Islamic scholars from overseas, a practice that could be emulated in Libya. The lesson for Libyan authorities to learn from countries such as Malaysia might be to restrict the scholars to one bank, and to insist that they provide training to young scholars in order to create a local pool of expertise in this area.

Nonetheless, the per capita income level is expected to continue rising over the next few years, and Libya remains an attractive proposition as one of the least penetrated retail banking markets in the Middle East and North Africa region. Traditional attitudes among the country’s customers are particularly well-suited to Islamic banking, which does not charge interest rates on loans and operates within a fee-based framework (Oxford Business Group, 2010). This suggests that as Libya opens up to foreign direct investment and ownership, the existing Libyan commercial banks are likely to face considerable pressure from foreign banks, especially those already expert in providing Sharia-compliant products. Therefore, the quality of service delivered by Libya’s commercial banks may be crucial to their efforts to retain customers, operate profitably, and thereby gain the competitive advantage necessary to flourish in a liberalized banking environment.
Given that the focus of this study is the perception of service quality of the customers of Libyan commercial banks, it is appropriate here to provide a brief overview of the circumstances experienced by Libyan bank customers which may be regarded as unusual or culturally distinctive. For many years, the main function of Libya’s public commercial banks was to receive and distribute public sector salaries. The government insists on paying these salaries, which constitute at least a part of the income of most families in Libya, directly into accounts held by state-owned commercial banks: the effect of this is to provide the four main commercial banks with a customer base which they must do little to attract or retain. As a result there has been minimal incentive for these banks to update their procedures or their technology. Even at the time writing, the banks are still using manual systems of banking, and new technology has not yet been completely integrated into these banks. Basic transaction facilities are available to customers, such as account balances and a simple payroll system for employees, but there is no kind of networking between the banks’ headquarters and their branches. Customers have to wait in queues to make withdrawals from or payments into their accounts. They have cheque books to use, but they are only used when making a withdrawal. Credit systems within Libya are uncomplicated and based on face-to-face transactions, and what confidence existed in the banking system was severely damaged by the currency retorts of 1980, when customers were allowed only one week to exchange their existing currency for new (Kumati, 2008). Therefore, many people said and still say “We are not going to save or deposit our money in a bank. Let us keep our money in our pocket”. Most Libyans, therefore, still prefer to carry out their transactions in cash.
The researcher, as a Libyan citizen and long-term customer of Libyan commercial banks, has the following observations to make about influences on Libyan banking practice.

A major cultural factor is the insistence among Libyan customers that female customers be treated separately from male. Banks are expected to provide different windows for women to conduct their business, and queues for service are also kept separate by gender. Men are content to see female customers given priority on the basis that they should be treated with respect and be free to return to their work or home quickly.

Banking, like all facets of life in Libya, is subject to the effect of influence or 'wasta' in the Arabic. A customer who knows someone in a bank or has relations working there is more likely to be able to conduct their business speedily and effectively. Bureaucratic requirements are circumvented, and it may be possible, for example, to arrange a loan on the basis of a single phone call if the necessary social connections exist.

Beyond the influence that can be obtained from family or kinship connections, it is necessary also to stress the importance Libyans place on personal relationships in managing their daily life. Ties of kinship and friendship make life easier, and customers of institutions such as banks are more likely to base their choice of bank and branch on the people they know who work there and the closeness of their relationship. Female customers often do not drive and have limited time to conduct their business, so are more likely to select a bank close to their home or place of work. Thus, it can be seen that considerations such as a simple comparison of products and services play a significant role in the choices Libyans make in the bank they use, and on their perceptions of levels of service quality offered.
2.7 Summary

Libya is an environment with great potential for expansion for all types of business, particularly in the banking sector. It needs people who can develop and manage its natural resources and people with knowledge and technological skills rather than simply capital. Within this chapter there is an overview of the evolution of the banking industry in Libya designed to provide a context for the empirical evidence that comes later in the thesis. A brief review of both Libyan banking and nonbanking financial institutions has been given. This chapter has also provided a brief review of the central bank's control over the adoption and enforcement of international best practices. It has also given the outlook for Islamic banking services in Libya and a personal perspective for banking in Libya.

In the following chapter, the researcher will review and analyse the relevant academic and professional literature on the subject of service quality in general, with the aim of understanding the appropriate role of service quality in the banking sector in particular, and creating a wide background to the research study.
Chapter 3  Literature Review (An Overview of Service Quality)

3.1 Introduction

Today, the service sector accounts for significant proportion of the economic activity in many countries. According to the Organisation for Economic Co-operation and Development, more than 70 percent of people worldwide are employed in the service sector (Arasli, Mehtap-Smadi and Katircioglu, 2005). This is particularly true of more highly developed economies, for instance, Kotler (2003) states that in the USA 79 percent of all employees hold jobs in the service sector, and services represent 76 percent of US GDP. Services are complex in nature due to their common characteristics, which include intangibility, heterogeneity, inseparatibility and perishability (Arasli et al., 2005). The importance of the services sector, and the characteristics outlined above, have also intensified the onus on companies to provide superior service as a means to improving financial performance and attracting and retaining customers in highly competitive environments (Wang et al., 2003). Therefore, the provision of a high level of service quality is increasingly recognised as being one of the key strategic drives of value within organisations in both the service and manufacturing sectors, (Lewis, 1991).

Moreover, competition is service oriented to such an extent that business organisations have come to realise that the merely technical solutions they offer to consumers, are not sufficient to create a competitive advantage (Abdelaziz, 2001). Therefore, the delivery of a higher levels of service quality is a strategy which is increasingly being adopted as a key to service providers’ efforts to position themselves more competitively in the marketplace (Brown and Swartz, 1989; Parasuraman et al., 1988). This is because quality, from the customer’s viewpoint, is a significant basis which he/she uses for differentiating between competing services (Bharadwaj, Varadarajan and Fahy, 1993).
From the service provider’s viewpoint, high quality service provision can reduce the costs inherent in attracting new customers and at the same time, increase customer satisfaction, enhance customer loyalty and improve customer retention rates (Newman and Cowling, 1996).

With regard to the banking sector, service quality has become an increasingly important factor for success and survival (Cui, Lewis and Park, 2003). Provision of high quality service aids in meeting several requirements of the modern bank such as achieving customer satisfaction with its consequent effects on loyalty and market share, soliciting new customers, improved productivity, financial performance and profitability (Julian and Ramaseshan, 1994; Lewis, 1989, 1993; Llosa, Chandon and Orsingher, 1998). It has also become a major research topic due to its important relationship with marketing and financial performance (Cui et al., 2003).

A review of the relevant literature suggests a two-way division in the principal focus of service quality research (Gounaris, Stathakopoulos and Athanassopoulos, 2003): initially, the identification of the dimensions of service quality was the primary concern of researchers (Parasuraman, Berry and Zeithaml, 1985, 1991b). Latterly, the development of instruments designed to measure service quality has become the focus of research efforts (Parasuraman, Berry and Zeithaml, 1988, 1991a, 1993; Cronin and Taylor, 1992, 1994; Asubonteng et al., 1996; Buttle, 1996). Accordingly, this chapter is devoted to reviewing the literature concerning the concept of service quality and its related subjects.

The chapter divided into fifteen main sections. The next section discusses the nature of service. A definition of quality and service quality are presented in section 3.3. Section 3.4 deals with the service encounter. The importance of service quality is illustrated in
3.2 The Nature of Services

A service can be defined as work performed for someone else (Juran and Gryna, 1993). The definition of service as an action comes within the framework of a relationship; the relationship is usually that between the customer and the provider of the service. Zeithaml, Bitner and Gremler, (2006, p.4) defined services as "deeds, processes, and performance." The definition suggests that service in general is not a tangible object that can be felt or touched, a quality which distinguishes services from tangible products, while Kotler et al. (2001, p.535) see service, as "any activity or benefit that one party can offer to another which is essentially intangible and does not result in the ownership of anything." Services are intangible in nature, and this intangibility makes the analysis of the subject of service quality different from that of the analysis of manufacturing quality (Gummesson, 1991). Also, Grönroos (2000, p.46) believes services to be "a process consisting of a series of more or less intangible activities that normally, but not necessarily always, takes place in interactions between the customer
and service employees and/or physical resources or goods and/or systems of the service provider, which are provided as solutions to client problem.”

This definition emphasises that service is an activity or a set of activities delivered by a service provider to customers with the aim of meeting their demands or solving their problems. That is, the service provider supplies service for customers in order to satisfy customers during the service transaction. Customers make judgments (e.g., satisfaction) on what they have received or consumed, and their subjective attitude towards the service has a significant influence on their evaluation of the service provider and the associated service quality.

Parasuraman et al. (1985) argue that even the most comprehensive knowledge of a product is not sufficient to understand the nature of service properly. Service is more complex than goods and more difficult to measure precisely. Some researchers (e.g., Zeithaml, Parasuraman and Berry, 1992; Zeithaml and Bitner, 1996) have identified four fundamental characteristics of service as distinct criteria compared to goods or tangible products.

3.2.1 Characteristics of Services

It can be said that the two industry sectors, services and products, have common goals such as customer satisfaction, productivity and success, but the service sector has intrinsic characteristics that drastically differentiate it from goods based industries. A service has the following characteristics: intangibility, inseparability, heterogeneity, and perishability.
3.2.1.1 Intangibility

The majority of services are intangible in their nature (Bateson, 1977; Shostack, 1977; Berry, 1980; Lovelock, 1981). This lack or absence of tangible attributes makes it very difficult for producers to describe a service in promotional or advertising material, and equally difficult for consumers to understand a service's virtues and benefits. With a service, the consumer is not able to see, hear, feel, smell, or touch the product before it is purchased (Ghobadian, Speller and Jones, 1994; Dibb et al., 2006). Parasuraman et al. (1985) argue that because services involve the delivery of a performance or action rather than the transference of ownership of an object, exact manufacturing specifications cannot be given and uniform quality can rarely be guaranteed. Most services cannot be counted, measured, inventoried, tested, and verified in advance of sale to assure quality. Because of intangibility, firms may find it difficult to understand how consumers perceive service and evaluate service quality (Zeithaml, 1981).

3.2.1.2 Inseparability

In the case of many services, production and consumption of the service are simultaneous and therefore inseparable in the mind of the customer, (Carmen and Langeard, 1980; Grönroos, 1978; Upah, 1980). In service industries, the provider often creates or performs the service at point in time it is consumed (Dibb et al., 2006). Services are often highly visible, and as a result within the process of transaction it is not always easy for the service provider to conceal mistakes or shortfalls in quality. Moreover, the customer's involvement in the process means that there are additional factors adding to the uncertainty of quality, which managers generally have little control over. Furthermore, given the visibility of some service provision activities, the
behaviour or reaction of one group of customers may have an influence another group’s expectations of service quality.

3.2.1.3 Heterogeneity

Services are heterogeneous because they are difficult to reproduce identically in different conditions and to different customers: the performance of a service often varies from one producer to another, from customer to customer, and even from one day to another (Parasuraman et al., 1985). In industries such as retail banking, which are both labour intensive and have large product portfolios, the buyer cannot assume consistency of staff behaviour and, therefore, consistency of service performance and quality (Berry et al., 1985; Booms and Bitner, 1981; Langeard et al., 1981; Howcroft, 1993). As a result, the buyer of services may perceive themselves to be at greater risk of suffering from poor quality than a purchaser of goods, which are considerably easier to standardise (Eiglier and Langeard, 1977; Guseman, 1981; Zeithaml, 1981).

3.2.1.4 Perishability

A further difference between goods and services is that unlike goods, services cannot be stored. Services that are not used or sold at their appointed time cease to exist. Thus the matching of demand and supply within companies which provide services poses a great challenge. Demand management strategies like pricing, reservation systems, etc., and supply management strategies like utilising part-time employees, capacity sharing, etc., are developed to handle the problem of perishability (Gummesson, 1991; Ghobadian et al., 1994; Zeithaml and Bitner, 2000). Moreover, many producers of goods are realising that they can add value to their products by the provision of add-on services such as after-sales care, help-lines and insurance, leading to a blurring of the traditional divisions between goods and services. It is therefore incumbent on companies and
organisations whose only product is a service that they use service quality as a means of gaining competitive advantage.

3.3 Defining Quality and Service Quality

Service quality is one of most researched areas in the academic study of services. As a result, it is necessary to clarify and define this term (Fisk and Brown, 1993). Consequently, defining quality is fundamental and a prerequisite to understanding the term of service quality.

3.3.1 Defining Quality

Given the necessity to employ quality for competitive advantage, it is important for a company or organisation to have a clear idea of what level of quality they want to achieve. Quality is an extremely difficult concept to define in a few words. It has been defined in different ways, with the most common conceptualisation arising from consideration of the quality of goods, rather than the quality of services. However, before the start of investigating service quality definitions, it is important to understand some definitions of quality that exist in the wider business environment. This will allow some understanding of where current issues in the application of quality to services have arisen (Reeves and Bednar, 1994).

Furthermore, quality is widely considered a key contributor to corporate success. It is of primary concern to organisations of all kinds and it can be considered the strategic variable which has the greatest impact on production and marketing activities in the service industry. As a result, the banking industry, reliant on trust and credibility to maintain its activities, has to determine a definition of quality particular to its own service sector (Bowen and Hedges, 1993).
There is no consensus as to what constitutes quality, and researchers have offered a range of different definitions. Chaplin (1981) wrote of excellence, and stated that excellence was possible in anything; a definition of fitness for use is offered by Juran, Gryna and Bingham, (1988); and for (Grönroos, 1990) quality is a question of customer perception of excellence; it is regarded as the creation of value for the customer by Edvardsson and Mattesson, (1993) and seen as reflected in the importance and essence of customer’s judgments by Zeithaml, Berry and Parasuraman, (1993). It can also be defined in terms of providing goods or services to customers according to a specification that meets their needs and satisfied some existing requirement (Palmer, 2005).

Crosby (1980) defined quality as "conformance to requirement" (p. 9), with a focus on people and organisational factors, and placed an emphasis on the company’s need to achieve changes in culture, training, a commitment by senior management to quality, and a consistent monitoring of the costs of providing quality. Deming (1986) took a more statistical perspective of quality, and emphasised the the need to reduce to its absolute minimum the variance of services using statistical process control techniques. Deming also outlined fourteen management principles necessary to achieve quality, which include management commitment, process design and control, reducing barriers to employee participation, and continuous improvement. Juran (1989) pointed out the need for expert planning and product design, a commitment to the auditing of quality, and the maintenance of a good relationship between the supplier and customer. Taguchi and Clausing (1990) extended this list of quality improvement attributes, including in their requirements product and process design. Taguchi and Clausing’s methods are intended to provide a system able to produce services based on the specifications of customers, designed to meet those specifications in a profitable and satisfactory service
delivery. A further definition offered by Samuel (1999, p.382) quoted the International Standards Organisation (ISO) definition of quality as "the totality of features and characteristics of a product or service that bear on its ability to satisfy or imply customers' needs". According to this view, the standard definition of quality should include all those features of a product (or service) which are necessary to the customer who might buy it.

Thus, quality has implications not only for the way that products are made but also for the way that they serve the needs and wants of customers (Reed, Lemak, and Montgomery, 1996). Reeves and Bednar (1994) stated that quality not only means conformance to specifications, but it also means meeting or exceeding customer expectations. Ghobadian, et al. (1994, pp. 47-48) pointed out that although there are many definitions of quality, it can be organised through five main headings which identity the characteristics of high quality:

- **Transcendent.** Quality is defined as being innate to the service in its excellence. In this categorisation, the product or service has unparalleled properties. However, this definition of quality has limited application in practice, due to the difficulty of identifying the determinants of quality prior to purchase.

- **Product led.** In this definition, quality is regarded as representing the units of goodness contained within a product or service. Thus, a high quality service contains within it more units of goodness than a low quality service. This definition depends for its accuracy on the quantification of the units of goodness or tangible attributes within a service; in practice, however, this is a subjective assessment and it is no easy matter clearly to identify and quantify the attributes.
of a service. Furthermore, due to its subjective nature, goodness is not absolute but relative to a particular person or instance in time.

- **Process or supply led.** Under this approach, quality can be defined as "conformance to requirements". This definition of quality emphasises the importance of effective management and control of supply-side quality. Therefore, focus is internal instead of external. An organisation which offers a basic service involving little or customer contact, such as companies in the financial services sector, public transport and fast food restaurants, may be able to use this definition.

- **Customer led.** In this definition the focus is external. The definition of quality is regarded as "satisfying customer requirements" or "fitness for purpose". This approach depends on an organisation's ability to find out the requirements of their customers, and thereby satisfy those requirements. This approach has an implicit relationship to the supply-led approach because the requirements of customers are designed into the service before it is offered for sale, however, the product's degree of conformance is not determined until the transformation stage. This definition is most useful to organisations which offer services based on a high degree of personal contact, which require service providers to have specialist skills or knowledge, or which are labour intensive, for example legal services, accountancy, health-care, leisure and educational provision.

- **Value led.** Here the focus is external. The definition of quality given either as "cost to the producer and price to the customer" or "meeting customer requirements in terms of quality, price and availability". There is implicit assumption of a trade-off between price, availability and quality, and a purchaser decides between these attributes in forming an intention to purchase.
Thus, service providers, such as financial service organisations, educational institutions, hospitals etc., may need to define quality in terms particular to their competitive environment. Their mission is difficult because they need to find new definitions for terms like "customer", "supplier" and "defect", because the definitions traditionally applied in a manufacturing context are no longer relevant.

3.3.2 Defining Service Quality

The concept of service quality is not easily defined or measured (Mackay and Crompton, 1988). This is because services are subjective in nature. The concept of service quality has attained a considerable body of research and engenders debate within the research literature because is both difficult to define and measure, and so far no general consensus has been reached on the best way to approach either of these tasks (Gummesson, 1991; Wisniewski, 2001).

There have been definitions of service quality based on different theoretical assumptions. For instance, Bitner and Hubbert (1994) define service quality as "the consumer's overall impression of the relative inferiority or superiority of the organisation and its services" (p. 77). Grönroos (1984) define service quality as "the outcome of an evaluation process, where a consumer compares his expectations with the service he perceives he has received" (p. 37). Sasser, Olsen and Wyckoff, (1978), and Lehtinen and Lehtinen (1982) claimed that service quality derives from a comparison between what customers feel a service company ought to offer, and their perceptions of actual performance of the company providing a particular service. Such definitions open up areas of interest for a researcher in this area. Any notion of what services 'should' offer is likely to be affected by some particulars of a customer's background, such as
experience of competitors, and the influence of environment, nationality, culture and even religious or ethical beliefs.

Additionally, there are a number of different "definitions" as to what is meant by service quality. One commonly employed defines service quality as the degree to which a service meets customers' needs or expectations (Lewis and Mitchell, 1990; Dotchin and Oakland, 1994; Asubonteng, et al., 1996; Donnelly and Wisniewski, 1996).

Other researchers have defined service quality as the difference between customer expectations of a service prior to purchase, and perceptions of the service after it is consumed. If expectations are greater than performance, then a customer's perception of quality is that it is not satisfactory, (Edvardsson, 1998).

Parasuraman, Berry and Zeithaml defined service quality as "delivering quality service means conforming to customer expectations on a consistent basis" (Parasuraman et al., 1985). Subsequently, they defined it again as "a global judgment, or attitude, relating to the superiority of the service" (Parasuraman et al., 1988, p.16). Furthermore, many researchers in the service quality literature concur with this definition (Bolton and Drew, 1991; Cronin and Taylor, 1992; Boulding et al., 1993). Service quality has been also defined by Parasuraman et al. as "exceeding what customers expect from the service" (Parasuraman, Berry and Zeithaml 1990). This is comparable to Lewis (1989) definition as "consistently meeting or exceeding customer's expectations". These definitions, while useful, all assume service quality encounters to be taking place in what might be called a cultural vacuum, and idealised location divorced from the multitude of social and cultural environments which exist around the world. Customer expectation is an especially mutable concept, with all kinds of influences acting upon what customers expect in any given situation.
Notwithstanding this, definitions of service quality are often based on an assumption that it is the result of a comparison between a pre-purchase expectation about a service, and a subsequent post-purchase perception of the way the service has been delivered (Grönroos, 1984 and Parasuraman et al., 1985, 1988, 1991 and 1994). However, some researchers have felt that the inclusion of expectations unbalances research into customer perceptions of service quality, due to the influence the experience of a service on what customers can remember of their expectations. As a result, Cronin and Taylor, (1992) proposed the idea that "service quality should be measured as an attitude", and devised a measurement of service quality based on a concentration on 22 perception items of the SERVQUAL scale, but without the inclusion of expectations.

Thus, it is important to note that service quality could be severely affected by both the customer and the service provider interactions (service encounter). This has attracted the interest of researchers as it has the potential to have a huge impact on the success of the business marketing effort. A discussion of the service encounter follows.

3.4 The Service Encounter

The service encounter and the customer's evaluation of the quality of the service encounter are critical to the success of any service business (Reisinger, 2001). Perhaps one of the most important aspects of a successful service encounter is the service employee. Various authors acknowledge the importance of the customer-employee interaction in the service delivery process (e.g. Berry, Parasuraman and Zeithaml, 1988; Lovelock, 1984; Reisinger, 2001). Lee-Ross (1999) added that the attitudes of service industry workers can be a key factor in service provision. Reisinger (2001) also noted that this type of interpersonal transaction is very labour intensive and that the attitudes of the provider toward a customer can greatly influence the customer's satisfaction.
Past research has acknowledged the significance of the customer-employee interaction in the production of service quality (e.g. Berry et al., 1985; Lovelock, 1984). For service organisations, high quality services that meet customers' needs are critical in achieving a competitive advantage (Holmlund and Kock, 1996; Parasuraman et al., 1988). More specifically, the pivotal role played by service providers in customers' evaluation of service delivery are recognised as being very important (e.g. Heskett, 1986; Heskett, et al., 1994; Mattsson, 1994).

According to Jayawardhena et al. (2007), broad definitions of service encounters have been offered in the marketing literature. For example, Shostack's (1985) definition involves elements beyond the interpersonal element of a service encounter, including physical environment in which it is delivered and the availability of self-service technology. In the banking context, this would include elements such as the comfort and fittings of a bank branch and the availability of technology such as ATMs and phone and internet banking. Conversely, it is possible to find more narrow definitions of service encounters, which focus on the personal nature of the encounter and the involvement of individuals. For instance, Surprenant and Solomon (1987) defined the service encounter as a ‘dyadic interaction’ between the consumer on one hand and the service provider on the other. This definition build upon their previous work, which suggested that service encounters can be seen as individuals performing roles (Czepiel, Solomon and Surprenant, 1985) in which both customers and service providers have duties to perform. According to these authors, in the process of a service encounter, or ‘moment-of-truth’, the formation of a customer's perception is largely based upon various emotional and intangible contents of the encounter than it is on the surroundings of the encounter (Lemmink and Mattsson, 2002; Stauss and Mang, 1999). Indeed, “traditionally, service encounters have been characterised as low tech, high face-to-face
contact” (Drennan and McColl-Kennedy, 2003, p. 296). In the setting of a business-to-business service encounter, Paulin, Ferguson and Payaud, (2000) explain that contact personnel and social/interpersonal aspects of a service encounter have a far larger role to play than technology in forming quality perceptions. This is even the case in high-technology service organisations, where it has been argued, “several reasons make the ability of the customer contact person crucial when delivering complex services” (Mattsson, 2000, p. 24). These views are interesting in a cultural context: if the level of personal service is crucial to customer perceptions of the service encounter in high-tech sectors within developed economies, how much more important is it in low-tech business in less-developed economies with cultures marked by the importance they place on reciprocity and close personal relationships in business?

Moreover, Czepiel, (1990) argues that a range of characteristics distinguish service encounters. Firstly, they are purposeful. There is contact which occurs with the purpose of achieving a specific goal. Secondly, there is a limited scope to service encounters, which are restricted to the nature and content of a service which is delivered. Thirdly, the service provider and customer play roles in the service encounter that are clearly defined and are understood by both participants. Therefore, there is a suggestion that service encounters are formed at least partly by the behaviours of individuals as well as the quality of customer and employee interactions (Bitner, 1990; Bitner, Booms, and Mohr., 1994; Heskett et al., 1994). However, service encounters also takes place within a context, and this context includes many cultural elements which a poorly designed research instrument may be unable to recognise. Jabnoun and Kalifa (2005) make the following observation: “managers using generic widely used measures such as SERVQUAL may end up missing important concerns of their customers [...]. this is particularly important when national cultures favor certain service attributes and/or
prohibit others, as manifested in the example of banking in Muslim countries” (p. 385). In Libya, it is not acceptable to customers that men and women should be obliged to share the same queue when waiting to be served in a bank, and therefore the provision of a separate service window for women might be regarded as a cultural ‘hygiene’ standard in Libya, a minimum requirement below which service ceases to be acceptable. As a result of this, an item was added to the SERVQUAL model in this study giving customers the opportunity to recognise that this standard was being met by their banks.

3.5 Importance of Service Quality

The latter part of the twentieth century, especially after the first major oil crisis, saw a growing realisation that services would play a more important role in the world economy. As a result, research efforts have increasingly been directed at defining and finding ways to improve quality, with a view to achieving sustainable competitive advantages (Zeithaml et al., 1990). A growing proportion of the global economy is contributed by service industry companies, and these companies have used a variety of approaches to improve their quality of service to gain a competitive advantage and satisfy the needs of their customers (Sureshchandar et al., 2001).

Many studies which have pointed to the enormous benefits which companies can gain from offering superior service quality. These studies show that the provision of high quality service contributes to advantages such as a positive relationship between an organisation’s performance and its service quality (Buzzell and Gale, 1987). These authors indicate that high service quality leads to higher market share, and therefore improved return on investment and asset turnover.

Service is also considered a key element of competition: Lewis (1989) studied quality in the service sector and concluded that organisations need to study service quality and
collect data on it, in order to understand what quality means to their customers and what they consider it consists of, and how it can be measured (Lacobucci, Grayson and Ostrom, 1994) in order to differentiate themselves from competitors in the market place (Morre, 1987).

Research has also established a link between service quality and customer satisfaction, with a concomitant influence on loyalty and market share, which in its turn leads to greater productivity, higher profitability and lower costs, along with improved employee satisfaction and reduced staff turnover (Anderson et al., 1994; Berry et al., 1985; Bolton and Drew, 1991; Caruana, 2002; Jabnoun and Al-Tamimi, 2003; Julian and Ramaseshan, 1994; Lewis 1989, 1991, 1993; Lassar et al., 2000; Lewis, Orledge and Mitchell, 1994; Llosa et al., 1998; Newman, 2001; Reichheld and Sasser, 1990; Wang et al., 2003). In the context of this study, this relationship between service quality and company performance is more difficult to classify. In Libya, the four main commercial banks offer an almost identical range of services and very similar levels of service, and while the private commercial banking sector is growing, it is not really a viable option for the vast majority of Libyan customers. Most Libyans work in occupations which are part of the public sector, and in order to protect the interests of the public commercial banks, the state will only pay public sector salaries into accounts held by these banks. The service encounter in Libyan banks is therefore subject to certain external constraints which necessarily have an influence on the behaviour of the service provider, and the perception of the customer. It is part of the aim of this study to assess what the result of these influences is.
3.6 The Relationship between Service Quality, Customer Satisfaction and Customer Loyalty

Recently, there has been an increasing quantity of research published investigating the relationships between service quality, customer satisfaction and customer loyalty. Several new models have been developed and researchers are investigating how the goals of satisfaction and loyalty can be attained by the provision of high quality service. Due to the importance of service quality in establishing a competitive advantage, the distinction and association between service quality and customer satisfaction was initially at the forefront of many research endeavours (Brown and Swartz, 1989; Cronin and Taylor, 1992; Bloemer, Ruyter and Peeters, 1998; Lassar et al., 2000; Caruana, 2002; Baron and Harris, 2003; Beerli, Martin and Quintana, 2004; Yavas, Benkenstein and Stuhldreier, 2004; Ting, 2004; Zhou, 2004). This distinction is very important to managers and researchers alike, since as Cronin and Taylor (1992) stated, service providers must be aware of whether their objective is to have customers who are satisfied with their performance, or to offer the maximum level of perceived service quality. In general, the nature of the causal relationship between quality and customer satisfaction is a subject of great academic debate (Baron and Harris, 2003).

However, more recent research has focused on the additional element of customer loyalty, on the grounds that winning new customers is much more difficult and expensive that retaining existing ones, to the extent that both Ndubisi (2005) and Pfeifer (2005) estimate that the cost of providing service to a loyal customer is five or six times less than the cost of obtaining a new customer. Examples of research into this relationship include a study by Pont and McQuilken (2005), which found that customer satisfaction and customer loyalty were related to each other, but also concluded that satisfied customers are not always loyal customers. Pleshko (2009) and Al-Wugayan
and Pleshko (2010) have suggested that there is no relationship between customer satisfaction and loyalty, while admitting that their findings are in contrast to those of most other researchers.

Subsequent research has considered the relationship between the concepts of quality, satisfaction and loyalty in terms of the dimensions of SERVQUAL, for example Zaim et al. (2010) cited in Siddiqi (2010), found that tangibility, reliability and empathy were important contributory factors in the creation of customer satisfaction, whereas Mengi (2009) found responsiveness and assurance to be important factors. Lai (2004) and Kumar et al. (2010) identified assurance, empathy and tangibles as the important factors in this context, in contrast to Baumann et al. (2007) who found that tangibles were not related to customer satisfaction, and Ahmed et al. (2010) whose findings suggest that empathy is in fact negatively related to customer satisfaction.

In terms of research specific to the retail banking sector, researchers have identified a range of determinants of customer satisfaction. Arasli et al. (2005) claim that the reliability dimension of SERVQUAL had the greatest effect on customer satisfaction in the Greek Cypriot banking industry, while in contrast Chaniotakis and Lymperopoulos (2009) concluded that reliability was not found to be related to customer satisfaction. Some researchers have included financial services products in their measurement of customer satisfaction and attempted to compare their importance with the traditional service quality elements: according to Levesque and McDougall (1996), while a competitive interest rate is one of the most important determinants of customer satisfaction with a retail banking service provider, they also found that a good 'employee/customer' relationship was able to increase the satisfaction level of customers over and above the level provided simply by a competitive product range. They indicate that recovery from service problems is extremely important to
maintaining customer satisfaction, because it is only when customers are faced with a service failure that they really compare the service they receive with the expectations of recovery they have in a given situation. However, their results were not able to definitively link satisfactory problem-recovery with an increase in overall customer satisfaction; rather they suggest that such an outcome is necessary to maintain the existing satisfaction level. Finally, this study concluded that banks able to offer competitiveness and convenience were in possession of the two most important determinants of customer satisfaction. In later research, Jamal and Naser (2003) found that the importance of convenience and competitiveness as critical factors differed between genders, ages and income groups.

Attempts have been made over the years to model the relationships between service quality, customer satisfaction and customer loyalty, and some of these models have relevance to the current study. In 2002 Caruana proposed a model shown below to illustrate the basic interrelationship of these concepts:

![Caruana's Model](source: Siddiqi (2010, p. 8))

This model suggests that customer satisfaction is linked to customer loyalty, but also that loyalty can be achieved through service quality directly. Such a model makes no distinction between the different quality attributes of tangible products and services, but
does provide some insight into the formation of loyalty as a key competitive advantage for companies of all kinds. Siddiqi (2010) used this model as a conceptual basis for an investigation of the relationships between quality, satisfaction and loyalty in the Bangladeshi retail banking sector, and found that “customer satisfaction has a large positive correlation with customer loyalty in the retail banking sector in Bangladesh” (p. 18). These findings support those of researchers such as Kandampully and Suhartanto (2000); Reichheld (2006); and Cohen et al. (2007) and underline the importance of service quality to retaining profitable existing customers. Furthermore, Caruana’s (2002) contention that service quality has a profound impact on customer satisfaction and loyalty as a result of comparison between expectations of a service and perceptions of the way the service is actually performed implies that it is customer perceptions which have to be managed and changed through the performance of service offerings and service failure/recovery efforts. The relationship between these elements is well illustrated by the Basic American Customer Satisfaction Index model shown below:

Figure 3.2: Basic American Customer Satisfaction Index Model

Of the many National Satisfaction Index model that have been produced in recent years, the American model has gained the greatest reputation for reliability and validity
because within the model satisfaction is measured in the context of other interrelated variables (Hu et al., 2011). This model introduces the concept of customer complaints as a measurable impact on overall satisfaction and therefore loyalty, and proposes that when customers are dissatisfied they have two choices, either to make a complaint or to exit their relationship and purchase goods or services from another provider. Customer complaints are therefore a good indicator of overall customer (dis)satisfaction and may be an important element to measure when attempting to draw conclusions about customer loyalty. The model also underlines the importance of perceptions of value and quality on the formation of customer satisfaction and subsequently customer loyalty.

To summarize, satisfaction can be seen as the customer's evaluation of the product or service they receive. The importance of these customer evaluations derives from the impact that satisfaction is posited to have on customer behaviour, such as loyalty and the intention to repurchase, as well as providing marketing benefits such as positive word-of-mouth recommendation. Further research in this area needs to take these factors into account in order to produce a full picture of the relationships between loyalty and satisfaction on the one hand, and service quality on the other, in order to help banks to produce viable methods of understanding their customers' expectations and gaining their loyalty. In this context, Yavas et al. (2004) state that service quality has a positive relationship with a range of behavioural intentions, either directly or through the mediating effect of satisfaction. Consequently, and confirming what has already been mentioned, Jonsson and Zineldin (2003) have stated that the ability of banks to develop and enhance long-term customer relationships and satisfy existing customers should be the central aim of any relationship management strategy. They added that customer satisfaction has a positive effect on customer loyalty and retention.
In this study, although the concepts of service quality and customer satisfaction and loyalty are clearly recognised as related in the literature (e.g. Bolton and Drew, 1991a, b; Cronin and Taylor, 1992, 1994; Roest and Pieters, 1997; Strauss and Neuhaus, 1997; Angur et al., 1999), the focus will only on the subject of service quality and not on customer satisfaction and loyalty. This restriction on the scope of the study was based on a conclusion derived from the literature and the researcher's own experience that while the concept of service quality was reasonably well understood in Libyan society, notions of loyalty and satisfaction were less well known. The practice of marketing services and products is an underdeveloped area in Libya, especially in the banking industry, and knowledge of the opportunity to switch bank accounts or hold multiple bank accounts is not prevalent in among Libyans. Furthermore, the fact that government salaries were paid into designated bank accounts made the concept of loyalty almost meaningless to many Libyans, because their choice of bank was decided for them by their principal source of income, and this study therefore confines itself to perceptions of service quality. However, in the light of recent events in Libya and the change of regime they have entailed, it may be fruitful for future research to explore the relationship between service quality and satisfaction leading to loyalty in the light of localised cultural factors identified in the literature and by this study.

3.7 Service Quality Expectations and Perceptions

Customer expectations and perceptions of quality have been shown in many research efforts to be the key drivers of quality improvement. In recent years, researchers have devised new, more accurate techniques for the measurement of service quality in order to offer improved information to organisations and consumers. Their aim has been to provide an improved understanding of what customers expect from a service, and how
their perceptions of quality are formed. In this context, Lewis and Entwistle, (1990) claimed that when customer expectations and perceptions become more elevated, it becomes imperative that organisations are able to keep pace of these changing expectations and perceptions thoroughly and effectively. It could be argued that if companies are not improving, they are falling behind the rising expectations of their customers.

The expectations and perceptions of customers with regard to service quality are considered as a key factor influencing consumer evaluations of service quality (Parasuraman et al., 1985).

3.7.1 Customers' Expectations of Service Quality

There are many instances of the importance attributed to service quality in the literature of services, for example Sweeney, Johnson and Armstrong, (1992); and Brown and Swartz, (1989). Customer expectations have a major role to play in the consumer decision making process (Van Raaij, 1991, and Spreng, Dixon and Olshavsky, 1993), and they these decisions are influenced by factors such as brand or type of product or service. After a purchase has been made, evaluations are based on expectations of service quality held pre-purchase (Parasuraman et al., 1988 and Brown and Swartz, 1989) and these are a determinant of customer satisfaction (Oliver, 1980; Kurtz and Clow, 1998).

Perceptions of service quality may be defined as a consumer judgement of the superiority, excellence or otherwise of the service received (see for example Parasuraman et al., 1985; 1988 and Zeithaml, 1988). Studies such as those mentioned show that perceptions of service quality result from consumers making comparisons of their pre-purchase expectations with the perceived quality of the service actually
delivered by the supplier (Takeuchi and Quelch, 1983; Parasuraman et al., 1988; Zeithaml, Parasuraman and Berry, 1988; Zeithaml et al., 1990; Lewis et al., 1994).

Parasuraman et al. (1988) make the point that expectations of service quality depend on the consumer’s wants and desires, i.e. they consist of what they feel a service provider should offer rather, rather than what they do. Carman, (1990) also claims that “norms” are involved in expectations of service quality and that these “norms” are based on experience. Expectations are defined by Teas (1993) as a set of pre-purchase beliefs held by potential consumers about the performance of a product or service. Conversely, Zeithaml et al. (1993) regard service expectations as beliefs, which customers hold about service delivery and which function as a standard or reference point against which to judge performance. Clearly, any ‘norms’ against which customers base their experience of a service must be conceptualised taking account of the specific environment in which the service is delivered, for ‘norms’ in one society or culture will differ from those in another.

When perceptions of a service are low, Oliver (1980) claims that this is due to a failure to meet consumer expectations, whereas perceptions of quality increase as long as performance exceeds expectations. Hence, consumer expectations function as the foundation on which service quality can be evaluated. In addition, Zeithaml and Bitner (1996) maintain that because different customers will hold a variety of service expectations, it is therefore reasonable to suppose that this variety is dependent on a range of factors that have an influence over customer expectations and the standards that they wish their service providers to meet.
3.7.2 Customers' Perceptions of Service Quality

Berry et al. (1988) suggest that a number of definitions agree as to the importance of customer perceptions of quality, and that they also emphasise that the customer's attitudes or judgements result from a comparison of their expectations of service with their perception of actual service performance. However, other researchers assert that perceptions are the only influence on service quality (Carman, 1990; Cronin and Taylor, 1992 and Babakus and Boller, 1992).

Perceptions can also be defined as the beliefs consumers hold regarding the service they receive (Parasuraman et al., 1985) or experienced service (Brown and Swartz, 1989). However, other researchers have indicated that a perception of high service quality results in a greater intention to re-purchase (Boulding et al., 1993; Taylor and Baker 1994; Zeithaml et al., 1990).

3.8 Conceptual Models of Service Quality

In the service marketing literature, several models have been developed in order to identify the determinants of service quality. The aim of these models is to help management in understanding how customers evaluate quality in a service context.

Initially, the conceptualisation of service quality (Grönroos, 1982, 1984; Parasuraman et al., 1985) was based on the disconfirmation paradigm (Oliver, 1980), which was itself derived from the literature on natural goods quality. According to the definition of service quality under the disconfirmation paradigm, it is the result of a comparison between perceived and expected service performance.

In pursuit of this line of reasoning, researchers generally adopted one of two models: either the Nordic (European) model (Grönroos, 1982, 1984), or the American model...
developed by Parasuraman et al. (1985, 1988). The American model dominates the literature, but there remains no agreement as to which of the two, or some other, conceptualisations better portrays perceived service quality (Brady and Cronin, 2001).

3.8.1 Nordic School Model

3.8.1.1 The Grönroos Model

Grönroos (1990) suggested a service quality model, which consists of two principle components: technical quality and functional quality. Apart from these elements, corporate image is also a crucial component in Grönroos’ model. Figure 3.3 presents the model, which integrates product and service quality perspectives from the customer’s viewpoint.

Figure 3.3 shows how complex the quality perception process is. There are different kinds of elements that determine whether the quality is considered good, bad, or neutral. This model conceives service quality as the combination of the delivery service activities and the service itself, and the firm image.

![Grönroos' Service Quality Model](image)

*Figure 3.3: Grönroos' Service Quality Model*

Source: Adapted from the work of Grönroos (1984, p. 40)
Technical quality refers to what customers receive as a result of their interaction with employees. Because their aspects are more tangible they are relatively easy to measure objectively, and form an important basis for measuring service quality (Palmer, 2001). Good examples of this aspect may be guestrooms in hotels, meals in the restaurant and so on.

Functional quality encompasses the delivery of technical quality. In other words, customers are influenced by how the technical quality is delivered to them through their interaction with employees. For instance, in the case of a fast food restaurant, a customer is greeted by an employee at the tills; his order is taken and dispatched as soon as possible. All of these kinds of experience during the service encounter are examples of functional quality.

The corporate image is the way consumers perceive the firm and it becomes crucial in the customer's interaction with the company, and may affect how customers perceive technical and functional quality.

The level of perceived service quality is not exclusively determined by the level of the technical and functional quality dimensions, but rather by the gap between the expected and experienced quality (Grönroos, 1990). As is evident from Figure 3.3, image is related to all the elements that compose the model. Therefore, it is important for any service firm to pay attention to the image it promotes, including external factors, such as its previous performance.

Loizides (2005) mentioned some of Grönroos' conclusions as follows:-

(1) Customer perceptions of quality are not only related to the productive element of a service, but also to the delivery process itself.
The experience of the customer within the process - the extent of involvement - also affects perceptions of the quality of a service.

The interactions between buyers and sellers are more important than traditional marketing activities.

Corporate image is also more influenced by the interactions between buyers and sellers, word-of-mouth, and communication than traditional marketing activities.

A high level of functional quality (i.e. the performance of the contact personnel) will compensate for temporary problems with technical quality and even for an overall lower technical quality level.

The main criticism the Nordic model faces, which perhaps accounts for its relative lack of popularity comparison with to the American model, is that it fails to provide explanations on how to measure the various aspects of service quality, most notably technical quality. Because of this, researchers have been obliged to develop their own scales whenever they wish to measure technical quality (Kang and James, 2004) and therefore a wide variety of items have been used in different studies, reducing their comparability. On constant is that technical quality is usually measured using qualitative methods. For example, Brady and Cronin (2001) reported using open-ended surveys asking customers to identify the particular attributes of technical quality; similarly Richard and Allaway (1993) and Powpaka (1996) used in-depth interviews to uncover its parameters.

3.8.1.2 The Lehtinen and Lehtinen Model

Lehtinen and Lehtinen (1991), researchers of the Nordic school, introduced two approaches to understanding service quality; three-dimensional and two-dimensional. According to the first view, service quality includes three main dimensions; physical
quality, interactive quality and corporate quality. The first dimension is physical quality, which can be interpreted as the quality that derives from the physical attributes of a service. This includes the physical product itself, for example, food and drinks in restaurants and bars, as well as the network of physical supports that facilitate the production of the service, as figure 3.4 displays.

Figure 3.4: Physical Elements in Service Production

```
Physical elements
  /\  
|  |
|---|--|
| PHYSICAL PRODUCTS     | PHYSICAL SUPPORT |
| Environment         | Instruments     |
```

*Source: Adapted from Lehtinen and Lehtinen (1991, p. 289)*

The physical product can be any item consumed during the service production process, so usually it can be evaluated in an objective manner. The second part of physical quality is the physical support, which is a framework that enables or facilitates the production process of the service. It can be divided into two categories; the service firm environment (firm appearance, decoration, etc.), and the equipment used in delivering services.

The second dimension in this model is interactive quality. This feature relates to both the interaction between customers and providers, and the interactive elements of the service provider. These elements may be mechanical, as in the case of an ATM, or human, such as waiters in restaurants. Interactions between different groups of customers can also be an important feature of interactive quality. In addition to this, organisation quality is considered in the Lehtinen and Lehtinen model as a third dimension. Corporate quality is time dimension based; it usually develops incrementally
over the history of the service organisation. It is argued that this dimension can be used as a way to cover some drawbacks related to other aspects of quality in the service firm. Yet, while the two dimensions mentioned above cannot be evaluated until, the customer has been in contact with the firm, the corporate dimension is the only one that can be experienced by a customer before participating in the service production process.

An alternative, yet complementary approach to quality simply utilises two dimensions; process quality and output quality of service production (Lehtinen and Lehtinen, 1991). This perspective is more abstract in nature and concentrates more on customer opinion. According to Lehtinen and Lehtinen (1991), quality in service firms may be divided into two main dimensions: process quality and output quality. Process quality is the result of the subjective judgments of customers, and draws upon their view of the production process and from feelings of how well they fit into it. This depends on the nature of the service, and the level of the customers’ participation in the service delivery process. The more customers become part of the production process, the more they will contribute to service quality levels: this is particularly true of customers in the banking sector, where customer input into the service encounter is very influential on the outcome, and especially true in the Libyan banking context where service encounters are transacted manually and require considerable patience from the customer. The second dimension, output quality, represents the customers’ evaluation of the service production process. This can include both tangible and intangible elements. For example, Lehtinen and Lehtinen (1991) stress that the output of tourism is often intangible, as it is represented by personal feelings and experiences. These dimensions are parallel with two dimensions (functional and technical) suggested earlier by the Grönroos (1984) model. These dimensions have particular importance in the evaluation of service quality in banking systems and the financial services industry in general. In banking, customers
have a large role to play in the delivery process, and they are dealing with an issue in which they have a high degree of emotional investment: their money.

To summarise, the Nordic school has made several major contributions to the field of service quality. This can be seen through the identification of, and the distinguishing between several quality dimensions. Moreover, this school stresses the interactive nature of seller-customer interactions and emphasises relationship quality. It also stresses the importance of functional over technical quality, as it is usually more difficult for customers and service providers to evaluate than the technical quality, but at the same time, the integration of both dimensions is recommended. Another area, which this school also introduced, is that of corporate image, which is not considered in the gap model. Despite this, the Nordic school model has been criticised as being relevant only at a theoretical level, and because it was developed in one service context (Ekinci, 2002). For instance, Grönroos’ model was developed based on a Swedish sample only; Lehtinen’s model was tested and developed in a restaurant context, thus, generalisation of these results needs to be carefully handled. Many researchers feel that the shortcomings of the Nordic model are compensated for by the greater flexibility and applicability of the American school.

3.8.2 The American School (Gap Model)

Parasuraman et al. (1985) conducted a study that led to the development of a service quality ‘gaps model’. They defined service quality as a function of the gap between customers’ expectation of a service and their perceptions of the actual service delivery by the provider (customer gap). The main idea of this work is that the service provider should try to close the gap between what is expected and what is received, in order to satisfy its customers and build-term a long relationship with them. By indentifying gaps,
this allows employees to know that is expected of them, and customers to have an idea of the level of service they can expect to receive (Zeithaml and Bitner, 2000). Simultaneously, the model suggests that this gap is influenced by four other gaps (provider gaps) which need to be closed. Figure 3: 5 illustrates this:

Figure 3.5: Gap Analysis Model

Source: Adapted from the work of Parasuraman et al., (1985, p. 44)
The four gaps created by executives and one gap created by customers (see figure 3.5) have been described as follows:

(Gap1) Consumer Expectation-Management Perception Gap (the difference between consumer expectations and management perceptions of customer expectations). In essence, service firms executives (marketers) may not always understand what features communicate high quality to consumers, what features a service needs in order to meet consumer needs, and what levels of performance are necessary to deliver high quality service. This lack of understanding has an impact on the perception of quality derived by consumers (Parasuraman et al., 1985).

(Gap2) Management Perception-Service Quality Specification Gap (the difference between management perceptions of consumer expectations and service quality specifications). A variety of factors such as a lack of resources, prevailing market conditions, and incompetent management may cause a discrepancy between what management perceives of consumer expectations to be and the actual specifications established for a service. This discrepancy is likely to affect perceptions of quality held by consumers (Parasuraman et al., 1985).

(Gap3) Service Quality Specifications-Service Delivery Gap (the difference between service quality specifications and the service actually delivered). Despite the presence of guidelines for service performance and treating consumers correctly, this does not necessarily ensure a high quality of service performance. A service firm's employees have a major influence over consumer perceptions of service quality and it is not always possible to regulate the quality of employee performance, (Parasuraman et al, 1985).

(Gap4) Delivery-External Communications Gap (the difference between service delivered and what is communicated about the service to consumers). Parasuraman et
al. (1985) state that media advertising and other forms of communication by a firm can influence consumer expectations. External communications have the potential to affect consumer expectations of a service, in addition to consumer perceptions of the service delivered. However, customer perceptions of service quality are likely to be negatively affected by communications which reveal, discrepancies between service delivery and what was promised by communications—in the form of exaggerated claims or the absence accurate of information about service delivery (Parasuraman et al., 1985).

(Gap5) Expected Service-Perceived Service Gap (the difference between the consumer's expected and perceived quality of a service). This gap represents the direction and the magnitude of the discrepancy between the consumer’s perceptions of the actual service performance and his expectations for the service. Parasuraman et al. (1985) claim that customer assessment of high or low service quality depends on the way consumers perceive real service performance in comparison with their expectations. This last phrase is very important, because ‘what they expected’ contains a multitude of expectations that may be affected by a company’s reputation and marketing effort, but are also necessarily affected by the cultural background, age, socio-economic group and many other elements of the customers themselves.

These five gaps are the basis of the service quality model. Service quality as it is perceived by a customer is dictated to a large extent by the size and direction of Gap 5, which in turn, depends on the nature of the gaps associated with the design, marketing, and delivery of services, i.e. Gaps 1, 2, 3 and 4.

In addition, with regard to Gap 5, Parasuraman et al. (1985) identified several criteria for the evaluation of service quality, which are divided into ten main categories entitled “service quality determinants”. Each service quality determinant is further sub-divided
into separate service quality elements. The service quality determinants and their elements are:

(1) Access: which includes approachability and ease of contact; (2) Communication: which involves customers in simple language and listening to them; (3) Competence: which involves contact personnel having the necessary skills and knowledge to perform their role in a service; (4) Courtesy: which involves such elements as politeness, respect, consideration, and the friendliness of contact personnel; (5) Credibility: which involves trustworthiness, believability, honesty, and keeping the best interests of customers in mind; (6) Reliability: which involves dependability and consistency of performance; (7) Responsiveness: which requires employees to be willing and ready to provide a service; it also involves the timeliness of the service; (8) Security: which is the perception of being free from danger, risk, or doubt; (9) Tangibles: which include the physical substance of the service; and finally (10) Understanding/knowing the customer: which involves efforts to understand the needs of customers. All of these elements hold a different definition in the minds of consumers according to his/her background and personal perception.

Figure 3.6 illustrates that perceive service quality is the result of consumer’s comparison of expected service with perceived service. The possibility exists that the relative importance of the ten determinants in forming consumer expectations (before the service is delivered) may not be the same as their relative importance compared to consumer perceptions of the delivered service; however, the overall comparison of expectations with perceptions has been a common feature of past research into service quality (Lehtinen and Lehtinen, 1982; Grönroos 1983).
Parasuraman et al. (1985) argue that perceptions of service quality exist somewhere on a continuum ranging from quality which is ideal to the customer, to quality which is completely unacceptable, with a mid-point on the continuum representing a position of satisfactory quality. A consumer's perception of service quality finds a position on the continuum depending on the extent of the discrepancy between expected service (ES) and perceived service (PS). Thus:

1) When ES>PS, perceived quality is less than satisfactory and will move further towards unacceptable quality when the discrepancy between ES and PS increases;

2) When ES=PS, perceived quality is satisfactory;
3) When ES<PS, perceived quality is more than satisfactory and will move further towards ideal quality when the discrepancy between ES and PS increased.

Parasuraman et al. (1985) subsequently conducted research, testing and analysing the model they proposed in five separate service categories (retail banks, a long-distance telephone company, a securities broker, an appliance repair and maintenance firm, and credit card companies), which led to the development of the SERVQUAL measurement instrument by Parasuraman et al. (1988) which will be discussed in more detail later in this chapter.

Subsequently, the gap model was developed to include a conceptual basis to form a guide to the management of service quality through the identification of potential antecedents of each gap (Zeithaml et al., 1988). As figure 3.7 shows, there are four gaps that may help the service firm in understanding how to close their service quality gap (Gaps). These gaps are; the understanding gap, the design gap, the delivery gap, and the communication gap.
In summary, the American school has made many contributions to the service quality literature; the SERVQUAL model presents five gaps, which help the service firm in understanding and managing service quality. These gaps are not only able to sometimes predict customer evaluations; they also have important practical or managerial value in
terms of improvements to service quality (Zeithaml et al., 1990; Parasuraman, Zeithaml and Berry, 1994 a, b). The calculation of gaps has the potential to assist managers to identify specific discrepancies among the participants in a service. In addition, this model has an advantage over the Nordic model in that it has empirically developed five dimensions of quality in the service context. The degree to which the dimensions can be regarded as suitable for a particular study may depend on the social/cultural context in which it is conducted.

3.9 Service Quality Dimensions

Over the past two decades, researchers and practitioners have found that customers take many factors into account when assessing service quality (Grönroos, 1984; Parasuraman et al. 1985, 1988; Lehtinen and Lehtinen, 1991; Lassar et al., 2000; Baron and Harris, 2003).

Review of the existing literature suggests identified that service quality has generally been regarded as a multidimensional construct. For instance, Sasser et al. (1978) first introduced the concept of service quality as a combination of explicit and implicit attributes, which include substantive service, security, consistency, attitude, completeness, condition, availability, and timing. LeBlanc and Nguyen (1988) listed five components of service quality: (i) corporate image, (ii) internal organisation, (iii) physical support of the service producing system, (iv) staff-customer interaction, and (v) level of customer satisfaction.

Grönroos (1984), as mentioned before, suggested that the measurement of service quality is a result of customers' overall assessment of two dimensions: (i) technical quality, and (ii) functional quality. A third dimension, corporate image, was added in his follow-up work (Grönroos, 1988).
Parasuraman et al (1985, 1988) conducted a series of exploratory field studies tasks to explore the structure of service quality as it is perceived by customers, across a wide range of service industries. Ten dimensions of service quality were first identified namely: (i) tangibles, (ii) reliability, (iii) responsiveness, (iv) competence, (v) courtesy, (vi) credibility, (vii) security, (viii) access, (ix) communication, and (x) understanding the customer. Following factor analysis and testing, Parasuraman et al. (1988) reduced these to five categories after observing that there was an overlap of criteria from the original ten dimensions. Table 3.1 shows how the ten dimensions of service quality are related to the five dimensions of SERVQUAL.

Table 3.1: Service Quality Dimensions

<table>
<thead>
<tr>
<th>Ten dimensions</th>
<th>Five dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>Reliability</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Responsiveness</td>
</tr>
<tr>
<td>Competence</td>
<td>Assurance</td>
</tr>
<tr>
<td>Courtesy</td>
<td></td>
</tr>
<tr>
<td>Credibility</td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td></td>
</tr>
<tr>
<td>Access</td>
<td>Empathy</td>
</tr>
<tr>
<td>Communication</td>
<td></td>
</tr>
<tr>
<td>Understanding</td>
<td></td>
</tr>
<tr>
<td>The Customer</td>
<td></td>
</tr>
<tr>
<td>Tangibles</td>
<td>Tangibles</td>
</tr>
</tbody>
</table>

Source: Kasper, Helsidngen and Vaies (1999, p. 214)

In contrast to SERVQUAL, Lindqvist (1988) proposed a seven-dimensional construct of service quality. The seven dimensions consisted of: (i) behaviour of the personnel, (ii) consumption, (iii) accessibility, (iv) price level, (v) the quality of the goods and entertainment services offered, (vi) opening hours, and (vii) buying accessibility and
advertising quality. Edvardsson (1989) reduced the number of dimensions to just four, which are considered to have an effect on customers' perception of service quality: (i) technical quality, (ii) integrative quality, (iii) functional quality, and (iv) outcome quality. The extent to which the second and fourth of these dimensions connect is vital to any consideration of service quality in a range of different environments. Services must integrate with customers' needs and expectations at many different levels if they are to achieve a satisfactory outcome for both customers and providers: customers want their cultural needs and expectations to be met as well as their technical or tangible needs, and providers who are able to achieve this at a competitive price are likely to be successful.

Hedvall and Paltschik (1989) confined themselves to just two dimensions of service quality: (i) willingness and ability to serve, and (ii) physical and psychological access. Attempting to investigate the subjective elements existing in service delivery, Lehtinen and Lehtinen (1991) suggested the existence of three dimensions of service quality related to the service product, consisting of: (i) physical quality, (ii) interactive quality, and (iii) corporate quality. Meanwhile, Rust and Oliver (1994) propose three key elements of service quality: (i) service products, (ii) service environment, and (iii) service delivery.

Johnston (1995) produced an extremely comprehensive and detailed list of the dimensions of service quality. His findings assert the existence of eighteen factors (i.e., dimensions): access, aesthetics, attentiveness/helpfulness, availability, care, cleanliness/tidiness, comfort, commitment, communication, competence, courtesy, flexibility, friendliness, functionality, integrity, reliability, responsiveness, and security. In spite of this exhaustive list, Johnston (1995) conceded that some of these dimensions
could be omitted and that the factors presented may be inadequate to specific service context. Table 3.2 provides a summary of these dimensions of service quality.
Table 3.2: Summary of Research on Dimensions of Service Quality

<table>
<thead>
<tr>
<th>Authors</th>
<th>No. of Dimensions</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sasser et al. (1978)</td>
<td>8</td>
<td>Substantive service, security, consistency, attitude, completeness, condition, availability, and timing.</td>
</tr>
<tr>
<td>(Grönroos, 1988)</td>
<td>3</td>
<td>Technical quality, functional quality and corporate image.</td>
</tr>
<tr>
<td>LeBlanc and Nguyen (1988)</td>
<td>5</td>
<td>Corporate image, internal organisation, physical support of the service producing system, staff-customer interaction, and the level of customer satisfaction.</td>
</tr>
<tr>
<td>Lindqvist (1988)</td>
<td>7</td>
<td>Behaviour of the personnel, consumption, accessibility, price level, the quality of the goods and entertainment services offered, opening hours, and buying accessibility and advertising quality.</td>
</tr>
<tr>
<td>Hedvall and Paltschik (1989)</td>
<td>2</td>
<td>Willingness and ability to serve, and physical and psychological access.</td>
</tr>
<tr>
<td>Rust and Oliver (1994)</td>
<td>3</td>
<td>Service products, service environment, and service delivery.</td>
</tr>
<tr>
<td>Johnston (1995)</td>
<td>18</td>
<td>Access, aesthetics, attentiveness/helpfulness, availability, care, cleanliness/tidiness, comfort, commitment, communication, competence, courtesy, flexibility, friendliness, functionality, integrity, reliability, responsiveness, and security.</td>
</tr>
</tbody>
</table>

*Note: (a) Although service quality is generally believed as a multidimensional structure, Cronin and Taylor (1992) reported in their SERVQUAL replication study that service quality is a one-dimensional structure.*

83
To summarise, various researchers have explored the constructs of service quality in a range of empirical contexts, and suggested quite different service quality dimensions. Because different service dimensions are likely to be found in different industries, researchers have suggested that it is incumbent upon the manager or researcher to develop multiple scale items to capture adequately a particular study context (Oliver, 1981: Bolton and Drew, 1994). The implications of these observations for this study are that SERVQUAL will need to be amended to reflect the particular circumstances of the Libyan public commercial bank sector. Such amendment will need to have regard to its characteristics as a banking system operating in a Muslim society, in a socially conservative Arab nation, within a transition economy only recently opened to the influences of competition and foreign ownership. This context should include recognition that while Libya is a Muslim country, Islamic banking institutions compliant with Sharia have never been a feature of the economy.

3.10 Service Quality Measurement

In the broad services sector businesses have recognised the increasing importance of service quality to their attempts to gain competitive advantage, and this has resulted in the development and use of a range of attribution based measurement techniques, which aim to measure service quality as it is perceived by the customer (Parasuraman et al, 1985; Cronin and Taylor, 1992). Despite this, the subject of conceptualising quality in a service environment, and the number of its dimensions, is still a research area subject to debate in the service marketing literature. However, researchers have generally adopted two main approaches: the expectancy-disconfirmation paradigm (SERVQUAL), and the perception only paradigm (SERVPERF).
3.10.1 The SERVQUAL Model

The work of Parasuraman et al. (1985, 1988) has had an enormous influence on research aimed at defining and measuring service quality. The original SERVQUAL model included two sections, each of which had 22 items designed to measure; a) customer expectations for various aspects of service quality; and b) customer perceptions of the service that was actually received from five different service categories: retail banking; credit cards; securities brokerage; long-distance telephone calls; and appliance repair and maintenance (Parasuraman et al., 1988). Their scale is based on the gap theory (already discussed), and suggests that customer perceptions of service quality are a result of differences between her/ his expectations of the performance of a general class of service providers and her/ his assessment of the actual performance of a specific firm within that class (Cronin and Taylor, 1992). The SERVQUAL scale originally assumed that customers normally employ ten dimensions when evaluating perceived service quality. Parasuraman et al. (1988) later collapsed these dimensions into five, as shown in section 3.10.

Based on these factors, a scale called SERVQUAL was developed (Parasuraman et al., 1988), which measures customer perceptions of service quality. This model works on the philosophy that customers typically assess service quality by comparing the service they have actually experienced (the perceived service quality) with the service, they desire or expect (their expected service quality). In other words, service quality involves a comparison of customer expectations with customer perceptions of actual service performance. Since Parasuraman et al. (1988) introduced the SERVQUAL instrument; many researchers have used, extended and developed this scale to study service quality in different sectors of the services industries (Avkiran, 1994; Buttle, 1996; Al Khatib
and Gharaibeh, 1998; Davies et al., 1999; Angur et al., 1999; Polatoglu and Ekin, 2001; Zhu, Wymer and Chen, 2002; Caruana, 2002; Cui et al., 2003; Jabnoun and Al-Tamimi, 2003; Wang et al., 2003; Kilbourne et al., 2004; Yavas et al., 2004; Arasli et al., 2005; Bennett and Barkensjo, 2005).

Although many studies have employed the SERVQUAL model as a framework for the measurement of service quality, criticism has also been directed at this model in the literature on services marketing. These criticisms can be summarised as follows:

3.10.1.1 Criticisms of the SERVQUAL Model

Parasuraman et al. (1988) initially stated that their five service quality dimensions were generic, and thus these dimensions represent a "skeleton" for all service industries. In contrast, however, several researchers have suggested that the dimensions of SERVQUAL are in fact contextual, and not capable of being universally applied (Carman, 1990; Buttle, 1996; Ekinci, 2002) and that they therefore need to be adapted to the context in which service under study is being evaluated (Babakus and Boller, 1992).

Carman (1990) attempted to investigate the ability of the SERVQUAL dimensions to be generalised through different services settings. He thus studied four service firms (a dental school patient, a business school placement centre, a tyre store, and hospital). Carman (1990) found the stability of the dimensions to be impressive, but was not satisfied that SERVQUAL could be applied generically across a wide range of services. He proposed that whenever a service was evaluated: (1) eight (as opposed to five) of the original ten dimensions should be retained until factor analysis indicated that they were not unique; (2) items defining dimensions should to be adapted or modified to the
particular context; and (3) the revised instrument should be tested for reliability and validity before being commercially applied.

Babakus and Boller (1992) performed an empirical study using the SERVQUAL instrument. The data were obtained from an electronics company and a gas company, leading them to conclude that the five dimensions suggested by Parasuraman et al. (1988) are problematic, and that in the kind of service under investigation, service quality is a one-dimensional rather than five-dimensional construct. They comment that the domain of service quality may be complex in terms of factors in some industries and very simple in others. Babakus and Boller (1992) therefore argued that the quantity of service quality dimensions would depend on the service being evaluated.

In addition, SERVQUAL has been criticised for foregrounding the functional dimension of service (within the service delivery process), while paying minimal attention to the technical elements (the outcome of the service process) (Buttle, 1996; Cronin and Taylor, 1992).

Several scholars, such as Cronin and Taylor (1992, 1994) and Teas (1993), argued that in terms of the disconfirmation paradigm, the application of SERVQUAL was not appropriate for measuring perceived service quality. Cronin and Taylor (1992, 1994) questioned the operational validity of SERVQUAL’s measurement of service quality, stating that it conflates customers’ attitudes and their satisfaction. They argue that SERVQUAL actually does not measure either customer satisfaction or service quality, but rather it appears, at best, as an operationalisation of only one of the many forms of expectancy-disconfirmation (Cronin and Taylor, 1994). Their research results indicated that: (1) performance based measures are better predictors of service quality than gap (perceptions minus expectations) measurements; (2) service quality is in fact an
antecedent of satisfaction, rather than the other way around, as suggested by Bitner (1990); and (3) satisfaction is superior to service quality in predicting customer purchase intentions (Cronin and Taylor, 1992).

Carman (1990) stated that there is little theoretical or empirical evidence supporting the relevance of the expectations-performance gap as the basis for measuring service quality (Carman, 1990). Carman also calls into question Parasuraman et al.'s collection of expectation data after a customer actually uses the service. He claimed that this should be done before using the service, even though this is rarely practical. Carman further maintained that even when this is done, expectations and perceptions showed little relationship to one another. He noted the importance of customer expectations, and laid down a challenge to future researchers to produce alternative methods and ways to collect and analyse expectation data (Carman, 1990).

Teas (1993, 1994) provided further criticism of the disconfirmation paradigm as a conceptual foundation, stating that it was a theoretical impossibility that performance levels which exceeded a consumers' ideal standard could be evaluated higher than those that were "ideal". Finally, from the perspective of measurement, there are three psychometric problems inherent in the use of a difference scale: which are designated reliability, discriminate validity, and variance restriction problems. Evidence was provided by Brown, Churchill and Peter, (1993) that the psychometric problems listed above are actually produced by using SERVQUAL; they suggest the use of non-difference score measures, which produce a higher level of discriminate validity.

Overall, Buttle (1996, p.10) listed several criticisms of SERVQUAL, on both theoretical and operational levels, they are summarised below:
(1) Theoretical:

- Paradigmatic objections: SERVQUAL basis as a disconfirmation paradigm rather than an attitudinal paradigm means that it fails to take account of existing economic, statistical and psychological theory.
- Gaps model: scant evidence exists that customers judge service quality in terms of gaps between performance and expectations.
- Process orientation: SERVQUAL is concerned with the process of service delivery, and fails to take sufficient notice of the outcomes of service encounters.
- Dimensionality: SERVQUAL's five dimensions are not universal; the number of dimensions which comprise service quality is contextual; items do not always load on to the expected (a priori) factors; and there is often a large amount of intercorrelation among the five dimensions.

(2) Operational:

- Expectations: The word 'expectation' is misleading; consumers use other standards apart from expectations in their evaluation of service quality; moreover, SERVQUAL does not take account of absolute service quality expectations.
- Item composition: four or five items are not capable of capturing the range of variables present within each of the service quality dimensions.
- Moments of truth: assessments by customers of service quality may vary from one moment of truth to another.
- Polarity: the reversed polarity of items in the scale causes respondent error.
- Scale points: the seven-point Likert scale has major methodological flaws.
• Two administrations: the necessity to administer the instrument twice causes boredom and confusion.
• Variance extracted: SERVQUAL provides reasons for a disappointing number of the total amount of item variances.

The validity and utility of SERVQUAL have generally been discussed in terms of its ability to reflect true service quality perceptions across a wide range of different industries and service sectors. The wider context in which services are delivered has been given less consideration, but it is necessary to remember no service is provided in a cultural vacuum, and customers and providers are both influenced by their past experiences and current values. In addition to a requirement to amend service quality dimensions by adding (or even subtracting) items, researchers have also to consider their approach to data collection, which needs to be sensitive and responsive if valuable data is to be collected. For example, the administration of questionnaire surveys must be conducted in full knowledge of how familiar such tools are to a particular study population, while questions of anonymity and data protection may also be extremely important.

3.10.1.2 SERVQUAL Applications

Although the SERVQUAL model has been criticized by many managers and academics alike, it has been applied in a variety of industrial, commercial and not-for-profit settings in general, such as tyre retailing (Carman, 1990) dental services (Carman, 1990), hotels (Saleh and Ryan, 1991), travel and tourism (Fick and Ritchie, 1991), car servicing (Bouman and van der Wiele, 1992), business schools (Rigotti and Pitt, 1992), higher education (Ford, Joseph and Joseph, 1993; McElwee and Redman, 1993), hospitality (Johns, 1993), accounting firms (Freeman and Dart, 1993), architectural...
services (Baker and Lamb, 1993), hospitals (Babakus and Mangold, 1992; Mangold and Babakus, 1991; Reidenbach and Sandifer-Smallwood, 1990; Soliman, 1992; Vandamme and Leunis, 1993; Walbridge and Delene, 1993), airline catering (Babakus, Pedrick and Richardson, 1993a), banking (Kwon and Lee, 1994; Wong and Perry, 1991), apparel retailing (Gagliano and Hathcote, 1994) and local government (Scott and Shieff, 1993). In addition, a number of Arabic and Islamic studies have used the SERVQUAL model to measure service quality in different sectors (e.g. Al Sahan, 1994; Yavas, Bilgin and Shemwell, 1997; Jabnoun and Al-Tamini, 2003; Mostafa, (2005); Ashfaq, Kashif and Muhammad, 2010).

As a result, in spite of the general acceptance of the applicability of SERVQUAL, it is necessary to test and refine the model still further to account for all these problems and identify the dimensions of such a complicated and abstract concept as service quality. Asubonteng et al. (1996) maintain that additional work is still required before a suitable measure of service quality is discovered. There is little doubt that the link between perception and expectation is a complex one, and many researchers have pointed out the difficulty for customers to remember their expectations after receiving a service, and for service quality measurements to accurately capture the differences between perceptions and expectations. This has led to a belief among some researchers that the gap between these elements should be excluded, and the sole focus should be on perceptions of performance.

Nonetheless, Parasuraman et al. (1991b, p.445), noted that “SERVQUAL is a useful starting point, not the final answer. SERVQUAL is more valuable when it is used periodically to track service quality trends, and when it is used in conjunction with other forms of service quality measurement.”
3.10.2 Performance-Only Measures (SERVPERF)

Cronin and Taylor (1992) suggest that SERVPERF is a more direct form of measurement technique compared to SERVQUAL. It attempts to overcome the problems associated with the use of disconfirmation models as a basis for measuring service quality. In SERVPERF, the respondent (customer) is required to rate the service provider's performance on a scale ranging from (1) strongly agree to (5) strongly disagree. Unlike SERVQUAL, it does not take into account the difference scores between expectations and perceptions, and only relates to the assessment of the post-consumption perceptions. The model is "an absolute rating of customer attitudes towards service quality" (Palmer, 2001, p. 228).

SERVPERF supports the body of research that challenges the inclusion of the expectations criterion, and instead favours a 'perceptions-statements instrument' while measuring service quality (Boulding et al., 1993). According to the model, an accurate expectations measure can only be obtained prior to the service encounter. Moreover, McAlexander, Kaldenberg and Koeing, (1994) argued that inclusion of an expectations measure reduces the content and discriminant validity of the measures. Given the advantages claimed for SERVPERF it is useful to compare it with the dominant instrument, and to consider some of the claims made for the superiority of SERVQUAL.

3.10.3 Support for SERVQUAL

Many of studies exist which support the various characteristics of SERVQUAL. Babakus and Boller (1992) offer verification for the metric's face validity, in addition to Brown et al. (1993). Asubonteng et al. (1996) support the claims made for its internal reliability and the extent to which the items of the scale constitute each dimension, and
Angur et al. (1999) favourably discusses SERVQUAL’s convergent and discriminant validity.

Angur et al. (1999) conducted a study into data collected from two major banks in India, and found that SERVQUAL provided a larger amount of diagnostic information than the SERVPERF scale, while there was no significant difference in the ability of the two measures to predict future customer intentions. Stafford et al. (1999, p.15) tested the “efficacy of four approaches of measuring service quality (SERVPERF, SERVQUAL, the log of ratio, and ratio) in the USA insurance industry”. They found the log of ratio and the ratio methods to be inferior to both the SERVPERF and SERVQUAL measures, while goodness-of-fit indicators proved the SERVQUAL scale to be the superior model in comparison with SERVPERF.

Gi-Du, Jeffrey and Kostas, (2002) write in favour of SERVQUAL’s ability to measure internal service quality and consider its dimensions as distinct and conceptually clear. This support for SERVQUAL’s ability to produce valid results raises questions of how it could be improved still further. As mentioned above, much discussion has surrounded the number of dimensions employed and the individual items that make up each dimension.

3.10.4 The Number of Dimensions Debate

Criticism has been raised with regard to the number of service quality dimensions SERVQUAL employs, particularly when a survey is conducted in an unusual service setting and/ or in a different country. Ford et al. (1993), in an empirical study, reached the conclusion that SERVQUAL’s dimensionality must be related to the country of application. Furthermore, Asubonteng et al. (1996) conducted a critical examination of
18 separate empirical studies into service quality, and concluded that the dimensions of quality were probably dependent on the particular service industry being studied.

In this respect, Imrie, Cadogan and McNaughton, (2002) propose interpersonal relations, a dimension important to Taiwanese customers, as not adequately addressed in SERVQUAL, while Sureshchander, Chandrasekharan and Anantharaman, (2002) emphasise the significance of both technological and human factors with bank customers in India. Other researchers such as Angur et al. (1999) and Wang et al. (2003) have also found the SERVQUAL dimensions to be inadequate in that they do not fully describe the service criteria important to customers in emerging markets.

Nevertheless, Parasuraman et al. (1991, p. 440) have offered explanations for the differences in service quality dimensions that appear in many SERVQUAL studies. They proposed that “respondents may indeed consider that the SERVQUAL dimensions are conceptually distinct, but if their evaluations of a specific company on individual scale items are similar across dimensions then fewer dimensions will result. On the other hand if their evaluations of a company on scale items within a dimension are sufficiently distinct, more than five dimensions will result”.

This claim that the dimensions of SERVQUAL are flexible and responsive suggests that it a tool capable of reflecting genuine customer perceptions in a variety of environments and industries, including one as important to both the individual and society as banking.

3.11 The Importance of Service Quality Measurement in the Banking Industry

The marketing concept states that the identification, anticipation, and retention of customers are the key to long-term survival and prosperity (Ranaweera and Prabhu, 2003). Banks, like any other service offering institution, cannot afford to lose customers
and market share through incompetent service as this could lead to poor revenue earnings and disappointed stakeholders. The financial implication of this could be disastrous for the long-term survival of such banks (Kaynak and Kucukemiroglu, 1992; Levesque and McDougall, 1996; Kaynak and Harcar, 2005). Nevertheless, it is much cheaper to design a good system of quality delivery and keep existing customers satisfied than to redesign a service several times due to poor quality (Ford, Joseph and Joseph, 1999; Duncan and Elliot, 2002). It is also likely to increase customers’ tendency to switch from banks of poor quality to ones that they believe will meet their quality expectations. This will subsequently lead to bad word of mouth campaigns against such banks (Martenson, 1985; Tan and Chua, 1986; Khazeh and Decker, 1992; Boyd, Leonard and White 1994; Veloutsou, Daskou and Daskou, 2004). Furthermore, because most banks’ products are closer to the service side of the service-good continuum, there are few tangible elements for customers to evaluate compared to other industries; as such, customer assurance and perception are highly affected by the intangible aspects of the bank’s business during the service encounter. In addition, if the banks’ services are not managed competently, the sense of assurance, empathy, responsiveness and reliability perceived by customers during the service encounter could be much below customers’ expectations and such services may undoubtedly be considered bad. Banks, therefore, need to manage the service quality dimensions very well in order to meet or exceed customer’s expectation (Parasuraman et al., 1988; 1991; 1993; Avkiran, 1999; Bahia and Nantel, 2000; Vargo and Lusch, 2004).

With regards to the tangible elements, such as the ‘servicescapes’ (Bitner, 1992), these need to be comfortable and to the customer’s liking. Furniture, cashier’s till layout, staff uniforms, cheque books, IT equipment, and the working conditions of ATMs etc need to be of acceptable standards that would appeal to potential and existing customers.
Customers tend to develop a mental picture of their service expectations by observing these cues. If customers observe some shortcomings from these cues, it could seriously affect their impression and expectation of the bank’s service quality and this may even cause them to use alternative or competing banks (Reichheld and Sasser, 1990; Ranaweera and Prabhu, 2003).

The first step is to identify customers’ quality needs, and then for the banks to identify these needs by the use of the instrument of the SERVQUAL models on a regular basis. Then, based on these findings, the banks could anticipate and identify customers’ service requirements proactively. The service offering could then be adapted to meet the needs of specific market segments. SERVQUAL therefore has the potential to confer real competitive advantages, provided proper care is taken to maximize the responsiveness of the chosen survey method.

3.12 Studies on Service Quality in the Banking Sector

There have been many empirical studies conducted on the subject of service quality in the retail-banking environment. The majority of these have sought to use the SERVQUAL model to measure service quality by replicating or adapting it (e.g. Blanchard and Galloway, 1994; Newman and Cowling, 1996; Athanassopoulos, 1997; Newman, 2001). A smaller number of studies have included Grönroos’s ideas on service quality (e.g. Howcroft, 1993; Holmlund and Kock, 1996; Ennew and Binks, 1999). New models of service quality have been developed by some studies in retail banking (e.g. Mersha and Adlaka, 1992; Avkiran, 1994). Studies of the application of SERVQUAL to retail banking have been published in North America, Australia, Hong Kong, the UK, and some Islamic and Arabic environments.
Avkiran (1994) initiated the BANKSERV model for the sole purpose of measuring customers’ service quality evaluation of Australian banks. This theorist contended that there is a strong link between a bank's service quality and customers’ satisfaction. There is little doubt that the BANKSERV model is indeed a generic form of the SERVQUAL model. The model measures banks’ service quality across four dimensions with the use of seventeen items. These dimensions are: staff behaviour, effective communication, trustworthiness or being credible, accessibility of ATM. Avkiran's (1994) research indicates that credibility is a combination of various attributes of staff behaviour, effective communication, the provision of functional ATM facilities. He further indicated that accessibility to various banks branches was still of paramount importance to customers despite the introduction of internet, telephone and mobile banking.

Commenting on the effectiveness of the BANKSERV model, Avkiran (1999) contended that the key advantage of the model was that it overcomes the major psychometric problems that are associated with the SERVQUAL model. In addition, the sentences are much more structured to prevent negative wordings, which theorists have been critical about in relation to the SERVQUAL model.

Al Sahan (1994) applied the gaps analysis model of Parasuraman and his associates to the banking sector in Alexandria in Egypt. This study aimed to test the extent of the perceived quality gaps from the point of view of the customers, and the importance of this in explaining the perceived quality of service and in identifying and analysing those organisational factors causing the gaps. The study indicated the existence of a gap between the customer's expectations of service quality and the management's perception of these expectations. This finding suggested the necessity of relying on marketing plans, with the customer at the centre. Such plans should be based on accurate data, collected from market research, concerning expectations and perceptions.
of service quality from the customer's point of view. Al Sahan has also concluded that the reliability dimension is the most important dimension in determining quality, followed by the dimensions of responsiveness and security. It is therefore essential to lay down the necessary guidelines based on an assessment of the relative importance of quality dimensions, and to encourage managers to maintain contact with customers.

An investigation into the relationship between service quality, customer satisfaction, complaint behaviour and commitment in the banking industry of Turkey was conducted by Yavas et al., (1997). Their study found customer contact to be a key element of high quality service delivery, and further discovered customer satisfaction to be determined to a significant extent by overall service quality, indicating that the success of service quality can be deduced from the contribution it makes to the attraction and retention of satisfied customers. The inclusion of this study of Turkey, an emerging economy with a predominantly Muslim population, is significant in that it stresses the importance of personal relationships and the face-to-face communication to the acquisition and retention of satisfied customers.

Mels, Boshoff and Nel (1997) focused their studies on three separate service sectors: banks, insurance brokers and motor repair service stations, employing an explanatory factor analysis, and reached the conclusion that the factor structure of the SERVQUAL instrument actually consisted of two empirical factors, which were: intrinsic service quality and extrinsic service quality, in contrast to the five factors as proposed by Parasuraman et al. (1988). Items included in intrinsic service consist almost exclusively of the actions of employees, either directly (responsiveness, assurance, and empathy) or indirectly (reliability), (in other words similar to the Nordic School’s interactive quality-Lehtinen and Lehtinen, 1982). On other hand, the item of extrinsic service quality consist of the tangible aspects of service delivery (similar to the Nordic School’s
technical quality- Grönroos, 1984, or physical quality- Lehtinen and Lehtinen, 1982). A two-dimensional model was produced by Mels et al. (1997) who contended that the two-factor solution was more capable of interpretation, and therefore superior. These results provided support to the Nordic School which, in the early 1980's, argued that service quality perceptions were largely determined by two, not five, dimensions. This raises an important question: Do customers place greater value on the feeling of having their cultural and emotional needs met by the service quality encounter, or is the efficient and timely processing of their banking needs sufficient? In many developed Western economies the answer to this question seems obvious, but the possibility remains that in other environments different values pertain, and that findings which indicate more or fewer dimensions of SERVQUAL actually indicate a completely different way of viewing service provision.

Taking the example of SERVQUAL applied to a developed economy, Llosa et al. (1998) studied the clients of a large French bank, and found no support for the hypothesis of unidimensionality suggested by Cronin and Taylor (1992, 1994). However, they also found a discontinuity in the minds of their respondents between the 22 items of the SERVQUAL scale, and the five SERVQUAL dimensions (except for the tangibles dimension). With the help of hierarchical cluster analysis, they found that partitions with five, four, or three clusters fitted the data better than SERVQUAL's five-dimension partition. As a conclusion, they arrived at a three-cluster partition: (1) enlarged tangibles; (2) contractual performance (reliability, competence); and (3) relation receptiveness and confidence.

Another study worth mentioning was the one conducted by Angur et al. (1999). Their research was conducted in India to examine the performance of an alternative instrument for measuring service quality in the banking industry. The researchers
gathered data from two major banks; an international bank and a major public bank. They were certain that these banks had wide and diverse numbers of customers that satisfied their research requirement. Their findings indicated that customers' perception of service quality was based on multiple dimensions, which were not in total conformity with the proposition of Parasuraman et al. (1985) of a five dimensional construct. Thus, the SERVQUAL instrument, in this study, was of a four dimensional structure, and the researches assert that from a practical point of view, the SERVQUAL scale provides greater diagnostic information than the SERVPERF scale which examined a performance-based measure of service quality by Cronin and Taylor, (1992). India being a very populous country has people with varying demographic, socio-economical and socio-cultural background. According to their findings, reliability and responsiveness were highly valued by Indian customers and played a very important role in the service quality perceptions. According to these theorists, their findings indicated that SERVQUAL was a superior instrument for measuring quality than SERVPERF, suggesting that SERVQUAL is appropriate for studies of service quality in the banking systems of emerging economies. However, efforts have also been made to design instruments specifically tailored to the banking industry.

Bahia and Nantel (2000) designed a model specifically for analysing banks’ service quality (BSQ). This BSQ model was intended to provide measurement of banking services quality to a high level of accuracy. This scale was originally tested in a study conducted in the banking industry of Canada. The study comprised of a hundred and fifteen respondents who were between the ages of eight and sixty. These theorists used the original ten dimensions of the SERVQUAL model instead of the collapsed five dimensions. They argued that these ten dimensions are much more applicable to various service industries, including banking, than the five dimensions. Their scale consisted of
six dimensions with thirty-one items which comprised of the elements of the marketing mix. These dimensions were (1) price, (2) access, (3) effectiveness and assurance, (4) tangibles, (5) reliability (6) service portfolio. Effectiveness implies how employees are able to inspire a feeling of courtesy and security. These are very important dimensions because as well as appreciating friendly staff, customers value the safe keeping of their assets highly. Access implies how fast and accurately the service was conducted. Service portfolio simply refers to the types of products available from the bank. Customers like choices and attached interest to services that offer preferences to them. Price on other hand refers to the worth of the service delivery in monetary terms. The remaining dimensions of reliability and tangibles attract the same definition provided by the SERVQUAL model, which has been discussed earlier in this literature review.

Due to the various items included in the BSQ model, it has proven better for the measurement of customers' perception of banks' quality than the SERVQUAL or Nordic models. The main reason for this is that the model was designed with the banking industry in mind. Additionally, the BSQ model has been tested across different countries and yet its results have been consistently effective, which suggests that BSQ is a useful tool (Spathis, 2002).

However, this is not to suggest that SERVQUAL has been found to have no validity in the banking sector, for example, Lassar et al. (2000) conducted research into the influence of service quality on customer satisfaction in private banking; their study sought to find the relationship between service quality and competitive advantage and customer loyalty. Their findings point to the existence of a relationship between those variables and the enormous effect of communication service quality in the banking sector, while SERVQUAL was found to possess a high level of validity and is recommended for measuring service quality in this sector particularly.
Othman and Owen (2001) undertook a study in the Kuwait Finance House (KFS). They suggested that a modified SERVQUAL model, which they called CARTER, should be employed by the management of Islamic banks to measure the level of service quality and the level of customer satisfaction resulting from it.

The modified model of SERVQUAL that was introduced by the researchers is based on the five dimensions selected from the original SERVQUAL dimensions, in addition to a new dimension specially tailored to suit the nature of the Islamic banking business, which they called Compliance. The Compliance dimension contains new items, which pertain to the banks' commitment to following Islamic principles such as the following: interest is forbidden to be either paid or taken on savings and loans; the provision of Islamic products and services; the provision of interest-free loans; and the availability of profit-sharing investment products. A revelation of the study's results was that the customers of the KFH evaluated the service quality dimensions compliance with Islamic Shari'ah law, and assurance and responsiveness, as being most important to them, while the dimensions of tangibles, reliability and empathy were rated least important.

Sureshchandar et al. (2002) attempted to develop a model that could particularly meet the requirement of the banking industry. They were interested in designing a model that would overcome the shortcomings of the SERVQUAL instrument in the banking industry. The main objectives of their study were: (a) to identify key elements that customers' used to determine service quality; (b) to design an appropriate and competent instrument that would suit the needs of the banking sector and one that would measure customers' service quality perception; (c) to ensure that the instrument conformed to accepted standards with establish analysis techniques in terms of validity and reliability.
Their instrument comprised of five dimensions, which were service personnel; the service product, (which is by definition the service being purchased); competency during the service encounter, the service environment or servicescape; and organisation brand image in terms of ethics. The dimensions of their instrument were derived from the SERVQUAL model, albeit with some additions and modifications. Their instrument proved useful in making service quality comparisons amongst competing firms (Sureshchandar et al., 2002), and it provides the flexibility of adding or deducting some of the dimensions to suit a given market setting. It also provided a means for improving service offerings in the banking sector.

Kayis, Kim and Shin (2003) executed an empirical study to compare customers’ perceptions of service in both South Korean and Australian banks. They were particularly interested in determining the key differences, similarities, and factors that influence these customers’ expectations and perceptions of banks service quality in two very different banking markets. Their findings indicated that banks within both countries, which had knowledgeable staff and excellent managerial competence indeed produced a good impact on customers’ quality perception. Their research demonstrates that managing the people side of the quality spectrum is important in terms of gaining competitive advantages. As with many of the studies outlined above, the findings of this study suggest that people are central to the provision of services, and that the service encounter where customer and service provider meet can have an enormous impact on customer perceptions.

In a study which attempted to measure the service quality of South Korean banks using a questionnaire focusing on three measures, expectations, perceptions of performance, and importance, sought the disconfirmation of the original SERVQUAL and the suggestion that its measurement scales could not be used directly in the banking sector.
in Korea. In their finding, they asserted that Parasuraman et al. (1988) psychometric dimensions and measurement items were not confirmed in context of banking in South Korea. In addition, the original SERVPERF was found to be of use only when the original 21 measure items were aggregated into five dimensions, suggesting a limited utility in terms of capturing the specific details of the construct of service quality from the perspectives of theoretical development and managerial practice. They also found, consistent with literature findings, that the factor tangibles showed cross-cultural consistency. Furthermore, although the measurement scales showed the viability of the individual items that have been retained, the dimensionality of the items differed from the original scales. As a further conclusion Cui et al. (2003) maintained that the SERVPERF scale was probably no better than SERVQUAL when applied to the banking sector in Korea.

The SERVQUAL instrument was also modified by Jabnoun and Al-Tamimi (2003), who developed an instrument to measure the service quality of commercial banks in the United Arab Emirates. Using 30 items taken from to the five dimensions of SERVQUAL, tests for reliability and validity indicated that the instrument produced only three dimensions, namely, human skills, tangibles and empathy. These dimensions were all significant in explaining the variations in overall service quality, but the most significant contributor to these variations was human skills rather than the other two dimensions. It was argued that these findings were consistent with Parasuraman et al. (1988), since the factor human skills was found to consist mostly of items taken from the original dimensions of reliability and assurance, while the two less significant dimensions consisted mainly of the items taken from the original dimensions of tangibles and empathy. The findings of this study also agree with other studies which highlight the importance of human interaction to the service process.
Al-Tamimi and Al Amiri (2003) compared the five dimensions of SERVQUAL between the two main Islamic banks of the UAE in order to measure the service quality of UAE Islamic banks. The results of this test showed that a positive and statistically significant relationship existed between overall service quality and the SERVQUAL dimensions in Islamic banks in the UAE. Therefore, this analysis revealed that the UAE Islamic banks' customers were satisfied with overall service quality. It was also found that empathy and tangibles were the most important dimensions whereas the reliability, responsiveness and assurance dimensions appear to be less important.

In a similar study, Jabnoun and Khalifa (2005) examined service quality in UAE banks. They developed a measure of service quality and used it to compare service quality between the UAE's conventional and Islamic banks. They developed a 30-item questionnaire including the five dimensions of SERVQUAL (five items of reliability, three items of responsiveness, four items of empathy, four items of assurance, and five items of tangibles). In addition to these, two new dimensions called values (six items) and image (three items) were added. Factor analysis resulted in four dimensions, which the researchers named: personal skills, reliability, values, and image. Results of regression analysis revealed that all four dimensions were significant in determining service quality in conventional banks. Moreover, it was determined that the most important of these dimensions were values and image. Conversely, only personal skills and values were found to be significant in determining perceptions of service quality in Islamic banks. These findings suggest that the customers of Islamic banks, who may be supposed to have strong religious regions for choosing these banks, gave a high degree of importance to their treatment on a personal level, and to the respect for their values and traditions shown by the bank and its employees.
Balestrini and Huo (2005) conducted research to distinguish key cross-cultural differences between retail banks customers of China and the United Kingdom in terms of service quality perception. They surveyed a total of a hundred and sixty customers of similar demographic background from both countries. The customers were in fact students at the University of Surrey. This university was deemed to provide a suitable research population as it has a large proportion of both Chinese and United Kingdom students. They used a stratified random sampling approach to select the studied population sample. These theorists claim that using the students was appropriate in that they formed a relatively homogeneous group with similar interest and behavioural pattern.

The questionnaire design was based on the SERVQUAL model (Parasuraman et al., 1988). The results indicated that students from both cultural backgrounds had high service quality expectations of their banks. However, British customers generally tended to have a higher expectation of service quality than their Chinese counterparts did.

In a study measuring the perceptions of service quality of Greek Cypriot bank customers, Arasli et al. (2005) examined the relationship between service quality, customer satisfaction and positive word of mouth, in the context of changes bank market dynamics following that country’s accession to EU membership. Responses were collected from 260-retail bank customers using to a Greek translation of the SERVQUAL instrument. The study used descriptive and factor analysis, and multivariate regression analysis to estimate the impact of the dimensions of service quality on overall customer satisfaction, and its subsequent effect on positive word of mouth. Arasli et al. stated that the SERVQUAL scale proved to be of a three-dimensional structure in their study. The results also suggested that the expectations of the respondents were not always met, and that the widest gap was found to be in the
responsiveness-empathy dimension. Reliability items affected customer satisfaction most, which consequently had a statistically significant (positive or negative) impact on word of mouth. The finding that a gap existed between expectations and delivery of items in the responsiveness-empathy dimension provides further evidence of the importance that customer’s place on a feeling that their bank is treating them as an individual with distinctive personal and cultural needs.

Tahir and Bakar (2007) undertook a study to investigate the level of service quality of commercial banks in Malaysia from the perspective of bank customers, and assessed their satisfaction with the services provided by the commercial banks. They used a questionnaire to collect data from a sample of 300 respondents located on Malaysia’s the East Coast region. Measurements employed were based on the widely accepted SERVQUAL model (Parasuraman et. al. 1985, 1988, 1991). The researcher used descriptive statistical analysis (mean and paired t-test) to evaluate the customer perceptions of the level of service quality within Malaysia’s commercial banks. The study examined the service quality gap by comparing customers’ expectations with their actual perceptions. The results of the study indicated that the overall service quality provided by the commercial banks was below customers’ expectations. Responsiveness was found to be the most important dimension to customers, followed by reliability, tangibility, assurance, and empathy. Although the findings showed that customers were somewhat satisfied with the overall service quality of the banks, the largest gap identified was in the dimension of responsiveness, further evidence that in an Islamic society and a developing economy, the importance of personal relationships is key.

Amin and Isa (2008) conducted a study to examine the relationship between service quality perception and customers’ satisfaction in Malaysian Islamic banking. Their scale started with the SERVQUAL measurement scales, but consisting of a six
dimensional structures: tangibles, reliability, responsiveness, assurance, and empathy, plus a compliance dimensions to measure Malaysian Islamic banking service quality. Respondents were the customers (Muslim and non-Muslim) who visited the bank counters. They had to have an account with one of the full-fledged Islamic banking and dual-banking systems. The results showed that the proportion of Malaysian Muslims' awareness of Islamic banking products and services was high compared to non-Muslim customers. Findings suggested satisfaction with the overall level of service quality provided by their banks among the majority of Islamic banking customers. These findings also indicate that the model of Islamic banking service quality dimensions should be standardised to consist of these six dimensions, and that they constitute good determinants of satisfaction. The relationship between service quality and customer satisfaction was significant.

Mengi (2009) compared customers' perceptions of service quality in the public and private banks of Jammu. The service quality of both the banks was measured using the SERVQUAL scale, which was used to determine different dimensions of service quality, followed by and chi-square analysis which was used to understand the impact of SERVPERF (service performance) dimensions (tangibility, reliability, responsiveness, assurance and empathy) on customer satisfaction. The study found that customers of public sector banks were more satisfied with their service quality than those of private sector banks.

In a study designed to evaluate the service quality in retail banking in the Middle East in general, and Qatar in particular, Hossain and Leo (2009) studied different levels of customers' perception regarding service quality. Their analytical study was principally based on primary data collected through a scientifically developed questionnaire. The questionnaire was administered in person to a sample 120 customers, chosen on a
convenient basis from four Qatari banks, i.e. Qatar National Bank, Doha Bank, Qatar International Islamic Bank, and Arab Bank. The design of the questionnaire was influenced by the studies of previous scholars such as Berry et al., Parasuraman et al., (1985) Zeithaml and Bitner, (1996) and Stafford, (1996). The results indicated that customers' perception was highest in the area of tangibles and lowest in the area of competence.

Kumar, Kee and Manshor (2009) undertook research to determine the critical factors to assess the level of service quality of banks by re-examining the SERVQUAL model, originally pioneered by Parasuraman et al. Furthermore, the technique of dominance analysis was used to measure the relative importance of each critical factor in closing up the overall service quality gap of banks. The sample of the study consisted of 308 bank customers from different parts of Malaysia. The data were collected using a structured questionnaire. According to the study's findings, the modified SERVQUAL model returned four critical factors (dimensions) produced by factor analysis. They were: tangibility, reliability, competence and convenience. The results also revealed that there were significant differences between the respondents' expectation and their perceptions. Among the four dimensions tested, tangibility had the smallest gap whereas convenience had the largest gap. The study results illustrated that the banking sector needs to become more competent by being more responsive, fulfilling the assurance expectations of their customers, and providing banking facilities more conveniently.

Ashfaq et al. (2010) conducted research to investigate the key determinants that affected customers' quality perception of both Pakistani Islamic and conventional banks. They acquired data from a total 720 respondents from various geo-demographic segments within Pakistan. The research employed a structured questionnaire written in English collecting data from customers of both Islamic and conventional banks in Pakistan.
Customers’ responses regarding service quality were gathered through a modified version of the SERVQUAL model developed by Parasuraman et al. (1988, 1991). Their study was mainly influenced by the large number of banks that have gained entry into Pakistan following the deregulation and liberalisation of the Pakistani banking sector. Islamic banks have become very popular due to their approach of not charging or paying interest on their products. This has resulted in immense competition between these banks and the traditional ones. The study demonstrated that customers of Islamic banks had better service quality perceptions of these banks than customers of the traditional banks. This finding suggests that either the customers of Islamic banks had different expectations from the customers on non-Islamic banks, or that the Islamic banks were meeting certain customer needs better than their non-Islamic competitors.

Sadek et al. (2010) undertook a study to determine the differences in quality perception amongst the Islamic Bank of Britain and the Cooperative bank’s customers. The key similarity between these two banks is that they are very ethical in their service offerings with Islamic Bank of Britain utilising Sharia principles in its banking service. The study focussed only on customers within the Leicestershire area of the United Kingdom. The researches adapted the SERVQUAL instrument to collect data across six dimensions namely; compliance, level of reliability, empathy, tangibles, responsiveness and finally assurance. Data received from customers through the distribution of a questionnaire were analysed by the use of SPSS (Statistical Package for the Social Sciences) software. This indicated that the key items of satisfaction of Islamic bank customers were: that no interest was taken or collected on loans and savings; that other products were based on the foundation of their faith; that they were served by courteous and polite staff; and that the bank was run on the concept of profit sharing. With regards to Cooperative bank customers, the items that ranked highest were: that the bank was run on ethical values,
that the bank paid attention to varying customers’ needs and wants; and that no financial support was given to nations that abused human rights laws. With regards to the key factors that led to customers’ satisfaction in both banks, these included: courtesy of staff, competent financial advice, attractive servicescape, staff knowledge and finally ease of access. This research outcome is very similar to other studies done by researchers in predominantly Islamic states, but what is perhaps interesting is that while the religious background of these two banks was different, the customers of both banks were attracted at least partly by the ethical stance they adopted to certain banking practices, suggesting that the customers were looking for something in their banks beyond mere financial competence and a wide range of products and services.

A summary of these studies on service quality that have been conducted in the banking sector is given in table 3.3 at the end of this chapter.

3.13 Culture and Its Effect on Service Quality

Theorists have argued that as customers’ assessment of service quality is the difference between the expected and perceived service quality (Parasuraman et al., 1985; 1988), the notion of service quality is likely to vary from one socio-cultural segment to another. It is a multifaceted construct that no two cultures are exactly unique. In some small countries, the cultural background of individuals may be classed as the same by ignoring slight differences. However, in large countries like the US, India, Russia etc. there is certainly heterogeneity of culture even within these nations (Hill, 2004).

In terms of the contemporary definition of culture, Tsoukatos and Rand (2007) declared, it to consist of socially conditioned patterns of human thought and behaviour, as was originally proposed by Taylor (1974). Culture consists also of possessions and fashions in thought, expressed by individuals as members of a society (Ferraro, 2002) while
Rokeach, (1973) considered cultural values to be the basic motivators in life and prescriptions for peoples' behaviour. This last definition has some relevance for a study taking into account cultural influence on perceptions of service quality, because the source of prescriptions on peoples' behaviour can be religious, cultural or even corporate, and the extent to which behaviours are forced on people, or people impose behaviours on their institutions is an area rich in speculative possibilities.

Moreover, culture is defined as “the collective programming of the mind which distinguishes the members of one human group from another” (Hofstede, 1980). Culture drives people’s perceptions, thoughts, wishes, and behaviour, and influences customers’ service quality perceptions through the service expectations it produces (Donthu and Yoo, 1998; Furrer, Liu and Sudharshan, 2000). Customers are interested in what their bank will do, and these “Will” expectations depend on the level of service generally available in a society, formed through its specific cultural characteristics. However, expectations of what a service “should” offer are influenced by the cultural characteristics of a set of customers, or in the case of this study what the customers of Libyan commercial banks believe their banks should do. Furthermore, service performance perceptions, filtered through the lens of culture (Liu, Furrer and Sudharshan, 2001) have been found to directly affect perceived service quality and satisfaction (Halstead, Hartman and Schmidt, 1994).

This conception of culture as a lens through which expectations and perceptions are filtered requires some consideration of the cultural characteristics of different societies and nations. Much of the research on the effects of culture on national characteristics is based on the work of Hofstede (1980, 1991). In his earlier works, culture is defined in terms of four dimensions which seek to capture the nature of inter-personal relationships within a country or nation, these are: Power Distance, Individualism/Collectivism,
Masculinity/Femininity, and Uncertainty Avoidance. He later added a fifth dimension, Long Term Orientation following a study conducted in East-Asian societies (Hofstede and Bond, 1988). A further identification of culture with nation was provided in Hofstede's studies of 1980 and 1991, which provided scores in the range 'high' or 'low' across the five dimensions for many countries in a number of regions around the world.

As an extension of Hofstede's (1980) theory, Donthu and Yoo (1998) conducted research into the influence of cultural orientation on the service quality expectations of customers. Using Hofstede's dimensions of culture combined with the dimensions of service quality derived from the SERVQUAL scale, they developed and tested certain hypotheses connected to the five dimensions of culture against the five service quality dimensions and measurements of overall service quality expectations. The limitation to this study was that it focused only on 6 out of a possible 25 relationships between the five quality dimensions and the five cultural dimensions. Their study shows that customers who scored highly in terms of power distance, uncertainty avoidance, and individualism had higher expectations of the quality of a service than customers with low scores in the same dimensions. With regard to individual service dimensions, the study found that customers with high scores for power distance had lower expectations in the dimensions of responsiveness and reliability than those customers who had low scores for power distance, while customers with high scores for uncertainty avoidance customers place more importance on tangibles than low uncertainty avoidance. Finally, customers who displayed a high degree of individualism had higher expectations within the dimensions empathy and assurance than customers who were more collectivistic.

In addition to the limitation in terms of the number of connections studied, Donthu and Yoo (1998) have a further crucial limitation, which is similar to that found in studies by Winsted (1997) and Mattila (1999), which is that they do not take account of
contingency variables. When using the dimension of power distance, this study failed to factor in whether it was dealing with weak or powerful customers; furthermore, when using the dimension of masculinity, their study failed to take account of a service was provided by a male or female employee; in addition, when using the dimension of uncertainty avoidance, they failed to draw a distinction between service situations which occurred frequently or infrequent. However, the study remains valuable because of the connection established between the wishes and needs of individuals and certain cultural characteristics, which have an influence on service quality. This influence is of interest to this study, because as shown above, expectations of service quality can be culturally determined, and it therefore seems likely that perceptions of actual service quality will have a cultural element.

A study conducted by Mattila (1999) investigated how a customer’s culture influenced their evaluation of complicated services. Her study focused on luxury hotels and sought to understand and compare the extent to which Western and Asian customers were willing to make a trade-off between their wish for personal service and their desire for a pleasant physical environment. Adding to Winsted’s (1997) study, Mattila provides a framework that explains cultural differences found in Western and Asian customers, particularly in terms of collectivism and individualism, power distance (Hofstede, 1980, 1991), and high-context as opposed to low-context communication (Hall, 1984). A limitation of the study was that it failed to provide a control group when dividing her sample into three categories: Westerners, Asian Chinese, and Asian Indian. In addition, these three groups of customers were only tested against a narrow set of service dimensions (hedonic dimension, physical environment, and personal service component). Mattila’s findings suggest that Western customers were more likely to base their judgements on the tangible cues derived from their physical environment than
were their Asian counterparts, and that hedonism in terms of the consumption experience was a more potent determinant of satisfaction for Western customers than it was for those from Asia. Put briefly, the study found that Western customers valued style over substance, and preferred instant gratification to delayed satisfaction. This is a broad generalisation, but the findings at least indicate that service quality is a subjective notion, and that certain patterns can be discerned among customers depending on their cultural background.

Further to the findings of Mattila (1999), a study by Furrer et al. (2000) suggests that service quality perceptions vary between cultural groups, and that these variations are to some extent determined by each group’s cultural position with regard to Hofstede’s dimensions. The study explicitly maps the relationship the cultural position of customers and their perceptions of service quality. The importance of the SERVQUAL dimensions is illustrated by their correlation with Hofstede’s cultural dimensions, and the study proves the that a number of relationships exist between the dimensions of SERVQUAL and cultural characteristics, namely: there was a significant and positive correlation between tangibles, power distance, and assurance; a significant and negative correlation between tangibles and power distance and empathy, responsiveness and reliability; a significant and positive correlation between individualism and responsiveness, reliability, tangibles and empathy; a significant and positive correlation between uncertainty avoidance and responsiveness, assurance, empathy and reliability; and a significant and negative correlation between uncertainty avoidance and tangibles.

3.14 Implications of the Literature to Libya

The choice of banking services in Libya as the subject of this study because this industry represents a vital component of the country’s economic infrastructure, and this
has the potential to make its findings more widely significant, particularly to other sectors and to other developing economies. The Libyan banking sector has seen a rapid expansion in its size and competitive complexity in relation to its past performance in recent years due to beginning of a process of privatisation and liberalisation of banks. in the opening up of the Libyan economy has resulted in attracting the interest of foreign investors and as a result there are now many new domestic and international companies now operating in this sector.

As stated above, one of the principal goals of the current study is to examine the service quality provided by Libyan public commercial banks from the viewpoint of their customers. It is therefore necessary that this evaluation of service quality in the public commercial banks should distinguish these banks from their competitors in this environment. The increase in competition as a result of the current liberalisation of the economy should enable service quality to become key differentiating factor for these banks, and a lever to establish competitive advantages that will increase their customers' satisfaction and retain their business. This will in turn enhance their market positions and profitability.

Certain conclusions can be drawn from the literature review, including the following:

- The extant literature focuses principally on Western and Far-Eastern countries (see for example: Ennew and Binks (1996) and Abdul Razak and Chong (2007).

- The literature review helps to form a structure for the study, and identifies the methods and general conclusions derived by previous studies that are of relevance to this study. The literature suggest that while it has been widely criticised for certain failings, SERVQUAL is a robust and flexible research instrument with the capacity to produce valuable insights into the service quality.
offerings of both different sectors and cultures. It is capable of being adapted to different research environments according to the focus the researcher wishes to adopt, and results which do not confirm the existence of the original five dimensions identified by Parasuraman et al. (1985) should not be regarded as a failing of the model, but rather as revealing something about the research context. Additionally, the study of previous research facilitated the achievement of some of the aims, and the analysis of the different methodologies and techniques previously used contributed to the researcher’s decision as to which was most appropriate to this study. The decision to exclude expectations from the research process and to use factor analysis to discover the data pattern of service quality dimensions was the result of previous studies, which have adopted this approach and produced valuable insights into their particular research context.

- A gap in the literature regarding empirical research in Libya has been identified, and there is justification in previous studies for using the extended SERVQUAL model, and a close reading of the literature enabled the researcher to identify certain items that could be added to the dimensions of SERVQUAL to reflect the Libyan banking industry’s particular cultural and social characteristics. This thesis aims to fill a gap in knowledge by being the first study in the banking sector to use this extended model to investigate the influence of culture on service quality in Libyan banking.

While the literature review has provided useful and interesting insights which contribute to the formation of a conceptual framework for the study, its impact on and benefit to the banking sector in Libya must also be considered, and factored into the research design: therefore, it is expected that this study will prove useful to managers and
executives responsible for designing service quality provision in Libyan commercial banks.

3.15 Summary

This chapter reviewed the relevant research and literature that forms the foundation for an understanding of service quality. It reviewed the substantial literature available on this subject, starting with the nature of service, which has been investigated by many researchers in different sectors. In addition, the general concept of quality and service quality was defined. Then, the importance of service quality, and the relationship between service quality and customer satisfaction was discussed. In this chapter, the conceptualization of service quality was discussed through focus on dimensions and models of service quality, leading to a description of the SERVQUAL model as the method which will be used in this research to investigate perceptions of service quality among Libyan customers.

This chapter also reviewed service quality in the banking sector in general, which included a number of studies on service quality in the banking sector in both developed and developing countries. This literature shows that the SERVQUAL model has been the dominant tool used in many of these studies. These overviews also examined culture and its effect on service quality. Finally, these results highlighted the paucity of this kind of study in developing economies, of which Libya is one. As a result of this paucity, this study employs a modified SERVQUAL scale, and as such is the first of its kind to investigate the Libyan banking sector through an evaluation of customer perceptions of service quality. Moreover, it is of value to Libya and other developing economies because most previous research on bank service quality has been conducted
among European and US banks and financial institutions. Hence, the importance of this study lies partly in its attention to banking institutions in a developing economy, Libya.

Chapter four will provide a detailed discussion of the issues with regard to research design and methodology taken into consideration by the researcher. It will also explain why certain methods of data collection were chosen, and describe the design of the data collection instruments.
<table>
<thead>
<tr>
<th>Authors</th>
<th>Dimensions of the study</th>
<th>Type of scale</th>
<th>Type of industries and place</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avkiran (1994)</td>
<td>Staff conduct, credibility, communication, and access to teller services.</td>
<td>Developed BANKSERV instrument, was adapted from SERVQUAL</td>
<td>Australian banks</td>
<td>The six dimensions conceptualized at the start with 27 items were empirically reduced to 17 items across four discriminating factors. BANKSERV overcomes the major psychometric problems that are associated with the SERVQUAL model.</td>
</tr>
<tr>
<td>Al Sahan (1994)</td>
<td>Based on SERVQUAL’s dimensions, the gap between the customer’s expectations of service quality and the management’s perception of these expectations.</td>
<td>SERVQUAL</td>
<td>Banking sector in Alexandria in Egypt</td>
<td>The reliability dimension was found to be the most important in determining quality, followed by the dimensions of responsiveness and security. The study also revealed a gap between management perceptions of customer expectations and the criteria laid down for service quality by management.</td>
</tr>
<tr>
<td>Yavas et al. (1997)</td>
<td>Based on SERVQUAL’s dimensions, and some items for Satisfaction and two questions for Complaint.</td>
<td>SERVQUAL</td>
<td>Turkish banking industry</td>
<td>Their findings indicated that good service quality resulted in fewer complaints, greater satisfaction, and customers’ loyalty.</td>
</tr>
<tr>
<td>Mels et al., (1997)</td>
<td>Consists of two empirical factor intrinsic and extrinsic service quality.</td>
<td>Applying SERVQUAL instrument</td>
<td>Bank sector</td>
<td>These results provide support for the Nordic School and suggest that service quality perceptions are principally determined by two not five dimensions.</td>
</tr>
<tr>
<td>Llosa et al. (1998)</td>
<td>SERVQUAL’s dimensions</td>
<td>SERVQUAL</td>
<td>French bank</td>
<td>An empirical study shows that one dimension, ‘Tangibles’ is clearly perceived followed by ‘Empathy’. The three other dimensions, ‘Reliability’, ‘Insurance’ and ‘Responsiveness’, are confused in the client’s mind.</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------</td>
<td>-----------</td>
<td>-------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Angur et al. (1999)</td>
<td>SERVQUAL’s dimensions</td>
<td>SERVQUAL and SERVPERF</td>
<td>India banking industry</td>
<td>Results support a multidimensional construct of service quality and suggest that the SERVQUAL scale provides greater diagnostic information than the SERVPERF scale. The five-factor conceptualization of SERVQUAL does not seem to be totally applicable, and no significant difference was found in the predictive ability of the two measures.</td>
</tr>
<tr>
<td>Bahia and Nantel (2000)</td>
<td>BSQ model consisted of six dimensions (1) price, (2) access, (3) effectiveness and assurance, (4) tangibles, (5) reliability (6) service portfolio, with thirty-one items.</td>
<td>Scale called Bank Service Quality (BSQ)</td>
<td>Banking industry of Canada</td>
<td>They suggested an alternative scale for measurement of perceived service quality. Also, purification and validation produced a six-dimension scale which covers a broader range of marketing variables than was the case with the original SERVQUAL dimensions.</td>
</tr>
<tr>
<td>Lassar et al. (2000)</td>
<td>Model specify the dimensions of both the SERVQUAL and Technical/ Functional Quality.</td>
<td>SERVQUAL and Technical/ Functional Quality</td>
<td>International private banking industry</td>
<td>The findings reflect the existence of a relationship between those variables and the enormous effect of communication on the formation of service quality in the banking sector.</td>
</tr>
<tr>
<td>Othman and Owen (2001)</td>
<td>Original SERVQUAL dimensions in addition to a new dimension called</td>
<td>CARTER</td>
<td>Kuwait Finance House (KFH)</td>
<td>The study revealed that the KFH’s customers evaluate service quality dimensions such as compliance with Islamic Shari'ah, assurance and</td>
</tr>
<tr>
<td>Source</td>
<td>Instrument/Methodology</td>
<td>Country/Industry</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Sureshchandar et al. (2002)</td>
<td>Their instrument comprised of five dimensions; service personnel, the service product, competency during the service encounter, the service environment and organisation brand image in terms of ethics.</td>
<td>Banking industry in India</td>
<td>Their instrument has been useful in making service quality comparison amongst competing firms. It also provides the flexibility of adding or deducting some of the dimensions to suit a given market setting. It provided a means for improving service offerings in the banking sector.</td>
<td></td>
</tr>
<tr>
<td>Kayis et al., (2003)</td>
<td>Several cultural, conceptual and practical dimensions, along with hypotheses testing were carried out for comparative analysis of TQM implementations in both Korean and Australian banking industries.</td>
<td>SERVPERF</td>
<td>Significant relationships and path links between perceived service quality, customer satisfaction and customer loyalty were found, as well as between TQM practices and employee satisfaction. These findings suggest that organisations can achieve long-term business success by focusing on the satisfaction of their customers.</td>
<td></td>
</tr>
<tr>
<td>Cui et al. (2003)</td>
<td>Based on SERVQUAL’s dimensions.</td>
<td>SERVQUAL and SERVPERF</td>
<td>Factor tangibles showed cross-cultural consistency. The items dimensionality differed from the original scales. The SERVPERF scale might not be superior to SERVQUAL when used in the banking sector in Korea.</td>
<td></td>
</tr>
<tr>
<td>Authors</td>
<td>Methodology</td>
<td>Measure</td>
<td>Customers</td>
<td>Findings</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>---------</td>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td>Jabnoun and Al-Tamimi (2003)</td>
<td>Use of 30 items belonging to the five dimensions of SERVQUAL.</td>
<td>Modified SERVQUAL</td>
<td>UAE commercial banks</td>
<td>The study found that the instrument had only three dimensions, namely, human skills, tangibles and empathy.</td>
</tr>
<tr>
<td>Al Tamimi and Al Amiri, (2003)</td>
<td>Five dimensions of SERVQUAL.</td>
<td>SERVQUAL</td>
<td>UAE Islamic banks</td>
<td>The UAE Islamic banks’ customers were satisfied with overall service quality. Empathy and tangibles were the most important dimensions whereas reliability, responsiveness and assurance dimensions appear to be less important.</td>
</tr>
<tr>
<td>Jabnoun and Khalifa, (2005)</td>
<td>A 30-item questionnaire including the five dimensions of SERVQUAL.</td>
<td>SERVQUAL</td>
<td>Conventional and Islamic banks in the UAE</td>
<td>The study found four dimensions: personal skills, reliability, values, and image. Personal skills and values dimensions were significant in determining service quality in Islamic banks.</td>
</tr>
<tr>
<td>Balestrini and Huo (2005)</td>
<td>Based on SERVQUAL’s dimensions.</td>
<td>SERVQUAL</td>
<td>British and Chinese students at the University of Surrey</td>
<td>The results indicated that students from both cultural backgrounds had high service quality expectation of their banks. Both British and Chinese males, and British and Chinese female did not have higher service quality expectations than each other.</td>
</tr>
<tr>
<td>Arasli et al. (2005)</td>
<td>Their study proved to be of a three-dimensional structure, these are: tangibles, reliability, and responsiveness-empathy.</td>
<td>SERVQUAL</td>
<td>Greek Cypriot bank customers</td>
<td>The results revealed three-dimensional structure; tangibles, reliability, and responsiveness-empathy. Reliability items had the highest effect on customer satisfaction.</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Topic Description</td>
<td>Methodology</td>
<td>Industry</td>
<td>Study Findings</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>------------------------------</td>
<td>-----------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Tahir and Bakar (2007)</td>
<td>Five dimensions of SERVQUAL.</td>
<td>SERVQUAL</td>
<td>Commercial banks in Malaysia</td>
<td>The results indicated that responsiveness was rated as the most important dimension followed by reliability, tangibility, assurance, and empathy.</td>
</tr>
<tr>
<td>Amin and Isa (2008)</td>
<td>Six dimensions; five of SERVQUAL tangibles, reliability, responsiveness, assurance, and empathy, plus compliance.</td>
<td>SERVQUAL plus the compliance dimension</td>
<td>Malaysian Islamic banking</td>
<td>The results showed that the majority of the Islamic banking customers were satisfied with the overall service quality provided by their banks. The relationship between service quality and customer satisfaction was significant.</td>
</tr>
<tr>
<td>Mengi (2009)</td>
<td>Based on SERVQUAL’s dimensions.</td>
<td>SERVQUAL + SERVPERF</td>
<td>Public and private banks of Jammu</td>
<td>The study found that customers of public sector banks are more satisfied with the service quality, than those of private sector banks.</td>
</tr>
<tr>
<td>Hossain and Leo (2009)</td>
<td>Four dimensions (reliability, competence, tangibles, and empathy).</td>
<td>SERVQUAL and other studies’ dimensions</td>
<td>Retail banking in Qatar</td>
<td>The results indicated that customers’ perception is highest in the tangibles area and lowest in the competence area.</td>
</tr>
<tr>
<td>Kumar et al., (2009)</td>
<td>Four critical dimensions as detected by factor analysis. They are: tangibility, reliability, competence and convenience.</td>
<td>Modified SERVQUAL model</td>
<td>Bank customers from different parts of Malaysia</td>
<td>The study findings revealed that four critical factors (dimensions) which are: tangibility, reliability, competence and convenience. Tangibility had the smallest gap whereas convenience had the largest gap.</td>
</tr>
<tr>
<td>Ashfaq et al. (2010)</td>
<td>Based on SERVQUAL model.</td>
<td>Modified version of SERVQUAL</td>
<td>Pakistani Islamic and conventional banks</td>
<td>Their study demonstrated that customers of Islamic banks had better service quality perceptions than customers of traditional banks.</td>
</tr>
<tr>
<td>Sadek et al. (2010)</td>
<td>Six dimensions; Compliance, Assurance, Reliability, Tangible,</td>
<td>The proposed scale is called SERVQUAL and comprises 33</td>
<td>Cooperative Bank (CB) and Islamic Bank of Britain</td>
<td>The study showed that the Compliance issues were very important for IBB customers, while the same cannot be mentioned for the CB customers.</td>
</tr>
<tr>
<td>Empathy and Responsiveness.</td>
<td>items named ‘CARTER’</td>
<td>(IBB) in Leicestershire, United Kingdom</td>
<td>who gave more importance to Empathy and Responsiveness. The results also demonstrated that the similarities were found where almost of the items in Assurance have a similar ranking in both of banks.</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 4  Research Methodology

4.1 Introduction

Research methodology refers to the procedures of collecting, organising and integrating data in order to solve a problem or answer a question (Remenyi et al., 1998). It has been described as "a voyage of discovery during which the researcher learns much about research methodologies as well as about the subject being researched, and may even learn something of him or herself" (Remenyi et al., 1998, p. 27). Although research methodology design is to be considered a very complicated task, it gives the researcher the ability to understand his or her research area, develop communication skills, and learn how to apply knowledge and experience to a new situation presented in a novel manner (Collis and Hussey, 2003). There are many approaches which need to be considered when undertaking research. Saunders, Lewis and Thornhill, (2003) describe the research process as layers of an onion that need to be peeled away in order to reach a decision regarding the research philosophy, approach, and strategy, within the constraints set by time restrictions and the data collection methods.

The following section (4.2) discusses the first stage, which is the philosophy of the research. It is followed by section 4.3, which provides a detailed discussion of the research strategy. Section 4.4 presents the research design. Section 4.5 compares quantitative and qualitative research methods, while data collection methods are discussed in section 4.6. Section 4.7 illustrates the questionnaire design. Section 4.8 deals with the population and sample of the research. This is followed by section 4.9, discussing issues of the validity and reliability of the research. Section 4.10 provides a detailed description of the techniques of statistical analysis used in this study. Finally, a summary and conclusions are contained in section 4.11.
4.2 Philosophical Position of This Research

According to Easterby-Smith, Thorpe and Lowe (2002), the main aim of scientific research is to explain and understand a particular phenomenon in our life. To do so, researchers should use an appropriate scientific paradigm within which they can understand the area of inquiry under consideration.

According to Healy and Perry (2000), a scientific research paradigm is an overall conceptual framework within which researchers work. More widely, a paradigm is a world view, or as defined by Deshpande, (1983, p. 101) "a set of linked assumptions about the world which is shared by a community of scientists investigating the world". Guba and Lincoln, (1994, p. 105) define a paradigm as "the basic belief system or worldview that guides the investigator". The philosophy of research is very important for researchers, and according to Easterby-Smith et al. (2002) there are at least three reasons for this. First, it can help to clarify the research design; in other words, establish what kind of data is wanted and how to gather and interpret it, in order to reach the appropriate solutions to the research question/problem. Second, it helps the researcher to decide which designs will or will not work, so aiding in an appropriate choice of methodology. Third, it may help the researcher recognise and even generate designs, which could be outside his or her past experience.

Moreover, the philosophy of research incorporates beliefs and assumptions regarding ontology (the nature of reality), epistemology (the relationship between the researcher and the object of research), and methodology (the process and procedures of research). A scholar’s personal philosophy of research will directly influence his or her selection of the research paradigm to guide the research (Ponterotto, 2002, p. 369).
Within social research, most approaches exist on a continuum between two opposite research paradigms, which are the positivist paradigm and the phenomenology or interpretivist's paradigm. Table 4.1 summarises the major characteristics of these extreme paradigms.

Table 4.1: Characteristics of Social Research Paradigms

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Positivism</th>
<th>Interpretivism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reality</td>
<td>• Objective, out there to be found.</td>
<td>• Subjective, in people’s minds.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Created, not found, interpreted differently by different people.</td>
</tr>
<tr>
<td>Science</td>
<td>• Based on strict rules and procedures.</td>
<td>• Based on common sense.</td>
</tr>
<tr>
<td></td>
<td>• Deductive.</td>
<td>• Inductive.</td>
</tr>
<tr>
<td></td>
<td>• Value free.</td>
<td>• Not value free.</td>
</tr>
<tr>
<td>Purpose of</td>
<td>• To explain social life.</td>
<td>• To interpret social life.</td>
</tr>
<tr>
<td>research</td>
<td>• To discover the laws of social life.</td>
<td>• To understand social life.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• To discover people’s meanings.</td>
</tr>
<tr>
<td>Common</td>
<td>• Experiments/ surveys: verification of hypotheses, chiefly quantitative</td>
<td>• Hermeneutical/dialectical: researcher is a “passionate participant”</td>
</tr>
<tr>
<td>methodologies</td>
<td>methodologies.</td>
<td>within the world being investigated. Chiefly qualitative methods</td>
</tr>
</tbody>
</table>

Sources: Sarantakos (1998, p. 40); Healy and Perry (2000, p. 119)

It is essential to review the critically distinct perspectives of these schools to determine which position between their opposing poles is an appropriate philosophy for the current study.

4.2.1 Positivism

Positivism predominates in the social sciences and assumes that independent facts about a single apprehensible reality can be quantitatively measured (Tsoukas, 1989; Guba and Lincoln, 1994). Thus, the data and its analysis are considered be value-free and that observation does not change because they are being observed. As Guba and Lincoln argue, researchers view the world through a “one-way mirror” (1994, p. 110).
However, a positivist perspective is inappropriate when approaching a social science phenomenon such as a marketing network which involves people and their real-life experiences, because treating human subjects as independent, non-reflective objects "ignores their ability to reflect on problem situations, and act on these" (Robson, 1993, p. 60).

Thus, positivists separate themselves from the world they study, while researchers within other paradigms acknowledge that they have to participate in real-world life to some extent so as to better understand and express its emergent properties and features (Healy and Perry, 2000). In the same spirit, Easterby-Smith et al., (2002, p. 28) describe the key idea of positivism as that "the social world exists externally, and that its properties should be measured through objective methods, rather than being inferred subjectively through sensation, reflection or intuition". A positivist approach is characterised by a number of distinguishing features; it is deductive, it seeks to explain causal relationships among the variables being studied, and links them to a certain theory. It frequently utilises quantitative data, it often uses large samples and it employs controls to allow the testing of hypotheses and the determination of relationships between variables, and it establishes the reliability and generalisability of data. Remenyi et al. (1998) argue that among the benefits of a positivistic approach are cost effectiveness and speed in data collection and ease of analysis (see also Easterby-Smith et al., 2002; Collis and Hussey, 2003; Sekaran, 2003; Saunders et al., 2003).

4.2.2 Interpretivism

The phenomenological or interpretivist paradigm emerged as a result of the criticism discussed above with the application of a wholly positivistic approach in the social sciences. Easterby-Smith et al. (2002, p. 29) argue that this philosophy "stems from the
view that 'reality' is not objective and exterior, but is socially constructed and given meaning by people". As they state, a phenomenological approach focuses on the subjective state of individuals by embracing the meaning rather than the measurement of social phenomena (Easterby-Smith et al., 2002). This approach advocates the use of qualitative methods that focus on generating hypotheses in order to illustrate and explain the phenomenon in its context. Researchers have characterised this philosophy as follows: it focuses on the meaning, rather than the measurement, of social phenomena, thus it records what people think and feel. It usually utilises qualitative data and employs small samples. In this context, Easterby-Smith et al. (2002, p. 42) have stated that qualitative studies often feel very untidy because "it is harder to control their pace, progress, and end points. There is also the problem that many people, especially policymakers, may give low credibility to studies based on apparently 'subjective' opinions".

This philosophy attempts to understand and explain why people have different experiences, rather than searching for external causes and fundamental laws to explain their behaviour. Furthermore, the researcher is acknowledged as not being independent of what is researched, but is a part of it. According to Remenyi et al. (1998), the weaknesses of this philosophy are that: large samples are required if results are to have credibility, and this may be costly and time consuming (see also Easterby-Smith et al., 2002; Collis and Hussey, 2003; Saunders et al. 2003; Hair et al., 2003).

In general, there are advantages and disadvantages to each of these extreme research philosophies. Table 4.2 shows the strengths and weaknesses of positivist and phenomenological philosophies.
Table 4.2: The Strengths and Weaknesses of Positivist and Interpretivism Philosophies

<table>
<thead>
<tr>
<th>Theme</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positivist (Quantitative</td>
<td>• Can provide wide coverage of a range of situations.</td>
<td>• Methods used tend to be rather inflexible and artificial.</td>
</tr>
<tr>
<td>paradigm)</td>
<td>• Can be fast and economical.</td>
<td>• Not very effective in understanding processes or the significance that</td>
</tr>
<tr>
<td></td>
<td>• Where statistics are aggregated from large samples, they may be of</td>
<td>people attach to action.</td>
</tr>
<tr>
<td></td>
<td>considerable of relevance to policy decisions.</td>
<td>• Not very helpful in generating theories.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Because of a focus on what is, or what has been recently, it may be</td>
</tr>
<tr>
<td></td>
<td></td>
<td>hard for policy makers to infer what changes may occur and what actions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>should be taken in the future.</td>
</tr>
<tr>
<td>Interpretivism (Qualitative</td>
<td>• Data-gathering methods seen as more natural than artificial.</td>
<td>• Data collection can be tedious and require many resources.</td>
</tr>
<tr>
<td>paradigm)</td>
<td>• Ability to look at change processes over time.</td>
<td>• Analysis and interpretation of data may be more difficult.</td>
</tr>
<tr>
<td></td>
<td>• Ability to understand people's meaning.</td>
<td>• Harder to control the pace, progress and end-points of the research</td>
</tr>
<tr>
<td></td>
<td>• Ability to adjust to new issues and ideas as they emerge.</td>
<td>process.</td>
</tr>
<tr>
<td></td>
<td>• Contribute to theory generation.</td>
<td>• Policy-makers may give low credibility to results from a qualitative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>approach.</td>
</tr>
</tbody>
</table>

*Source: Amaratunga et al., (2002, p. 20)*

Importantly, between these two extremes, there is a growing body of philosophical approaches to research which embrace a middle ground such as realism and postpositivism (May, 1993; Miles and Huberman, 1994; Lincoln and Guba, 2000).

4.2.3 Realism

Realism, as a philosophical paradigm, has elements of both positivism and constructivism (Healy and Perry, 2000). While positivism is concerned with a single, concrete reality and interpretivism with multiple realities, realism attempts to collect multiple perceptions about a single, mind-independent reality (Healy and Perry, 2000).
The concept of reality embodied within realism is thus one extending beyond the self or consciousness, and which is not wholly discoverable or knowable. Rather than being supposedly value-free, as in positivist research, or value-laden as in interpretive research (Lincoln and Guba, 1985), realism is instead value-cognisant; this means that it is conscious of the values of human systems and of researchers. Realism recognises that perceptions have certain plasticity (Churchland, 1979) and that there are differences between reality and people’s perceptions of reality (Bisman, 2002).

Within the realism paradigm, the world can be distinguished as having the three domains of reality which are connected with mechanisms, events, and experiences (Bhaskar, 1978). In more detail, the three domains are the real domain, consisting of the processes that generate events, in which generative mechanisms or causal powers exist independently with a tendency to produce patterns of observable events under contingent conditions; the actual domain in which patterns of events occur, whether they are observed or not; and the empirical domain, in which experiences may be obtained by direct observation (Tsoukas 1989 p. 553; Outhwaite 1983, p. 322; Bhaskar 1978, p. 13). The discovery of these observable or non-observable structures and mechanisms that underlie events and experiences is the goal of realist research (Tsoukas, 1989). Given this complexity of their social science world, the knowledge that realism researchers obtain “is considered real but fallible” (Wollin, 1995, p. 80).

A development of the realist research philosophy which it is important to discuss at this stage is critical realism. According to Dobson (2002), the critical realist agrees that the knowledge of reality is a result of social conditioning and, thus, cannot be understood independently of the social actors involved in the knowledge derivation process. However, Dobson takes issue with the belief that the reality itself is a product of this knowledge derivation process. The critical realist asserts that “real objects are subject
to value laden observation”; with reality and the value-laden observation of reality operating in two different dimensions, one intransitive and relatively enduring; the other transitive and changing (Krauss, 2005).

Within a critical realist framework, both qualitative and quantitative methodologies are seen as appropriate for researching the underlying mechanisms that drive actions and events (Healy and Perry, 2000). Methods such as case studies and unstructured or semi-structured in-depth interviews are deemed appropriate within the paradigm, as are statistical analyses, such as those derived from structural equation modelling and other techniques (Bisman, 2002; Perry, Alizadeh, and Riege, 1997). With realism, the apparent dichotomy between the quantitative and the qualitative is therefore replaced by an approach that is considered appropriate given the research topic of interest and level of existing knowledge pertaining to it (Krauss, 2005).

The realist paradigm appears to be a relevant paradigm for qualitative researchers in researching markets because of the nature of its reality, the required relationship between reality and the researcher, and the related methodologies.

4.2.4 Postpositivism

Discontent with the axioms of positivism led to the emergence of postpositivism as a new paradigm in the post Second World War era (Borg and Gall, 1989; Crotty, 1998; Guba and Lincoln, 1994; Johnson and Onwuegbuzie, 2004). Postpositivism contends that there is a real and objective reality but it acknowledges that this reality is only imperfectly and probabilistically apprehensible. Denzin and Lincoln (2000, p. 9) point out that “postpositivism relies on multiple methods to capture as much of reality as possible”. Thus, postpositivism accepts the theory-laden and value-laden quality of
observation and agrees that "it is possible to acquire knowledge about phenomena not directly observable by the senses" (Borg and Gall, 1989, p. 21).

Although, stemming from the traditional philosophical school, postpositivism shares the problem of quantification, addresses the appropriateness of `quantifying' social phenomena, and applies the techniques to different contexts such as perceptions: areas that are not investigated within the pure positivist paradigm (Zhao, 2007).

Postpositivism critically reviews the fundamental stance of positivism, acknowledging the assumption that the world may be objective and external but care is needed to study knowledge (Phillips and Burbules, 2000 cited in Creswell, 2003). This indicates that postpositivists broadly accept the existence of an objective world with careful consideration. Additionally, this critical perspective is in response to the problem of quantification, and whether it is appropriate to quantify social phenomena (Zhao, 2007).

Therefore, postpositivist researchers accept one of the assumptions of the phenomenologist: the understanding of reality is structured and constructed by human beings (Tashakkori and Teddlie, 2003). This position influences the nature of research: it is affected not only by the researcher, but also by measurement, and the 'subjects' involved in that research (Zhao, 2007).

4.2.5 The Research Philosophy Most Appropriate to the Study

This study aims at testing and/or extending the existing knowledge about the cross-cultural/cross-sectional application of a service quality measurement instrument (SERVQUAL) in an Arabic context/culture. The study, in particular, seeks to apply a cross-sectional study to examine the validity and reliability, and the ability to replicate
the modified SERVQUAL model and to examine of the effects of culture on service quality in the Libyan banking sector.

Although the realist paradigm seems a more acceptable paradigm in research in marketing because it has elements of both positivism and constructivism, the researcher, with consideration to existing service quality literature, as explained below, adopted a postpositivist paradigm as the theoretical research position. The adoption of this paradigm affected the literature search, research strategy, research nature, research design and limitations.

To achieve its aims the current study employed a well-established quantitative technique as the main approach to the collection of the appropriate empirical data in the Libyan banking sector, which were then analysed through a range of statistical methods. In two closely related studies, Hussey and Hussey, (1997) and Collis and Hussey, (2003) assert that it is quite usual for research into business subjects to employ a mixture of approaches, especially in terms of their collection and analysis of data methods. They further suggest that positivism is the dominant paradigm in business research, meaning that researchers are not required to expend their efforts justifying the methodology they adopt. A phenomenological paradigm, by contrast, often requires considerable research, and space within the study itself, for researchers to justify the methodology adopted. Positivism fits well with the adoption of a quantitative approach and in terms of analysing numerical data and applying statistical tests, Hussey and Hussey (1997, p. 20) contend that quantitative research is, “an objective approach which includes collecting and analysing numerical data and applying statistical tests”.

The postpositivist perspective (and a quantitative approach) seems to be appropriate in this study for certain reasons. Firstly, because this research focuses on an instrument
devised by the North American School (SERVQUAL) to measure service quality in an Arabic context, it is logical to follow the same paradigm as this school in order to ensure good results by the adoption of this model. Secondly, previous studies in a similar area have utilised the same quantitative method as an appropriate way to achieve the required objectives (e.g. Al Khatib and Gharaibeh, 1998; Joseph, McClure and Joseph, 1999; Sathye, 1999; Abdelaziz, 2001; Jamal and Naser, 2002; Jabnoun and Al-Tamimi, 2003; Yavas et al., 2004). The final reason lies behind the issue of generalisibility of the results. Saunders, Lewis and Thornhill, (2007, p.118) argued that “in order to be able to generalise statistically about regularities in human social behaviour it is necessary to select a sample of sufficient numerical size”. In this study, the quantitative method of survey was considered as the research strategy (design) for data collection. A survey strategy (design) is one of the most common methods employed in marketing and social research for collecting data from a large sample, allowing researchers to generalise their results into the study’s population. This study has a sufficient sample size (N=404) which will help in generalising the results in the Libyan context.

4.3 Research Strategy

In the field of research into social science there are many strategies which a researcher may adopt. Remenyi et al. (1998, p 44) point out that research strategy is a way of going about one’s research, embodying a particular style and employing different research methods. In other words, it was defined as “the direction of the research including the process by which the research is conducted”. According to Yin (2003), the research strategy should be chosen as a function of the research situation. In general, it refers to different ways of collecting and analysing empirical evidence relating the research
interest. A number of issues have been considered in determining the optimum research strategy to satisfy the study aim and objectives, as follow (Remenyi et al., 1998; Saunders et al., 2003; Yin, 2003):

- The scope and nature of data required to move a theoretical assumption and concept into a particular methodology;
- The resource constraints such as time and financial budget (cost) required to undertake the study; and
- The researcher's personal experience, knowledge and skills.

As mentioned above, there are many research strategies, including experiment; case study, survey, and ethnography, (Remenyi et al., 1998; Leedy and Ormrod, 2001; Saunders et al., 2003; Sekaran, 2003; Yin, 2003; Hair et al., 2003). Each strategy has its own specific approach to collecting and analysing empirical data, and therefore each one has its own advantages and disadvantages. Most of these strategies were considered to be inappropriate for the aim and objectives of this research. For instance experiments, which fall under the positivist research approach, are normally used in natural science studies, and typically involve two or more experimental groups and a control group. Two main features of this method are manipulation and control. One drawback of this method is that a laboratory setting often fails to take account of variables found in the real world, and have to be carefully designed to capture the detail of human behaviour (Collis and Hussey, 2003).

On the other hand, and because of the limitation of the researcher's time, an ethnographic approach seemed to be an inappropriate strategy because it requires the researcher to be a full-time member of a work group as well as doing the research, and
involves direct participation in the activities of that particular workplace (Collis and Hussey, 2003).

Yin (2003) pointed out that the case study approach is preferable for questions relating to ‘why’, ‘what’ or ‘how’, because the researcher has ‘no control over events’ and such questions deal with operational links needing to be traced over time, rather than by frequency “snapshot”, and will focus on a contemporary phenomenon within a real-life context. In business studies, a common case study subject is a company or parts of a company, but it can also be other things, such as a group of people or event. Some drawbacks of using this strategy include difficulties in finding organisations that are willing to participate in the study; and the fact that it is difficult to understand the events in isolation at a particular period of time. Furthermore, case studies have been described as very time consuming and costly (Collis and Hussey, 2003; Saunders et al., 2003).

Surveys are generally part of a positivist or postpositivist approach to research. Although they have some weaknesses, such as low response rate and possible ambiguities in the questions, the advantages of a survey strategy suggested it was the appropriate methodology in this case. Indeed, surveys are the most popular and commonly used method in business and management research (Remenyi et al., 1998; Saunders et al., 2003). This strategy “draws most of its data from the present, and the researcher carries it out in order to establish people's views of what they think, believe value or feel, in order to discover these views for their own sake, or to support an argument that the researcher is presenting, sampling a population of potential respondents in order to generalise conclusions more widely” (Jankowicz, 2000, p 222).
The advantages of a survey strategy are considerable and are given in brief (Oppenheim, 1992; Jankowicz, 2000; Leedy and Ormrod, 2001; Easterby-Smith et al., 2002; Collis and Hussey, 2003; Saunders et al., 2003) below:

- It is a highly economical method since a large amount of data can be collected from a large number of people (big sample). It enables the researcher to collect a significant amount of data in an efficient manner;
- The survey method is a popular and common strategy in business and marketing research, as it allows for the collection of a useful amount of data from a sizable population;
- The data collected from the survey is from a standardised questionnaire, and it is therefore relatively easy to make comparisons and employ statistical analysis; and
- It is easy for most people to understand.

These advantages allow this study to collect data from a large amount of people in a manageable period of time, while also allowing sufficient flexibility to modify the SERVQUAL instrument to include items expected to reflect the particular characteristics of service quality in Libya. While the choice of appropriate research strategy is important and should not be made without a considerable amount of thought as to how the research question/problem can be answered/solved with the resources available to the research (Remenyi et al., 1998), a researcher has also to consider the particular circumstances pertaining in the research environment when designing the research instrument.

Because the current study adopts a quantitative approach, in order to collect answers from a large sample of customers through a questionnaire, the best choice of research
strategy seems to be a survey. Survey instruments are used extensively within service quality research in general, and especially when customer perceptions of service quality are being investigated. Providing the sample can be shown to be representative of the whole population, the findings from the survey can be generalised in order to understand more about the population.

4.4 Research Design

Research design concerns the planning of scientific inquiry, and the development of a strategy for finding out something. Churchill and Brown (2004, p. 4) define a research design as "the framework or plan for a study used as a guide in collecting data and analysing it." It is the blueprint that is followed in completing a study. Research design, therefore involves a number of interrelated decisions that each researcher must take in order to answer his/her question(s) and solve a particular problem(s) under investigation (Sekaran, 2003).

Sekaran (2003) and Saunders, Lewis and Thornhill, (2000) suggest three general categories of research: exploratory, descriptive and explanatory or hypothesis testing; characteristics of these categories are illustrated in table 4.3 below:-
Table 4.3: Categories of Research

<table>
<thead>
<tr>
<th>Exploratory</th>
<th>Descriptive</th>
<th>Explanatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Become familiar with the basic facts, setting and concerns.</td>
<td>• Provide a detailed, highly accurate picture.</td>
<td>• Test a theory’s predictions or principles.</td>
</tr>
<tr>
<td>• Create a general mental picture of conditions.</td>
<td>• Locate new data that contradict past data.</td>
<td>• Elaborate and enrich a theory’s explanation.</td>
</tr>
<tr>
<td>• Formulate and focus questions for future research.</td>
<td>• Create a set of categories or classify types.</td>
<td>• Extend a theory to new issues or topics.</td>
</tr>
<tr>
<td>• Generate new ideas, conjectures, or hypotheses.</td>
<td>• Clarify a sequence of steps or stages.</td>
<td>• Support or refute an explanation or prediction.</td>
</tr>
<tr>
<td>• Determine the feasibility of conducting research.</td>
<td>• Document a causal process or mechanism.</td>
<td>• Link issues or topics with a general principle.</td>
</tr>
<tr>
<td>• Develop techniques for measuring and locating future data.</td>
<td>• Report on background or context of a situation</td>
<td>• Determine which of several explanations is best.</td>
</tr>
</tbody>
</table>

Source: Adapted from Newman (2000, p. 22)

Each research study has a specific (distinguishing) objective, and consequently, each of these categories has its own characteristics and components in terms of hypotheses to be formulated, study settings, and the data collection method(s) to be used.

The present research falls into two of these categories. The exploratory research was conducted by reviewing the literature on service quality in order to define terms and concepts relating to external service quality. Reviewing the service quality literature also helped to determine any gaps in the literature, further define the research problem, and develop the conceptual framework of this study. In addition, it is exploratory in nature since it attempts to identify shortfalls and strengths in retail banking service quality through an investigation into customers’ ranges of attitudes; in addition, it is descriptive in nature as it attempts to build assessments of service quality profiles of customers based on the bank they principally use and their demographic characteristics.
Based on the previous discussions so far, this quantitative study will use a cross-sectional survey design to collect the relevant data for understanding the subject of service quality in the Libyan context. The cross-sectional survey research design entails the collection of data at a single point in time in order to collect a body of quantitative or quantifiable data in connection with two or more variables (usually more than two), which are then examined to detect patterns of association (Bryman, 2001, p. 42). A major tool for collecting the relevant data was the questionnaire. It was distributed to a sample of customers of Libyan banks to collect the relevant data necessary to achieve the purpose of this study. The choice of the SERVQUAL instrument (albeit modified) and a statistical approach to data analysis provides the study with a rigour which makes it comparable with previous studies conducted in different contexts. Such an approach sets limits on what a study is capable of saying, but allows it to say them with more certainty. Similarly, the choice of a quantitative or qualitative method involves the trade-off of certain advantages and disadvantages.

4.5 Quantitative Versus Qualitative Research Methods

According to Creswell (2003), research can be categorised into two distinct types: qualitative and quantitative research. The methodology adopted by the researcher has a large bearing on the choice of quantitative or qualitative research methods, and these methods must be matched with appropriate tools to facilitate the collection, analysis and interpretation of the research data. Certain research aims lend themselves to one method or the other, but sometimes they can be complimentary, especially in a complex real-world situation involving both measurable factors and those which are a matter of opinion, and as a result, researchers are increasingly designing study methods that take advantage of some of the most positive benefits of both approaches (Hussey and
Quantitative research can be defined as methods that primarily seek to express information numerically (Remenyi et al., 1998). In quantitative research, the researchers, as subjects, are seen as distant from the objects of investigation (Dachler, 1997). The quantitative approach places an emphasis on the structural issues of measurement and analysis of the relationships between certain variables and their effect on certain processes (Van Maanen, 1979; Denzin and Lincoln, 2000).

On the other hand, the qualitative approach is often small-scale, and aims to obtain a richness of detail rather than statistical generalisations. It also aims for detailed description and understanding of the phenomenon under investigation by way of observation and involvement (Van Maanen, 1979; Bryman, 1992). Furthermore, qualitative research is a method that involves collecting, analysing, and interpreting data by observing what people do and say (Creswell, 2003). In fact, qualitative research focuses on understanding phenomena and describing both the meaning and implications of events (Carson and Coviello, 1996). It is also recognised that as a participant in the research process the researcher will necessarily have some impact on the nature of the research and its outcomes.

Bryman (1992) argues that subjectivity, flexibility, lack of rigorous experimental control and determinism are mostly associated with qualitative data collection and analysis, which result in limiting their application to certain types of research. This study aims to collect impressions of service quality, but the population and the choice of research instrument (SERVQUAL) meant that the more rigorous approach of quantitative data collection was required.
According to Lee (1992) one of the most fundamental distinctions often stated is that the quantitative approach is objective and the qualitative approach is subjective. Moreover, qualitative research is concerned with observation, description and generation of hypotheses, as a contrast to positivist traditions. In addition, McDaniel and Gates (2002) outlined some more differences apparent in Table 4.4.

Table 4.4: Qualitative vs. Quantitative

<table>
<thead>
<tr>
<th></th>
<th>Qualitative approach</th>
<th>Quantitative approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of questions</td>
<td>Probing</td>
<td>Limited probing</td>
</tr>
<tr>
<td>Sample size</td>
<td>Small</td>
<td>Large</td>
</tr>
<tr>
<td>Amount of information</td>
<td>Substantial</td>
<td>Varies</td>
</tr>
<tr>
<td>Requirements for</td>
<td>Interviewer with</td>
<td>Interviewer with</td>
</tr>
<tr>
<td>administration</td>
<td>special skills</td>
<td>fewer special skills</td>
</tr>
<tr>
<td>Type of analysis</td>
<td>Subjective, interpretive</td>
<td>Statistical, summation</td>
</tr>
<tr>
<td>Hardware</td>
<td>Tape recorders,</td>
<td>Questionnaires,</td>
</tr>
<tr>
<td></td>
<td>projection devices,</td>
<td>computers, printouts</td>
</tr>
<tr>
<td></td>
<td>video, recorders,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>pictures, discussion guides</td>
<td></td>
</tr>
<tr>
<td>Degree of reliability</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Type of research</td>
<td>Exploratory</td>
<td>Descriptive or Causal</td>
</tr>
</tbody>
</table>

Source: Adapted from McDaniel and Gates (2002)

The discussion above proved valuable to the researcher when deciding on the type of research method to be used for the purposes of this research. Finally, the researcher decided to use a quantitative research method in the present study.

4.6 Data Collection Methods

Having made the decision to collect quantitative data, the researcher faced the dilemma of deciding the appropriate data collection method. Data collection methods are an integral part of the research design, and there are several data collection methods; each has its own advantages and disadvantages, as table 4.5 shows:-
Table 4.5: Advantages and Disadvantages of Interviews and Questionnaires

<table>
<thead>
<tr>
<th>Mode of Data Collection</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
</table>
| Personal or face-to-face Interviews | - Can establish rapport and motivate respondents.  
- Can clarify the questions, clear doubts, add new questions.  
- Can read nonverbal cues.  
- Can use visual aids to clarify points.  
- Rich data can be obtained.  
- Computer assisted personal interviewing and reponses entered in a portable computer. | - Takes personal time.  
- Costs more when a wide geographic region is covered.  
- Respondents may be concerned about confidentiality of information given.  
- Interviewers need to be trained.  
- Can introduce interviewer biases.  
- Respondents can terminate the interview at any time. |
| Telephone Interviews | - Less costly and speedier than personal interviews.  
- Can reach a wide geographic area.  
- Greater anonymity than personal interviews.  
- Can be done using computer assisted telephone interviews. | - Nonverbal cues cannot be read.  
- Interviews will have to be kept short.  
- Obsolete telephone numbers could be contacted, and unlisted ones omitted from the sample. |
| Personally Administered Questionnaires | - Can establish rapport and motivate respondent.  
- Doubts can be clarified.  
- Less expensive when administered to a group of respondents.  
- Almost 100% response rate assured.  
- Anonymity of respondent is high. | - Organisations may be reluctant to give up company time for the survey with groups of employees assembled for the purpose. |
| Mail Questionnaires | - Anonymity is high.  
- Wide geographic regions can be reached.  
- Token gifts can be enclosed to seek compliance.  
- Respondent can take more time to respond at convenience.  
- Can be administrated electronically, if desired. | - Response rate is almost always low; a 30% rate is quite acceptable.  
- Cannot clarify questions.  
- Follow-up procedures for non-responses are necessary. |
| Electronic Questionnaires | - Easy to administer.  
- Can reach globally.  
- Very inexpensive.  
- Fast delivery.  
- Respondents can answer at their convenience, like the mail questionnaire. | - Computer literacy is a must.  
- Respondents must have access to the facility.  
- Respondent must be willing to complete the survey. |

Source: Adapted from Sekaran (2000, p. 250)
The choice of data collection method involves a series of compromises between competing advantages and restrictions such as those illustrated in the table above, including such as available budget, time frame of research, type of data required, research context, etc. Considering these factors, and based on table 4.5, it was evident that using a questionnaire was the most suitable method for a cross-sectional survey research like this study. Survey questionnaires have a history of use in marketing and management research due to the ease of collecting a large amount of data from targeted audiences.

Moreover, in comparison to the interview, the cost and time of conducting a survey questionnaire is less than for interviewing. Furthermore, the researcher considered that the aims of this study could be achieved through an analysis of the responses of a large number of customers. A questionnaire personally administered by the researcher (self-administered questionnaire) was therefore adopted as the most appropriate method to collect the research data. Furthermore, this type of questionnaire had the additional advantage that Libya, a developing country with a relatively rudimentary postal and internet systems, would have made attempts to distribute the questionnaire by these means highly problematic. In addition, many researchers have employed this method in research efforts also aimed at the measurement of service quality in a range of sectors, including Brown and Swartz, (1989) in their research into medical services; Patterson, Johnson and Spreng, (1997) in professional business services; Witkowski and Wolfinbarger, (2002) in such sectors as banks, medical facilities, postal facilities, retail clothing stores, and restaurants; Chooi Sim and IDRUS, (2003) in the education sector; Juwaheer, (2004) and Akbaba, (2006) in the hotel industry; Radder and Wang, (2006) in the private accommodation sector and Arasli, Ekiz and Katircioglu, (2008) in the hospitals sector. A questionnaire was also considered appropriate to Libyan culture, in
which individuals are often unwilling to be frank and open in their opinions in the context of an interview with a person they do not know, and for whom the questioning of their personal habits and details might be seen as intrusive and even potentially harmful. Therefore, the choice of an anonymous questionnaire was deemed more likely to elicit honest and reliable data.

4.7 Questionnaire Design

Malhotra (2006, p. 299) defined questionnaires as a structured technique for data collection that consists of a series of questions, written or verbal, that a respondent answers. It aims at translating the information needed into a set of specific questions that respondents can, and will answer. Questionnaire design must take into consideration question formatting, wording, rating, and length of questionnaire, before pre-testing the questionnaire (Malhotra, 2006).

Questionnaires may employ many different types of questions, among which open-ended and closed-ended questions are most common, and they both have their advantages and disadvantages (Sekaran, 2003). Open-ended questions allow respondents to answer in any way they choose. A closed question, in contrast, asks the respondents to make choices among a set of alternatives given by the researcher. In this questionnaire, a format of close-ended questions was used. The advantages of closed-ended questions are that they are easy to ask and quick to answer, they require no writing by the respondent, and they are easy to code and analyse (Sekaran, 2003). This means that time restrictions are overcome, and allows a researcher to cover a larger sample and wider geographical area in their research process. Furthermore, the data once collected are more susceptible to a range of accurate and revealing statistical analysis tools.
Bourque and Clark (1994) suggested that when designing individual questions researchers do one of three things:

- Adopt questions used in other questionnaires.
- Adapt questions used in other questionnaires.
- Develop their own questions.

In this study almost all the questionnaire items were compiled from;

- Other theoretical research studies, related to this study, which attempted to build and test the validity of service quality measurement models, such as the SERVQUAL model which is based on the difference between customers' expectations and perceptions (e.g. Parasuraman, et al. 1985; 1988; 1990; 1991; 1993; 1994), and SERVPERF model that excludes any consideration of customers’ expectations in its scale (e.g. Cronin and Taylor 1992; 1994). In particular, those which have been conducted in Arabic and Islamic environments (e.g. Al Sahan, 1994; Yavas et al., 1997; Jabnoun and Al-Tamini, 2003; Mostafa, 2005; Al Zaabi, 2006).

In order to measure customers’ perceptions of the service quality they receive in Libyan public commercial banks, modification was made to the standard SERVQUAL model to include items which had proved to provide useful data in other Islamic/Arab contexts, with the expectation that the culture of service quality specific to a Libyan context might be reflected in the significance of these items.
The questionnaire, in this study, is split into two sections. Section one consists of 35 items covering five dimensions (reliability, assurance, responsiveness, empathy and tangibles) of a modified SERVQUAL model concerning customers' perceptions of service quality. The second section is designed to collect demographic information about the customers of Libyan commercial banks, including their gender, age, education, etc. (See appendix 4.2).

However, in this study, consideration was only given to the perception of quality. This was due to four main reasons: firstly, there are conceptual and psychometric problems linked with using differences between perceptions and expectations (Cronin and Taylor, 1992). Secondly, Babakus and Boller (1992) found that perception scores, by themselves, had a stronger correlation with independent measures of quality than do the SERVQUAL measures (expectations minus perceptions). Thirdly, the perception component of service quality has been used widely in the banking sector (e.g. Al Khatib and Gherabi, 1998; Jabnoun and Al-Tamimi, 2003) and also in other sectors, such as 'fast food chains' (e.g. Davies et al., 1999). The last reason was the desire to make the task of the respondents of this research easier; hence, the researcher preferred to include only the perception section, since it has been mentioned that a disadvantage of the SERVQUAL scale is that the questionnaire is too lengthy (Kasper, Hellensdagen and de Vaires, 1999). The researcher gave consideration to the fact that the questionnaire would be administered in the premises of the banks themselves, and that respondents would be concerned to conduct the business they had come to the bank for, and that therefore the research instrument should be as brief and simple as possible, while still providing rich and useful data.

As mentioned earlier, the five dimensions (i.e. reliability, assurance, responsiveness, empathy and tangibles) were employed to measure service quality relating to customers'
perception of the service actually received. In this specific research, respondents were asked to provide opinions with regard to those dimensions. A five point Likert scale was used, with respondents given a choice of responses ranging from 1= strongly disagree to 5= strongly agree. The reason for using a five point Likert scale rather than seven point scale was to reduce the frustration level of respondents and to avoid misleading or confusing them (Buttle, 1996; George and Hazlett, 1997).

4.7.1 The Stages of Development of the Questionnaire

Reviewing the relevant literature, it can be found that the SERVQUAL has been designed to be applicable across a broad spectrum of services. According to Parasuraman et al. (1988, p. 30):

"It provides a basic skeleton through its expectations and perceptions format, encompassing statements for each of the five service-quality dimensions. The skeleton, when necessary, can be adapted or supplemented to fit the characteristics of specific research needs of a particular organisation".

Although many believe that SERVQUAL type instruments should contain exactly twenty-two items, in numerous cases scales with different numbers of items are used (Carman, 1990). After all, SERVQUAL was in the first place meant to serve as a basic skeleton, which could and should be customized to better capture the quality characteristics of individual industries under examination (Parasuraman et al., 1988).

In line with the flexibility of use originally intended for this scale and bearing the research objectives in mind, the researcher decided to modify the SERVQUAL scale by adding additional items designed to measure service quality in the specific context of
Libyan commercial banks. Therefore, he adopted only the items related to perception within the SERVQUAL model (the reasons for this were mentioned earlier), and also other items from the relevant literature to develop the study questionnaire. These items were all adopted from studies into banking systems similar to Libya's in their cultural and religious backgrounds. This was the first stage of the preparation of the questionnaire, which was drawn up in English. This version of the questionnaire was reviewed and assessed by the researcher's supervisors and by other academic researchers. During this stage, the questionnaire was extensively discussed with six bank-marketing experts in the Libyan public commercial banks who were proficient in English and who participated in the study. The purpose of this consultation was to a) assess the appropriateness of the modified SERVQUAL scale to the Libyan banks, b) review its items and c) propose necessary adjustments to the scale with regard to its use in the specific industry.

The bank-marketing experts were asked to assess the five dimensions of service quality of the modified SERVQUAL model and comment on whether these would sufficiently capture all aspects of service quality in Libyan banks. Further, they were asked to offer advice on: a) whether certain items should be reassigned between dimensions or removed from the scale b) whether some of the original items should be replaced by others and c) whether new items should be added to the scale to capture industry specific attributes.

They proposed that although the five modified SERVQUAL dimensions (reliability, assurance, responsiveness, empathy and tangibles) could indeed cover the various quality aspects of Libyan banks, additional items should be added to the scale; and as a result 15 items were added to the original SERVQUAL model, as illustrated in table 4.6 below:
The items within the modified SERVQUAL model were selected based on three main criteria:

1. They addressed issues identified by the banking experts as being particular to commercial banking practices in Libya.

2. They were derived from previous studies conducted into service quality in Arab/Islamic contexts.
3. They were intended to address issues of both cultural and practical interest to customers of the banking industry, and commercial banking in particular, within the context identified in criterion 2.

As an example of the source of some of these items, Jabnoun and Al-Tamin (2003) conducted research into levels of perceived service quality in commercial banks in the UAE. The items Ass5, Res8, and Tan6 were all derived from this study as they met the criteria outlined above and were judged likely to provide valuable information about the perceptions of Libyan bank customers. Similarly, the items Res5, Res6 and Res7 were derived from the work of Al Sahan (1994), which applied the gap analysis model of Parasuraman et al. to the perceptions of service quality of bank customers in Alexandria, Egypt.

Therefore, certain new items were added and other ones removed or reworded in order to overcome some shortcomings in some areas of the questionnaire. Later, as a result of the results of the questionnaire in the pilot study, and the subsequent conversations the researcher was able to have with some of the participants in the pilot study, the researcher made some revisions to the first version, and then the second version was evaluated by the researcher's supervisors.

The final version of the questionnaire was prepared in English and Arabic. The back translation method was employed to identify and modify inconsistencies between the English and Arabic versions. Back translation is the process of translating a questionnaire from one language to another and then back into the original language by a second, independent translator (Zikmund, 1997). An expert in linguistics translated each question in the questionnaire into Arabic, and then the same version was translated
from Arabic to English by another person. Based on this, any inconsistency between the two versions was adjusted.

Moreover, the questionnaire was also revised by a number of people whose mother language was Arabic. Five PhD students in the University of Gloucestershire and one bank marketing expert from a Libyan bank helped in revising the questionnaire. Also, four academic members of staff in Garyounis University in Libya, read the Arabic and the English versions of the questionnaire and suggested some modifications into the Arabic scale. Furthermore, it is worth noting that the main part of the questionnaire of this study was the service quality section (SERVQUAL), which has been widely adopted in the Arabic marketing literature (Al Khatib and Gharaibeh, 1998; Abdelaziz, 2001; Jabnoun and Al-Tamimi, 2003, Al Zaabi, 2006). The researcher benefited from these studies in terms of the language used in the questionnaire. Accordingly, the criterion used to confirm the accuracy of translation is the experts’ judgments was based on their qualifications and experience in the field of translation from the Arabic to English language and vice versa (see appendix 4.3).

4.7.2 Pilot Study of the Questionnaires

A pilot study is a pre-test to a questionnaire prior to the actual collection of data. The importance of pilot tests lies in that it enables the researcher to re-design the questionnaire if any question is found to be ambiguous and difficult to understand, especially in such research as this study, in which a research instrument designed for use in one kind of cultural context is adapted and employed in another kind. It is also useful in testing the accuracy of sampling frames before extending its use to the main sample survey.
The role of the pilot study in this research was to assess the conceptual clarity of the items in the questionnaire to Libyan banking customers, and to ensure that the items added to the original SERVQUAL model were relevant to these customers. Researchers suggest that a minimum participation in the pilot study is 5, and the maximum is 100 (Blumberg, Crooper and Schindler, 2005). Therefore, thirty-five questionnaires were distributed non-randomly to customers of the banks under investigation to evaluate the face validity of the questionnaires. During the administration of the pilot study questionnaire, those customers who were willing to be interviewed (approximately 12) were asked to: a) offer advice on whether items were comprehensibly worded for the average Libya bank consumer, and suggest any appropriate alterations and b) propose any addition of new items if necessary or the removal of items they would consider as meaningless. As an example of the suggestions made at this stage, some respondents who were interviewed pointed out that there was confusion in their minds over the difference between item 26 (My bank gives me individual attention) and item 28 (Employees at my bank give me personal attention). Due to this confusion item 28 was deleted. In addition to proposals for removing items which were made at this stage, it was also necessary to reword certain items to make them more comprehensible in a Libyan context, (e.g. item 2, see appendix 4.4).

Therefore, problems or difficulties, such as ambiguity of wordings and misunderstanding of technical terms, were reported for further modification. The final questionnaires were revised by changing the wordings of the items to meet the needs of respondents in the specific context of Libyan banks. The pre-test feedback and the subsequent action taken are shown in appendix 4.4.
4.8 Population and Sample Research

4.8.1 Research Population

Collis and Hussey (2003) define a research population as any exactly defined set of people, or collection of items under investigation. Similarly, Sekaran (2003) define a research population as the entire group of people, events, or things of interest that the researcher wishes to investigate. In light of these definitions, the targeted population includes customers of public commercial banks in Libya.

The financial services industry was seen as an appropriate business sector in which to conduct this research, particularly in the light of such issues as the development of quality services and the emergence of globalisation that have changed the banking market. However, there were many other reasons behind choosing the banking sector among other sectors in Libya, as follow:

- Banking is one of the economy's most active and sophisticated sectors;
- It is the most important developed and modern sector apart from oil and it, which plays a significant role in the Libyan economy (Oxford Business Group, 2010);
- Libyan banks are providing the same varieties of products and services offered by commercial bank in most developed countries.

These considerations suggest that while the Libyan banking sector is important to study, it is also likely to produce results comparable to other studies employing SERVQUAL in more developed economies. In order to achieve the aims of the study, the researcher deemed it necessary to include all of the Libyan public commercial (state-owned) banks, so that the research could present a comprehensive analysis of the existing level of service quality. This decision enabled the research to generate a sample large enough.
to permit a process of meaningful statistical analysis. Therefore, the research study includes Libyan commercial banks according to the definition of the Libyan Central Bank; there are four banks in this group: Gumhouria Bank; National Commercial Bank; Wahda Bank and Sahara Bank. See chapter two for more details.

A questionnaire was prepared for distribution to the selected sample of banks to measure customer perceptions of service quality, using a modified SERVQUAL model. Table 4.7 illustrates the population of this study:

Table 4.7: Population of the Study (Banks)

<table>
<thead>
<tr>
<th>Banks</th>
<th>Number of branches</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public banks</td>
<td>333</td>
<td>84</td>
</tr>
<tr>
<td>Private banks</td>
<td>62</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>395</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Constructed by researcher on the basis of field data gathered as part of this investigation

Because this study focused only on the Libyan public commercial banks, the private banks were discounted, and a non-random stratified sample consisting of 20% of the 333 public banks (66 public banks) was devised, proportionate to each bank’s contribution to the total sector, (see table 4.8 below):

Table 4.8: Sample of the Study (Banks)

<table>
<thead>
<tr>
<th>Name of bank</th>
<th>Numbers</th>
<th>Percent (%)</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gumhouria Bank*</td>
<td>142</td>
<td>42</td>
<td>28</td>
</tr>
<tr>
<td>National Commercial Bank</td>
<td>62</td>
<td>19</td>
<td>12</td>
</tr>
<tr>
<td>Wahda Bank</td>
<td>76</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td>Sahara Bank</td>
<td>53</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>333</td>
<td>100</td>
<td>66</td>
</tr>
</tbody>
</table>

*(This after merge Umma Bank and Gumhouria Bank into a single entity (Gumhouria Bank)

Note: Constructed by researcher on the basis of field data gathered as part of this investigation
4.8.2 Research Sample

Collis and Hussey (2003, p 56) defined a sample as “a subset of population”. Hair et al. (2003) stated that it is very important to determine the appropriate sample size prior to data collection, from either a large (infinite) population or a small (finite) population.

Once the population was defined, the next step was to identify an appropriate sample and construct a suitable sampling frame. According to Hussey and Hussey, (1997), selecting a sample is a crucial element of any positivistic study. Moreover, sampling is a necessary curtailment of the research effort for several reasons, among them: reduced costs, improved result accuracy, faster data collection and ease of population selection (Cooper and Schindler, 2001). It is necessary that a sample should be large enough to meet the requirements of the study, and it should either be chosen at random, or the selection process should be free from bias (Hussey and Hussey, 1997). A sampling frame may be defined as complete list of all the instances in the population from which the sample is drawn (Saunders et al., 2009). In this research, once the sampling frame was determined, it became necessary to select the sample method and sample size. The choice of sampling method was determined by the objectives of the study, and certain constraints such as the limitations of financial resources, time, and the nature of the problem under investigation (McDaniel and Gates, 2006).

In a study of this kind, the researcher is faced with a choice between two major techniques for selecting a sample (Hair et al., 2003); these choices are random versus non-random sampling (probability vs. non-probability). When random sampling is employed, the researcher is able to decide in advance that the sample will represent every segment of the population (Leedy and Ormrod, 2010, p.205). However, when non-random sampling is employed, the researcher is adopting a strategy which consists
of the selection of an element of the population, in which the researcher selects participants to be part of the sample, who are considered to be typical of the wider population. This judgement is based to a large extent on the experience of the researcher and his/her familiarity with the research environment (Leedy and Ormrod, 2010). In the case of random samples, a more sophisticated analysis is possible through the utilisation of parametric methods of analysis, or through the projection of results with greater statistical reliability. With non-random sampling techniques, on the other hand, descriptive statistics are more appropriate. This study employed a non-random sample method, because the researcher was able to construct a more representative sampling frame, while retaining the statistical relevance of the data (Sekaran, 2003).

In determining sample size, Malhotra and Birks (2003) point out also that sample size in marketing research projects is influenced and determined by many factors, which can be summarised as follow:

- The average size of samples in similar studies;
- The nature of the research (e.g. in qualitative research, the sample size is typically small, meanwhile with quantitative research, larger samples are required); and
- The nature of the analysis, if sophisticated analysis of the data using multivariate techniques is required, the sample size should be large.

In this study, such multivariate techniques were used, and the sample size was therefore appropriately large. Lehmann (1989) mentioned that sample sizes based on those which have been used by others conducting similar studies in the past is an acceptable approach. Furthermore, Alreck and Settle (1995, p 63) pointed out that "for populations of 10,000 and more, most experienced researchers would probably consider a sample
size between 200 and 1000”. Generally, however, quantitative methodologies are associated with large sample sizes, to obtain a high degree of accuracy and to ensure that findings are representative of the population being studied and unbiased (Remenyi et al., 1998; Easterby-Smith et al., 2002; Collis and Hussey, 2003; Sekaran, 2003; Saunders et al., 2003; Hair et al., 2003).

The questionnaire survey was administered by the researcher in person, who, having obtained permission to approach the customers of all four commercial banks in their branches, visited several branches of each bank over a four week period in September-October 2009 to hand out questionnaires to customers willing to be surveyed. Generally, the customers completed the questionnaire within the bank and returned it to the researcher in person, or if he had left to canvass another branch, to the staff of the bank itself. Therefore, the researcher was sometimes available in person to clarify any uncertainties in the minds of respondents about the meaning of any questions, but not always. The researcher also included his mobile phone number on the questionnaire so that any respondents needing help could contact him: some respondents availed themselves of this assistance. Based on the previous discussion, five hundred and forty (540) questionnaires were distributed to the study sample (customers) of the major public commercial banks across the three cities of Tripoli, Benghazi and Al-Bayda in Libya. The number of allocated questionnaires for each city was 245, 190 and 105 respectively, and then 451 questionnaires were returned. Of the 451 returned questionnaires, 47 had to be eliminated because they were incomplete. The total number of usable and acceptable questionnaires was 404, which was a 75% response rate.
4.9 Reliability and Validity

Reliability and validity are central concepts in measurement. As presented in the previous section, researchers can either use existing tools or develop their own measurements to measure the concept in hand. However, in both cases, researchers must ensure the quality of measurement they have been using. In order to do so, the researcher must address both the validity and reliability of the measure.

4.9.1 Reliability

Reliability refers to the consistency of a measure. A test is considered reliable if the same result is obtained after it is conducted repeatedly. There are three main approaches for assessing reliability; this includes the test-retest, alternative-forms, and internal consistency methods.

4.9.1.1 Test-Retest Reliability

This kind of reliability is used to assess the consistency of a test across time. To gauge test-retest reliability, the test is administered twice at two different points in time. The degree of the similarity between the two measurements is determined by computing a correlation coefficient. The higher the correlation coefficient between the two tests, the greater is the reliability (Malhotra, 2006).

4.9.1.2 Alternative-Forms Reliability

This is an approach to assessing reliability that requires two equivalent forms of the scale to be constructed, and then the same respondents to be measured at two different times. The scores from the two alternative-scale forms are correlated to assess reliability.
4.9.1.3 Internal Consistency Reliability

The more commonly used measure of reliability is internal consistency. It is used to assess the reliability of a summated scale where several items are summed to form a total score. In internal consistency, the individual items of the scale should all be measuring the same construct and thus be highly inter-correlated (Malhotra, 2006).

Internal consistency is assessed through a series of measures, among which "split-half reliability" and Cronbach’s alpha are considered the most widely used measures in assessing the consistency of the entire scale (Nunnally, 1978). The simplest way to measure the internal consistency is "split-half reliability". By this approach, the items of the scale are divided into halves and the resulting half scores are correlated. High correlations between the halves indicate high internal consistency. The second approach is Cronbach’s alpha. This is the average of all possible split-half coefficients resulting from different ways of splitting the scale items (Malhotra, 2006). This coefficient varies from 0 to 1; the generally agreed upon lower limit for Cronbach’s alpha is 0.70, although it may decrease to 0.60 in exploratory research (Hair et al., 2006). In this study, the reliability analysis was conducted based on Cronbach’s alpha. As the next chapter presents, the overall scale and its dimensions showed a Cronbach’s value of 0.70 or above.

4.9.2 Validity

Validity is the extent to which a test measures what it claims to measure. It is vital for a test to be valid in order for the results to be accurately applied and interpreted. Three types of validity tests are recommended by researchers: content validity, construct validity and criterion validity.
4.9.2.1 Content Validity (face validity)

At the very minimum, researchers who develop a new measure should establish that it has face validity (Bryman, 2004). According to (Malhotra 2006, p. 286) "face validity is a subjective but systematic evaluation of how well the content of the scale represents the measurement task at hand". It can be approached by using a panel of people to judge how well the scale items adequately cover the entire domain of the construct being measured. Face validity is, therefore, an essentially intuitive process.

As this study back translated the questionnaire from English into Arabic, it was necessary to examine its face validity. In this study, therefore, face validity was approached in the pilot study stage (see section 4.7.2). A sample of customers of Libyan banks saw the scale's items and provided some comments concerning the language and the adequacy of items. In addition to that, four academic members in the business school at the Garyounis University in Libya judged the scale's items and suggested some improvements.

4.9.2.2 Criterion-Related Validity

This reflects the success of measures used for prediction or estimation. Criterion validity can be divided into two aspects: concurrent validity and predictive validity.

Concurrent validity is where an assumption of validity is made if the findings are supported by already existing empirical evidence (Sarantakos, 1998). Predictive validity reflects the ability of the measuring instrument to differentiate among individuals with references to a future criterion (Sekaran, 2003). While the two approaches examine the predictive ability of the measurement, the major difference between concurrent and
predictive validity lies in the fact that the former uses a simultaneous criterion measure; on the other hand, the latter employs a future criterion measure.

4.9.2.3 Construct Validity

This relates to how well the results obtained from the use of the measure fit the theories around which the test is designed (Sekaran, 2003, p. 207). Two types of construct validity are suggested in the literature: convergent and discriminant validity (Bryman, 2004; Hair et al., 2006). Convergent validity assesses the extent to which two measures of the same concept are correlated positively. Discriminant validity, also known as divergent validity, is the opposite of convergent validity, and ensures that the scale is sufficiently different from other similar concepts to be distinct from them (Hair et al., 2006). Factor analysis, which was used in this study, is one of the most widely used approaches in establishing construct validity (Sekaran, 2003).

4.10 Data Analysis

Several statistical analyses were conducted this study. Selecting the appropriate statistical methods depends on the nature of the data and the relationship between the method and the research objective. However, the main data analysis techniques which were adopted in this study were descriptive analysis, Mann-Whitney U Test and factor analysis, which are discussed below:-

4.10.1 Descriptive Analysis

According to Hussey and Hussey, (1997), descriptive statistical methods are employed when the research is concerned with describing, presenting and summarising data that have been collected. Descriptive statistical methods include techniques such as frequencies (counts and percentages), measures of central tendency (mean) and
measures of spread (standard deviation). These measurements of frequency allow researchers to investigate and describe the characteristics of the sample studied, and to discover the frequency distributions of the variables under investigation. Descriptive statistical analysis was used to evaluate customer perspectives of the levels of service quality of Libya’s commercial banks. These statistics were used to determine the mean and standard deviation of each SERVQUAL statement, with regard to perception only. In this study, for each of the items of each service quality dimension, means and standard deviations were computed, and descriptive statistics were used to provide a breakdown of the sample of customers’ demographic profiles. This included their gender, age, education levels, customers’ main bank, customers’ visits, and bank used. Descriptive statistics were also employed to calculate the response rates to the questionnaires.

4.10.2 The Mann-Whitney U Test

This test is for examining significant differences between two independent groups on, at least, an ordinal variable (Siegel and Castellan, 1988; Sekaran, 2003). In other words, it is used to test for differences between two independent groups on a continuous measure. This test is alternative to the t-test for independent samples. Instead of comparing the means of the two groups (t-test), the Mann-Whitney U Test actually compares medians (Siegel and Castellan, 1988; Hinton, 1995; Pallant, 2003). If the probability (p) of Z value is significant (i.e. p < 0.05), the result is significant and so there is a statistically significant differences between the two groups on the basis of the measured variable.

4.10.3 Factor Analysis

This section deals with the factor analysis carried out on the data in order to define a set of common underlying dimensions, known as factors, from among the measurement
items (variables) used in the questionnaire. Though, factor analysis can be carried out either from an exploratory or a confirmatory perspective (Hair et al., 1998), the main purpose of exploratory factor analysis is to define the fundamental constructs or dimensions (factors) assumed to underlie the original variables (Gorsuch, 1983). Hence, it can be applied to serve the twin purposes of data summary and data reduction without losing much of the information contained in the variables. On the other hand, confirmatory factor analysis is a much more advanced and complex technique used in the advanced stages of the research process to test a theory about latent processes. Variables must be carefully and chosen to reveal specific underlying processes. It is often performed through structural equation modelling (Tabachnick and Fidell, 2007). Due to the exploratory nature of this research and the research objectives, the exploratory factor analysis approach was adopted and discussed in this study.

4.10.3.1 Factors to be Considered or Assumptions Underlying Factor Analysis

According to Hair et al. (1998), there are a number of considerations that should be taken into account before factor analysis can be carried out effectively. As regards the sample size, it should preferably be 100 or more, with a minimum of 50. Another consideration is with respect to the ratio of observations to variables analysed. The preferable ratio is 10:1, while the minimum is at least a ratio of 5:1. Next, there should be sufficient correlations in the data matrix to justify factor analysis, and visual inspection should reveal a substantial number of correlations greater than .30.

Also, the Bartlett test of sphericity should be looked at, to determine the significance of the correlation matrix in terms of significant correlations among at least some of the variables. However, since the Bartlett test is sensitive to sample size, the measure of sampling adequacy (MSA) should also be considered to determine the appropriateness
of factor analysis through the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy.

According to Hair et al. (1998), MSA values below .5 are unacceptable, while values exceeding .7 or .8 are considered to be good enough to justify continuation with factor analysis.

4.10.3.2 Choice of Factor Extraction Method and Rotational Method

According to Hair et al. (1998), both the Common Factor and Principal Components methods are widely used, and the debate over which method is more appropriate to use continues to provoke interest (Gorsuch, 1990). However, it is also noted that the complications and limitations of common factor analysis have contributed to the widespread use of principal component analysis (Hair et al., 1998). Hence, based on the recommendations of Churchill (1995), and suggestions of Hair et al. (1998), the principal components method was considered appropriate for this study.

Most of the direct unrotated factor solutions obtained are often difficult to interpret. Hence, rotation is necessary, as it improves the interpretation of the results and helps the researcher to derive some meaningful factors. However, if the unrotated solution is interpreted as meaningful, then rotation may not be necessary (Hair et al., 1998). As regards rotational method, a choice is to be made between orthogonal and oblique rotation. Orthogonal rotation creates factors that are uncorrelated to each other, and hence minimises the risk of multi-collinearity. However, when the oblique rotational method is used, the dimensions are not assumed to be uncorrelated with each other (Hair et al., 1998). Hence, based on the recommendations of Hair et al. (1998), the orthogonal method of rotation was chosen, since the study dealt with a number of
variables, most of them correlated with each other. Thus, the principal component method along with Varimax rotation was employed.

### 4.10.3.3 Criteria for Number of Factors to be Extracted

Hair et al. (1998) suggest various criteria for deciding on the number of factors to be extracted, such as latent root/eigenvalue criterion, a priori criterion, percentage of variance criterion, scree test criterion, and heterogeneity of the respondents. However, the choice of factors is not usually based on a single criterion. Hence, for the purpose of this study, several criteria were chosen and used in determining the number of factors to be extracted. Factors were initially extracted according to the eigenvalues >1 criterion, and this was further verified using scree plots. Also, the guidelines given by Hair et al. (1998, p. 112) regarding the identification of significant factor loadings based on sample size, number of variables, and factors, were also considered in factor analysis.

Following the suggestions of Hair et al. (1998), a more conservative approach was followed considering the number of items included in the study, and only those factor loadings exceeding +/- 0.40 were considered in obtaining the factor solutions.

### 4.11 Summary

Although there is no right or wrong methodology, there are methodologies which are more or less useful, which can be employed in research projects to achieve their objectives (Sekaran, 2003; Saunders et al., 2003). This chapter has focused on the research design and methodology employed to achieve the research objectives. Decisions and strategies regarding the population and sample selection were illustrated. Four hundred and four usable bank customer questionnaires were completed, which represents a satisfactory response rate of 75% of customers. It was decided that the
questionnaire was the most appropriate tool for data collection. A detailed description of the pilot study and the process translating of the questionnaire (back translation approach), is provided.

Statistical analysis techniques were discussed in more detail, and the rationale for using such techniques was given. Descriptive analysis, non-parametric tests (Mann Whitney) and factor analysis were seen as the most appropriate statistical techniques in analysing the data of this research.

The next chapter will be dedicated to analysing and interpreting the results obtained from the application of the research methodology detailed in this chapter.
Chapter 5  Data Analysis and Findings

5.1 Introduction

This chapter presents and analyses the empirical data collected to achieve the research objectives. A discussion of the respondents' characteristics provides a full impression of the customers of Libyan public commercial banks investigated in this study. The chapter begins by describing the characteristics of the sample (customers), such as gender, age, educational level, etc. The statistical analysis techniques that were employed were; mean ratings, mode, standard deviation, Mann-Whitney U test, Kruskal-Wallis test, also, in order to analyse the service quality scale (the modified SERVQUAL), an exploratory factor analysis with principle component extraction and Varimax rotation was applied to the study data. At the end of the chapter, a summary is provided.

5.2 Study Sample Description

This section is mainly concerned with presenting a descriptive analysis of the sample. It aims to give a brief description of the customers of the Libyan public commercial banks that participated in this study. Five hundred and forty questionnaires (540) were distributed to the study sample. The total number of usable questionnaires returned was 404, representing a 75% response rate. Banks covered by this study totalled four; these were all state-owned (public) banks in Libya, which offer retail banking services: Gumhouria Bank, National Commercial Bank, Wahda Bank and Sahara Bank.
5.2.1 Description of Customer Sample According to Gender, Age and Educational Level

Table 5.1 shows that 61.4% of the customers were male, while females accounted for 38.6%. This wide difference between these two figures could be due to variety of reasons. The first is the nature of Libyan society, where men are expected to deal with financial matters to a greater extent than women. Secondly, in Libya, usually only a person having an income source has a bank account, unlike in western society where almost every person has a bank account. Furthermore, in Libya, as well as many other Arab countries, men are more likely to have paid employment due to many considerations. Firstly, there is the conservative religious nature of Arab and Libyan society, where women are not expected to work in male-dominated organisations. Secondly, women tend to accept more traditional secretarial jobs and work, for example, in the health or education sectors, probably due to this kind of work involving less contact with men, which is consistent with Islamic culture.
Table 5.1: The Sample Distribution According to Age, Gender and Educational Level

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>248</td>
<td>61.4</td>
</tr>
<tr>
<td>Female</td>
<td>156</td>
<td>38.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 25</td>
<td>75</td>
<td>18.6</td>
</tr>
<tr>
<td>25-34</td>
<td>142</td>
<td>35.1</td>
</tr>
<tr>
<td>35-44</td>
<td>114</td>
<td>28.2</td>
</tr>
<tr>
<td>45-54</td>
<td>57</td>
<td>14.1</td>
</tr>
<tr>
<td>55 and above</td>
<td>16</td>
<td>4.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>43</td>
<td>10.6</td>
</tr>
<tr>
<td>Diploma/ some college study</td>
<td>106</td>
<td>26.2</td>
</tr>
<tr>
<td>Graduate</td>
<td>179</td>
<td>44.3</td>
</tr>
<tr>
<td>Post Graduate</td>
<td>76</td>
<td>18.8</td>
</tr>
</tbody>
</table>

Table 5.1 shows variables with regard to age. The sample was skewed towards the middle age groups (25-34 and 35-44) categories, which were represented by 63.3% of the total, and there were fewer young and old respondents. The young customers (aged below 25 years old, 18.6%) were under-represented due to a considerable portion of this group being unemployed or students, and consequently not having a bank account. With regard to respondents' educational levels, Table 5.1 shows that a majority of customers were degree holders (44.3%), with 10.6% being high school certificate holders, while those with post-graduate qualifications represented 18.8%. It is to be expected that those members of Libyan society with high educational attainment would be overrepresented in a sample of commercial bank customers, since in a society still dominated by cash transactions a bank account is only a necessity to a salaried employee.
5.2.2 Description of the Customer Sample According to Bank Used, Customer Visits, and Customers’ Main Bank.

In terms of the banks used by customers, it can be seen from Table 5.2 that approximately half of the Libyan bank customers surveyed had a personal bank account with only one bank. Thirty-six percent had an account with two banks, whilst 11.6% had an account with more than two banking institutions in Libya.

Table 5.2: Sample Distribution According to Banks Used By Customer, Customer Visits to Bank and Customers’ Main Bank

<table>
<thead>
<tr>
<th>Bank used</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>One bank</td>
<td>211</td>
<td>52.2</td>
</tr>
<tr>
<td>Two bank</td>
<td>146</td>
<td>36.1</td>
</tr>
<tr>
<td>Three banks</td>
<td>47</td>
<td>11.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Customers’ Visits</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than once/ month</td>
<td>136</td>
<td>33.7</td>
</tr>
<tr>
<td>1-2 times/month</td>
<td>175</td>
<td>43.3</td>
</tr>
<tr>
<td>3-4 times/ month</td>
<td>93</td>
<td>23.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Customers’ main bank</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gumhouria Bank</td>
<td>143</td>
<td>35.4</td>
</tr>
<tr>
<td>The National Commercial Bank</td>
<td>118</td>
<td>29.2</td>
</tr>
<tr>
<td>The Wahda Bank</td>
<td>78</td>
<td>19.3</td>
</tr>
<tr>
<td>The Sahara Bank</td>
<td>65</td>
<td>16.1</td>
</tr>
</tbody>
</table>

As shown in Table 5.2, the frequency with which customers visited their banks for services was measured, with approximately half of the customers (43.3%) visiting their bank up to two times a month. Thirty four percent of the customers visited their bank only once a month and the remainder (23%) visited their bank 3 or more times a month. For many salaried workers, the only occasion in a month on which they would visit their...
bank is to withdraw their salary in cash to cover all their transactions until the next payday.

It can be seen from Table 5.2 that the results of the survey also showed that the four banks in Libya had a broadly similar shares of the personal banking market. Customers were asked to indicate which bank they used as their main bank. The main bank was defined as that bank with which they carried out most of their day-to-day banking transactions. The Gumhouria Bank had the largest market share, with 35.4% of the customers surveyed. The National Commercial Bank had 29.2% of the market whilst the Wahda Bank and the Sahara Bank had only 19.3% and 16.1% respectively. The lack of a dominant company among the public sector banks could be indicative of two things; either that competition between banks is fierce, and that no bank has been able to establish a dominant position, or that levels of competition are very low and that customers choose their banks on the basis of more personal interests, such as family tradition, its proximity to their home or work, or some acquaintance with a friend or family member who works in the bank.

5.3 Data Analysis

This section is divided into four stages: the first stage is devoted to the reliability statistics test of the customer’ questionnaire. The second stage is devoted to a descriptive analysis of the data that was collected by the questionnaire, which included an examination of the actual level of service quality provided by Libyan public commercial banks as it is perceived by their customers. The third stage is devoted to an exploratory factor analysis to address the study aims regarding degrees of importance attached to various dimensions of service quality (the dimensionality of the SERVQUAL) in the Libyan banking context.
5.3.1 Reliability Assessment of the Instrument

One of this research purposes was to examine the actual levels of service quality perceived by the customers of Libyan public commercial banks. The modified SERVQUAL instrument was used and included 35 items to determine only the customers’ perceptions. Analysis of the reliability of each question group was determined by the use of Cronbach’s Alpha technique, which statistically measures the internal consistency of the research instrument. These test results are shown in table 5.3 and demonstrate that the reliability coefficient for the service quality dimensions items was 0.834, which is a level considered satisfactory (>0.70) (Hair et al., 2003).

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality Dimensions</td>
<td>35</td>
<td>0.834</td>
</tr>
</tbody>
</table>

5.3.2 Demographic Variables and Service Quality Dimensions

As seen earlier, researchers and practitioners have found that customers consider many dimensions in their assessments of service quality (Grönroos, 1984; Lehtinen and Lehtinen, 1991). However, as mentioned in chapters 3 and 4, a modified SERVQUAL scale was applied in this study. The SERVQUAL scale was first published in 1988 and has undergone numerous improvements and revisions since then, so that it currently in its original form contains 22 perception items that are distributed throughout five service quality dimensions. The five dimensions can be summarised as follow (Berry et al., 1988):

- Tangibles: physical facilities, equipment, appearance of personnel;
- Reliability: ability to perform the desired service dependably, consistently and accurately;
• Assurance: knowledge and courtesy of employees and their ability to inspire trust and confidence;
• Responsiveness: willingness to help customers and provide prompt service;
• Empathy: the provision of caring, and individualised attention to customers.

This section concerns the role of demographics in customer evaluation, to investigate whether there is a link between respondents' demographic variables (i.e. gender, age and education) in their assessments of service quality. The statistical techniques employed were the Mann-Whitney U test and the Kruskal-Wallis test.

The Mann-Whitney test is used to test the differences between two independent groups on a continuous measure. It can be seen from Table 5.4 that there was no statistically significant difference with a two-tailed p value. The probability value (p) is not less than or equal to 0.05, that is to say there is no statistically significant difference between men and women in their perception of the service quality offered by Libyan public commercial banks in terms of overall service quality and in terms of three dimensions of service quality, namely: reliability, assurance and tangibles. Meanwhile it was found that there was a statistically significant difference in two dimensions; namely "responsiveness" and "empathy", since the output presented in the Table 5.4 shows that the Mann-Whitney U value for responsiveness is 16020.500 with a significance level (p) of 0.004, and for empathy 14988.000 with significance level (p) 0.000 respectively.
Table 5.4: Unrelated Mann-Whitney Test Comparing Service Quality Perception in Women and Men

<table>
<thead>
<tr>
<th></th>
<th>Reliability</th>
<th>Assurance</th>
<th>Responsiveness</th>
<th>Empathy</th>
<th>Tangibles</th>
<th>Overall service quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>19157.00</td>
<td>18443.00</td>
<td>16020.50</td>
<td>14988.00</td>
<td>18913.50</td>
<td>17195.00</td>
</tr>
<tr>
<td>Z</td>
<td>-.164</td>
<td>-.791</td>
<td>-2.916</td>
<td>-3.823</td>
<td>-.378</td>
<td>-1.881</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.870</td>
<td>.429</td>
<td>.004**</td>
<td>.000**</td>
<td>.706</td>
<td>.060</td>
</tr>
</tbody>
</table>

** Highly significant

Table 5.5 shows that there were no differences in term of age in customers’ evaluations regarding service quality rendered to them by banks in terms of overall service quality or any of the five dimensions namely: reliability, responsiveness, assurance, empathy and tangibles; and overall service quality. In other words, the different age groups of respondents demonstrated no statistically significant difference regarding their perceptions of the quality of services rendered to them.

Table 5.5: Kruskal-Wallis Test: Age of Respondents

<table>
<thead>
<tr>
<th></th>
<th>Reliability</th>
<th>Assurance</th>
<th>Responsiveness</th>
<th>Empathy</th>
<th>Tangibles</th>
<th>Overall service quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>1.454</td>
<td>2.058</td>
<td>2.685</td>
<td>5.374</td>
<td>1.719</td>
<td>2.160</td>
</tr>
<tr>
<td>Df</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.835</td>
<td>.725</td>
<td>.612</td>
<td>.251</td>
<td>.787</td>
<td>.706</td>
</tr>
</tbody>
</table>

The Kruskal-Wallis test was used to examine the differences in customers’ evaluation of the quality of services rendered to them. Table 5.6 shows that there were no differences in customers’ evaluations regarding service quality rendered to them by banks in term of education over all five dimensions. This finding and those above suggest that Libyan
bank customers are a relatively homogenous group, and that responses fell into certain patterns within this group. Several observations are raised by this finding: it is possible that the lack of competition and product differentiation between the banks means that customers are equally dissatisfied with their banks, or that customers are equally satisfied and that the levels of service are high, or meet some cultural needs that are not explicitly mentioned in the SERVQUAL dimensions.

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>Reliability</th>
<th>Assurance</th>
<th>Responsiveness</th>
<th>Empathy</th>
<th>Tangibles</th>
<th>Overall service quality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.714</td>
<td>.443</td>
<td>3.808</td>
<td>2.692</td>
<td>1.009</td>
<td>3.324</td>
</tr>
<tr>
<td>Df</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.438</td>
<td>.931</td>
<td>.283</td>
<td>.442</td>
<td>.799</td>
<td>.344</td>
</tr>
</tbody>
</table>

5.3.3 Description of the Service Quality Dimension (SERVQUAL)

As mentioned in chapter 4, a questionnaire was designed to collect data on customers’ perceptions of service quality. The main part of the questionnaire employed a modified SERVQUAL model, and this section of the questionnaire includes 35 items to assess service quality in the Libyan public commercial banks. Five different dimensions of SERVQUAL model were modified and used, organised randomly in the questionnaire. The dimensions were: reliability (8 items), assurance (6 items), responsiveness (8 items), empathy (7 items), and tangibles (6 items). The service quality scale was composed of 35 items, which were ranked by respondents on a scale from ‘strongly disagree’ (1) to ‘strongly agree’ (5). The Cronbach’s alpha of the scale was 0.834, which shows an excellent internal consistency.
In order to describe the responses in individual dimensions, a boxplot was developed for each. A boxplot is a way of summarizing a set of data measured on an interval scale. It is often used in exploratory data analysis. It is a type of graph which is used to show the shape of the distribution, its central value, and variability.

The picture produced consists of the most extreme values in the data set (maximum and minimum values included in the two extreme lines), the lower and upper quartiles on both sides of the box, and the median (centre line of the box) (Easton and McColl, 1997).

The boxplot is useful to graphically provide a simple illustration of the evaluation of the five dimensions based on the median values given by the respondents who participated in this study (n=404). An analysis of each dimension of the scale is presented separately in the next section.

5.3.3.1 Reliability Dimension

This dimension indicates the ability of Libyan public commercial banks to perform the desired service dependably, consistently and accurately. In order to have a visual representation of the level of agreement, a boxplot was developed to show how the responses were distributed. Figure 5.1 shows the median value of the eight questions included in this dimension, distributed over the five-point scale.
The graph gives a illustration of the median values of individual items within one of the SERVQUAL dimensions, and represents where most of the responses were allocated, with the median for each dataset indicated by the black centre line, and the first and third quartiles by edges of the greyish area, which is known as the inter-quartile range (IQR) (Easton and McColl, 1997). In this dimension, for instance, the median value for item 21 (My bank insists on error-free records) was 4 in a five-point scale and its value was evenly distributed between the upper and lower quartile of the boxplot. With a similar median value, items 1, 26, 31 and 34 have an uneven distribution of their values in the quartiles. In this group of items, item 1 (My bank’s employees provide services as promised), 26 (The employees of my bank have complete knowledge of the banking services and products provided), 31 (The employees of my bank allocate sufficient time to explain banking services to customers) and 34 (My bank provides its customers with accurate information) with a median of 4 have all their values exclusively in the lower quartile of the boxplot. This means that the evaluation of these items tends to be lower than 4 despite the general median value. The results show a high overall level of perceived quality among respondents for these items.
Another set of items has the median value in 3 (items 6, 11 and 16). The values of items 6 (*My bank shows me a sincere interest in solving my problems*) and 11 (*The advertised promises of my bank are consistent with its performance*) are evenly distributed in the upper quartile except item 16. This item (*My bank offers a wide range of financial products and services*) has all its values between the lower and upper quartile of the boxplot. This shows neither a positive nor a negative tendency in the responses to this question. It is noteworthy that the items with the lowest plot in this dimension is one concerned with products and services rather than less tangible elements of the service encounter.

The analysis of the boxplot provides a general picture of the results of this dimension in the questionnaire, as the median ranks the answers in exact values of the five-point scale. This information could be expanded using the data provided by the analysis of the mean, mode and standard deviation values, which show nuances in the evaluation of the service. Table 5.7 provides this information per item with the mean, mode and standard deviation.

Table 5.7: Measures of Central Tendencies and Standard Deviations (Averages) for Reliability Variables

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Mean</th>
<th>Mode</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.</td>
<td>My bank insists on error-free records.</td>
<td>3.69</td>
<td>4</td>
<td>1.06</td>
</tr>
<tr>
<td>34.</td>
<td>My bank provides its customers with accurate information.</td>
<td>3.57</td>
<td>4</td>
<td>1.08</td>
</tr>
<tr>
<td>1.</td>
<td>My bank’s employees provide services as promised.</td>
<td>3.50</td>
<td>4</td>
<td>1.04</td>
</tr>
<tr>
<td>26.</td>
<td>The employees of my bank have complete knowledge of the banking services and products provided.</td>
<td>3.45</td>
<td>4</td>
<td>1.02</td>
</tr>
<tr>
<td>11.</td>
<td>The advertised promises of my bank are consistent with its performance.</td>
<td>3.37</td>
<td>4</td>
<td>1.07</td>
</tr>
<tr>
<td>31.</td>
<td>The employees of my bank allocate sufficient time to explain banking services to customers.</td>
<td>3.36</td>
<td>4</td>
<td>1.03</td>
</tr>
<tr>
<td>16.</td>
<td>My bank offers a wide range of financial products and services.</td>
<td>3.28</td>
<td>4</td>
<td>1.07</td>
</tr>
<tr>
<td>6.</td>
<td>My bank shows me a sincere interest in solving my problems.</td>
<td>3.27</td>
<td>4</td>
<td>.941</td>
</tr>
</tbody>
</table>
The results in Table 5.7 confirm that in this dimension all items reached the same mode value (4). However, the highest mean score was allocated to the question related to the ability of Libyan public commercial banks to protect and maintain the customers' accounts from any errors, which indicating that customers perceived them to be more accurate and safe (item 21).

The second highest mean score was achieved by the provision of accurate information their customers (item 34). This is not a surprising result as this is an essential service for a financial business in general, and banks in particular, as well as being a vital way to build trust between the bank and its clients. This is followed by the ability of the Libyan public commercial banks' employees to provide services as they promised (item 1). This could be due to the management of the Libyan public commercial banks employing workers with suitable qualifications, as well as conducting interviews with them to ensure that they had the skill and ability that was needed to perform in the banking industry, in order to ensure that the services provided were suitable for their nature of the banking business.

Moreover, the employees' knowledge about banking services and products was ranked the fourth highest mean value, and this could be due to the same reasons that have been mentioned above.

With regards to the advertised promises, it obtained a mean value of 3.37, which might indicate that the Libyan public commercial banks' management was aware of the importance of the link between the banks' performance and their advertised promises (item 11). Moreover, these promises may be considered an important issue by many customers, who regard such promises as a basic requirement when evaluating their bank's performance.
The other aspect to be considered is whether the employees of the bank allocated sufficient time to explain banking services to customers (item 31). The mean score for this item was 3.36, which means that the time allocated to explaining banking products and services to customers by employees in banks may not have been enough to satisfy the banks' customers. Arab cultures in general, and Libyan society in particular, place strong emphasis on the centrality of personal relationships to business transactions, and any failure to allocate sufficient time to a service encounter may be considered a serious matter for Libyan customers expressing a perception of service quality.

The other lower rating was associated with the range of financial products and services offered by the Libyan public commercial banks (3.28). It seems clear from this response rate that despite the other positive qualities (e.g., computers, ATM, etc...), these types of services and products were still deficient in the Libyan banking sector, especially in the public commercial (state-owned) bank sector. This result shows that the Libyan banks' services and products were limited to specific types of services, and did not cover wide varieties of services and products. This is partly a function of the restrictions placed on the public banking sector by the Libyan state through its instrument of economic control, the CBL. This relative discontent shows that as Libya's economy becomes more diverse and dynamic, a demand for a wider variety of financial products is growing, and suggests that efforts to privatise the public banks and allow them freedom to compete with domestic and international competitors might be well received.

Another main issue related to customers' problems was the extent to which the banks showed an interest in solving their customers' problems (item 6). Results show that customers rated this item with the lowest scores (3.27). That means that the banks seem, in some cases, not to have given adequate attention to solving their customers'
problems. This may be due to two reasons; in Libyan public commercial banks most services are conducted manually, in this case, it is possible the banks’ staff have a lot of pressure of work caused by performing many tasks when the customer asks for help to solve his/her problem. This may lead to staff asking customers to wait for a time to get the help they need for their problems. Another reason could be that the nature of some customers’ problems may have taken a long time to be resolved, but some customers insisted on resolving it immediately. It can sometimes be difficult for staff to deal with these kinds of problems immediately.

The standard deviation of respondents’ answers indicated a similar pattern across the items of this dimension. The standard deviations in the items were low and the respondents showed a high degree of uniformity in their perceptions of items in the reliability dimension.

5.3.3.2 Assurance Dimension

The second dimension relates to the knowledge and courtesy of employees and their ability to inspire trust and confidence. Figure 5.2 shows the evaluation of the items used in this dimension in a boxplot graph.
Most of the items in this dimension reached a median score of 4 (item 2, 7, 17 and 22) in a five point scale. However, answers to items 2 (*The employees of my bank instil trust and confidence in me*), 7 (*My bank's employees make customers feel safe in their transaction*), 17 (*Employees in my bank have the knowledge to answer my questions*), and 22 (*The employees of my bank provide services with high competence*) were exclusively in the lower quartile. That means that despite the high mean, no response above 4 was allocated to this scale, but there were some responses in the lower quartile. This shows a tendency towards the negative half of the scale, despite the median score of 4.

The rest of the items in this dimension (12 and 27) reached a median of 3 on the five-point scale. Items 12 (*In my bank, employees are consistently courteous with me*) and 27 (*There is security staff in my bank all the time*) only had values in the upper quartile. Details about these items are presented below when discussing the median values.
Table 5.8 shows the items included in the Assurance dimension and their mean, mode and standard deviation values. The items are presented according to the highest mean score.

Table 5.8: Measures of Central Tendencies and Standard Deviations (Averages) for Assurance Variables

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Mean</th>
<th>Mode</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>My bank’s employees make customers feel safe in their transaction.</td>
<td>3.57</td>
<td>4</td>
<td>1.10</td>
</tr>
<tr>
<td>2.</td>
<td>The employees of my bank instil trust and confidence in me.</td>
<td>3.52</td>
<td>4</td>
<td>1.11</td>
</tr>
<tr>
<td>22.</td>
<td>The employees of my bank provide services with high competence.</td>
<td>3.47</td>
<td>4</td>
<td>1.13</td>
</tr>
<tr>
<td>17.</td>
<td>Employees in my bank have the knowledge to answer my questions.</td>
<td>3.44</td>
<td>4</td>
<td>1.07</td>
</tr>
<tr>
<td>12.</td>
<td>In my bank, employees are consistently courteous with me.</td>
<td>3.37</td>
<td>4</td>
<td>.911</td>
</tr>
<tr>
<td>27.</td>
<td>There is security staff in my bank all the time.</td>
<td>3.32</td>
<td>4</td>
<td>1.06</td>
</tr>
</tbody>
</table>

As Table 5.8 shows, this set of items suggests that the assurance dimension receives a high evaluation from respondents. All these items were allocated a mode value of 4. In addition, the highest mean was obtained for the item *My bank’s employees make customers feel safe in their transaction* (3.57), followed by *The employees of my bank instil trust and confidence in me* (3.52), *The employees of my bank provide services with high competence* (3.47), and *Employees in my bank have the knowledge to answer my questions* (3.44). These high evaluations may have been as a result of the regular training courses that the employees of Libyan public commercial banks usually receive to improve their technical banking knowledge. These programmes have a vital impact on employee performance in terms of enabling them to reply to repeated and unexpected questions and inquiries from their customers. Furthermore, the behaviour of bank employees instils greater confidence, which makes customers feel safe in dealing with banks. In addition to this, the management of the majority of Libyan public commercial banks ensured that the bank’s employees possessed the knowledge and skill
necessary to retain their customers' confidence and make them feel secure. Alternatively, these figures could also indicate a lower overall perception of the quality of these items.

Regarding the rest of the items in this dimension (item 12, *In my bank employees are consistently courteous with me* and item 27 *There is security staff in my bank all the time*), these reached mean values of 3.37 and 3.32 respectively on the five-point scale. The respondents may have seen these two items as being of less importance when evaluating their bank's services. In addition, customers may have considered that providing security staff at the bank did not necessarily have a direct impact on their assessment of banking services.

The standard deviation of respondents' answers indicated a similar pattern to that found in the reliability dimension.

### 5.3.3.3 Responsiveness Dimension

The third dimension, Responsiveness, refers to the willingness of the bank to help their customers and provide prompt service to them. Figure 5.3 shows the results of this dimension.
As figure 5.3 shows that, a median of 3 was reached by more than half of the items in this dimension (3, 8, 18, 28, 32 and 35). Some of these items had an even distribution in both quartiles: these questions were: 18 *The employees of my bank are ready to respond to their customers' request*, 28 *My bank expands the hours of business in case of customer need*, 32 *My bank increases the number of employees or serving windows when crowded*, and 35 *The employees of my bank answer telephone calls promptly*. Only two items, item 3 *Customers at my bank are told exactly when services will be provided* and item 8 *Employees in my bank give prompt service* reached a median value of 3 and had an even distribution in the upper quartile.

The others items with a 4 point median only had values in the lower quartile. In other words, the range of answers was basically between 4 and 3 in the scale, with a tendency to the lower end of the scale. These questions were: 13 *My bank's employees are always willing to help me*, and 23 *My bank allocates serving windows to serve female customers*. However, these two items had values above the median, which means that the level of agreement was high as there were values above 3 in these items. They also had an even distribution in the lower quartiles.
These results are confirmed by the information provided for the mean, mode and the standard deviation, presented in Table 5.9.

Table 5.9: Measures of Central Tendencies and Standard Deviations (Averages) for Responsiveness Variables

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Mean</th>
<th>Mode</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>My bank allocates serving windows to serve female customers.</td>
<td>3.48</td>
<td>4</td>
<td>1.06</td>
</tr>
<tr>
<td>13</td>
<td>My bank’s employees are always willing to help me.</td>
<td>3.44</td>
<td>4</td>
<td>.913</td>
</tr>
<tr>
<td>8</td>
<td>Employees in my bank give prompt service.</td>
<td>3.30</td>
<td>4</td>
<td>.929</td>
</tr>
<tr>
<td>3</td>
<td>Customers at my bank are told exactly when services will be provided.</td>
<td>3.29</td>
<td>4</td>
<td>.983</td>
</tr>
<tr>
<td>32</td>
<td>My bank increases the number of employees or serving windows when crowded.</td>
<td>3.17</td>
<td>3</td>
<td>1.06</td>
</tr>
<tr>
<td>28</td>
<td>My bank expands the hours of business in case of customer need.</td>
<td>3.12</td>
<td>4</td>
<td>1.14</td>
</tr>
<tr>
<td>18</td>
<td>The employees of my bank are ready to respond to their customers’ request.</td>
<td>3.09</td>
<td>3</td>
<td>1.10</td>
</tr>
<tr>
<td>35</td>
<td>The employees of my bank answer telephone calls promptly.</td>
<td>3.06</td>
<td>4</td>
<td>1.11</td>
</tr>
</tbody>
</table>

According to Table 5.9, results show that most of the items had a mode value of 4, with the exception of two items, 18 and 32, which obtained a mode value of 3. The highest mean value was scored by item 23 (My bank allocates serving windows to serve female customers, 3.48); this could be a reflection of a perception that the cultural influences of Libyan society, where it is not acceptable for men and women to mingle together in the same queue, were being recognised by the public banks, and that this recognition was valued by customers, reflected in its high mean score. The second highest mean value was reached by item 13 (My bank’s employees are always willing to help me, 3.44). This result could be due to the fact that employees at Libyan public commercial banks understand that their banks suffer from some weaknesses in terms of modern technology, such as computers and ATMs, therefore, this situation gives the employees motivation to offer more help to their customers at all times. Observation and anecdotal evidence gleaned by the researcher during the administration of the survey suggested
that Libyan customers very willing to wait for relatively long periods of time, (periods which would have been unacceptable in other cultural contexts), provided the service they received at the end of this time was thorough and took into account their personal needs as individuals.

In relation to items 8 (Employees in my bank give prompt service), 3 (Customers at my bank are told exactly when services will be provided), 32 (My bank increases the number of employees or serving windows when crowded), 28 (My bank expands the hours of business in case of customer need), and 18 (The employees of my bank are ready to respond to their customers' request) these items reached mean values of 3.30, 3.29, 3.17, 3.12 and 3.09 respectively on the five-point scale. However, the lowest mean in this dimension was achieved by item 35, The employees of my bank answer telephone calls promptly (3.06). This result shows that the respondents evaluated this item as the lowest in this dimension, which could be due to a variety of reasons; firstly, the employees in Libyan public commercial banks may not have adequate training programmes on how to deal appropriately with customer telephone calls. Secondly, it could be because there were some problems in the technology used by Libyan public commercial banks in providing this type of service.

The standard deviation of respondents' answers indicated a similar pattern to the first two dimensions.

5.3.3.4 Empathy Dimension

The fourth dimension was empathy: covering the caring, individualised attention given to customers. Figure 5.4 shows the evaluation of the items used in this dimension in a boxplot graph.
Some of the items in this dimension reached a median score of 4, including items 4 (*My bank gives me individual attention*), 14 (*The employees of my bank have the interests of their customers at heart*), and 19 (*The employees of my bank have a good relationship with their customers*). Responses to most of these items were evenly distributed in the lower quartiles, showing that respondents had a generally positive opinion, which ranged from 4 to 3 on the five-point scale. However, the answers to items 9 (*My bank has convenient operating hours*) and 33 (*The employees of my bank always listen carefully to my complaints*) were evenly distributed between the upper and the lower quartiles, with a median score of 3. These items ranked from 4 to 2, which means that there were both negative and positive answers to these questions.

The rest of the items in this dimension reached a median of 3 on the five-point scale: items 24 (*The employees of my bank understand customer needs*) and 29 (*The employees of my bank are keen to provide additional services to me*) were exclusively in the upper quartile, which means that there were only positive answers to these two items.
This information could be expanded using the data provided by an analysis of the mean, mode and standard deviation values, which show nuances in the evaluation of this service. Table 5.10 provides this information per item with the mean, mode and standard deviation.

Table 5.10: Measures of Central Tendencies and Standard Deviations (Averages) for Empathy Variables

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Mean</th>
<th>Mode</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>The employees of my bank have a good relationship with their customers.</td>
<td>3.57</td>
<td>4</td>
<td>1.13</td>
</tr>
<tr>
<td>4</td>
<td>My bank gives me individual attention.</td>
<td>3.41</td>
<td>4</td>
<td>1.08</td>
</tr>
<tr>
<td>14</td>
<td>The employees of my bank have the interests of their customers at heart.</td>
<td>3.38</td>
<td>4</td>
<td>1.00</td>
</tr>
<tr>
<td>29</td>
<td>The employees of my bank are keen to provide additional services to me.</td>
<td>3.33</td>
<td>4</td>
<td>0.981</td>
</tr>
<tr>
<td>33</td>
<td>The employees of my bank always listen carefully to my complaints.</td>
<td>3.30</td>
<td>4</td>
<td>1.16</td>
</tr>
<tr>
<td>24</td>
<td>The employees of my bank understand customer needs.</td>
<td>3.24</td>
<td>4</td>
<td>0.945</td>
</tr>
<tr>
<td>9</td>
<td>My bank has convenient operating hours.</td>
<td>3.07</td>
<td>4</td>
<td>1.11</td>
</tr>
</tbody>
</table>

The results in Table 5.10 confirm that almost all items in this dimension were marked with a mode value of 4. However, the highest mean score (3.57) in this dimension was allocated to item 19, which refers to the relationship between the employees and customers. This means that most of the customers of Libyan public commercial banks considered that they had a good relationship with their bank's staff. The second highest mean score (3.41) was assigned to the item individual attention (item 4). This means that the customers perceived that the banks' staff gave them personal care with a high level of attention on many occasions. This result is not surprising in a society like Libya, where people depend to a large extent on friendships and good relationships in meeting their needs and conducting dealings in different aspects of their lives. What is perhaps important to note here is that these items are possible to provide in a banking industry free from the competitive pressures found in open, market economies; in Libya
movement between banks by customers is relatively rare, and banks are not able to
differentiate themselves on the basis of the products or technology they provide due to
restrictions enforced by the CBL and the nature of the telecommunications/internet
infrastructure in Libya. The question Libyan banks must consider is whether close
personal attention is a requisite of high quality service in Libya, or an acceptable
alternative until modern banking technology can be introduced nationwide at a high
level of efficiency.

With regard to items 14 (**The employees of my bank have the interests of their customers at heart**), 29 (**The employees of my bank are keen to provide additional services to me**), 33 (**The employees of my bank always listen carefully to my complaints**), and 24 (**The employees of my bank understand customer needs**) these were marked with mean values of 3.38, 3.33, 3.30 and 3.24 respectively on the five-point scale.

The lowest rating, (with a mean value of 3.07) was associated with convenience of the
operating hours of the bank (item 9). This can be explained by two reasons: first, bank
operating hours were 8.30 am - 3.30 pm, and this may have been a source of
inconvenience to some customers, particularly those who worked. As retired customers
are able to use normal opening hours, this score is, as expected, higher in the older age
categories. Second, the relatively short daily working hours in which the customers can
carry out their transactions may cause overcrowding and an increased workload for
bank employees. This will prevent some customers from receiving individual attention
from the banks' employees, or even from the branch managers themselves.

The standard deviation of respondents' answers indicated a similar pattern to all three
previous dimensions.
5.3.3.5 Tangibles Dimension

The fifth dimension, tangibles, includes physical facilities, equipment and the appearance of personnel, and the level of modern technology such as computers and ATMs. Figure 5.5 displays the results of this dimension.

The results of the boxplot show that there were two questions with a median of 4 that had all their answers in the lower quartiles, with the range of answers between 4 and 3 in the scale: for items 15 (My bank’s employees look professional and well dressed) and 20 (The pamphlets and forms produced by my bank are clear and easy to understand), these two questions achieved the highest scores in this dimension and suggest that the bank’s staff had the necessary experience and were proficient in their work, and that they took care with their appearance according to their work needs, as well as that their banks provided their clients with explanations and information in a manner that was easy and clear to understand.
On the other hand, the other items in this dimension had a median of 3 on the scale. Some of them had their values exclusively in the upper quartile, which indicates that no answer was lower than 3, and this may also suggest that the answers tended to be more positive as they were exclusively between the median values 3 and 4. These items were: 25 (My bank has enough parking spaces and an accessible location), and 30 (My bank looks attractive from the outside). Also, the last two items 5 (My bank has state-of-the-art technology such as computers and ATMs), and 10 (Physical facilities of my bank are visually appealing) had an even distribution between the upper and lower quartiles. In other words, the range of answers was basically between 4 and 2 on the scale, with a tendency towards the lower end of the scale. The scores for these two questions were the lowest in this dimension, and also item 5 had almost the lowest score of all the items in this study.

These results could be confirmed with the information provided by the mean, mode and the standard deviation, which are presented in Table 5.11.

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Mean</th>
<th>Mode</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.</td>
<td>The pamphlets and forms produced by my bank are clear and easy to understand.</td>
<td>3.43</td>
<td>4</td>
<td>1.16</td>
</tr>
<tr>
<td>15.</td>
<td>My bank’s employees look professional and well dressed.</td>
<td>3.40</td>
<td>4</td>
<td>.997</td>
</tr>
<tr>
<td>30.</td>
<td>My bank looks attractive from the outside.</td>
<td>3.39</td>
<td>4</td>
<td>1.09</td>
</tr>
<tr>
<td>25.</td>
<td>My bank has enough parking spaces and an accessible location.</td>
<td>3.31</td>
<td>4</td>
<td>1.12</td>
</tr>
<tr>
<td>10.</td>
<td>Physical facilities of my bank are visually appealing.</td>
<td>3.22</td>
<td>3</td>
<td>1.06</td>
</tr>
<tr>
<td>5.</td>
<td>My bank has state-of-the-art technology such as computers and ATMs.</td>
<td>3.05</td>
<td>3</td>
<td>1.08</td>
</tr>
</tbody>
</table>

In line with the boxplot graph results, the results in table 5.11 show that most of the items had mode values of 4, with the exception of two items, item 5 and item 10 which
obtained mode values of 3. However, the highest mean was achieved by item 20 *The pamphlets and forms produced by my bank are clear and easy to understand* (3.43), followed by item 15 *My bank’s employees look professional and well dressed* (3.40).

Item 30 *My bank looks attractive from the outside* (3.39) was ranked third highest in this dimension, which means that the external appearance of the bank may have a role in creating the impression of the customers about the level of services that could be offered by one bank or another. Furthermore, although item 25 (*My bank has enough parking spaces and an accessible location*) had a mode value of 4, its mean value was not so high (3.31), which means that the banks’ parking spaces and locations may not have risen to the level that satisfied the aspirations of customers. This also may have been due to the location of banks in city centre locations, which sometimes impose some constraints regarding providing convenient parking for customers.

With regard to the Libyan public commercial banks’ physical facilities, customers evaluated these relatively low, with a mean value of 3.22, which means that the Libyan banks may not have paid enough attention to this issue, although these banks had the necessary sources of funding to improve facilities.

However, the lowest mean in this dimension was achieved by item 5 *My bank has state-of-the-art technology such as computers and ATMs* (3.05). In other words, this item was related to the level of modern technology that was in use at the time of the survey by the Libyan public commercial banks for the purposes of providing alternative means of accessing the basic services of the banks.

As a result, it can be seen that this item had the lowest mean and mode values in this dimension, and of all items within this study. Therefore, it is possible to conclude that
Libyan public commercial banks may have been deficient in providing modern
technology, and this may have had an impact on the perception of service quality among
the customers of Libyan public commercial banks.

The standard deviation of respondents’ answers indicated a similar pattern to all the
other dimensions.

5.3.3.6 Overall Service Quality (SERVQUAL)

Descriptive statistics were used to examine the actual level of service quality as
perceived by the customers of public commercial banks in Libya. The mean scores were
used in this study to measure the central tendency of data that can be used to predict the
future demand for products and services, while the standard deviation measure was used
to obtain the degree of the dispersion of data. The descriptive statistics were used to find
out the mean and standard deviation of each SERVQUAL statement, employing only
the perception element of the model. The descriptive statistical results, which include
the mean and standard deviation results of each SERVQUAL dimension, are presented
in Table 5.12 below:

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Mean values</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>3.46</td>
<td>.712</td>
</tr>
<tr>
<td>Assurance</td>
<td>3.44</td>
<td>.734</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>3.23</td>
<td>.791</td>
</tr>
<tr>
<td>Empathy</td>
<td>3.33</td>
<td>.802</td>
</tr>
<tr>
<td>Tangibles</td>
<td>3.29</td>
<td>.821</td>
</tr>
<tr>
<td>Overall service quality</td>
<td>3.35</td>
<td>.684</td>
</tr>
</tbody>
</table>

These findings, as shown in tables 5.7 to 5.12, indicate that all the mean values of the
overall service quality, the five dimensions of service quality and the 35 items of each
dimension for Libyan public commercial banks were relatively high, reflecting a positive perception of banking services quality from the perspective of their customers. Therefore, the customers of these banks generally rated the banks' performance in terms of the overall service quality, the five dimensions of service quality and the 35 items of each dimension favourably.

5.3.4 Factor Analysis

To address the study aims regarding degrees of importance attached to various dimensions of service quality, exploratory factor analysis was run on the sample of the customers of the Libyan public commercial banks.

5.3.4.1 Factor Analysis for the Study Sample

In order to analyse the service quality scale (modified SERVQUAL) an exploratory factor analysis with principle component extraction and Varimax rotation was applied. Hair et al., (1998) suggest that unrotated solutions are not sufficient to conduct the analysis and in most cases rotation will improve interpretation by reducing some of the ambiguities accompanying preliminary analysis.

Theories about the type of rotation adequate for specific data are not conclusive and there is no specific guidance about choosing between orthogonal or oblique rotation techniques (Hair et al., 1998). The orthogonal method, however, was selected in this analysis because the purpose was to identify theoretically meaningful constructs rather than reducing the items into a manageable set of factors. The literature also shows that Varimax rotation has been extensively used in similar studies (see Jabnoun and Al-Tamimi, 2003; Safakli, 2007). According to Hair et al. (1998) and Tabachnick and Fidell (2007), the cut-off criterion for the significance of factor loadings is set at 0.30
for a sample larger than 300 (see table 5.13). Factor analysis is extremely sensitive to the size of correlations, therefore, the inter-item correlation matrix needed to be checked before selecting the items for the factor analysis (Kim and Mueller, 1978). This procedure was accomplished with the service quality scale of the study sample shown in Table 5.14.

Table 5.13: Guidelines on Factor Loadings and Sample Sizes Needed

<table>
<thead>
<tr>
<th>Factor loading</th>
<th>Sample size needed for significance*</th>
</tr>
</thead>
<tbody>
<tr>
<td>.30</td>
<td>350</td>
</tr>
<tr>
<td>.35</td>
<td>250</td>
</tr>
<tr>
<td>.40</td>
<td>200</td>
</tr>
<tr>
<td>.45</td>
<td>150</td>
</tr>
<tr>
<td>.50</td>
<td>120</td>
</tr>
<tr>
<td>.55</td>
<td>100</td>
</tr>
<tr>
<td>.60</td>
<td>85</td>
</tr>
<tr>
<td>.65</td>
<td>70</td>
</tr>
<tr>
<td>.70</td>
<td>60</td>
</tr>
<tr>
<td>.75</td>
<td>50</td>
</tr>
</tbody>
</table>

(*Note: significance at 0.05 level) (Source: Hair et al., 1998, p. 112)
Table 5.14: Reliability Analysis of the Service Quality Scale for the Study Sample

<table>
<thead>
<tr>
<th>No.</th>
<th>Dimension</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
<th>No.</th>
<th>Dimension</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reliability</td>
<td>Alpha per dimension = 0.785</td>
<td></td>
<td></td>
<td>Empathy</td>
<td>Alpha per dimension = 0.812</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.460</td>
<td>.831</td>
<td>4</td>
<td></td>
<td>.378</td>
<td>.828</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>.478</td>
<td>.831</td>
<td>9</td>
<td></td>
<td>.316</td>
<td>.830</td>
<td>14</td>
</tr>
<tr>
<td>11</td>
<td>.463</td>
<td>.831</td>
<td>19</td>
<td></td>
<td>.358</td>
<td>.829</td>
<td>19</td>
</tr>
<tr>
<td>16</td>
<td>.411</td>
<td>.827</td>
<td></td>
<td></td>
<td>.475</td>
<td>.831</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>.463</td>
<td>.831</td>
<td>24</td>
<td></td>
<td>.479</td>
<td>.831</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>.433</td>
<td>.832</td>
<td>29</td>
<td></td>
<td>.401</td>
<td>.833</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>.377</td>
<td>.828</td>
<td>33</td>
<td></td>
<td>.317</td>
<td>.830</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>.448</td>
<td>.832</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assurance</td>
<td>Alpha per dimension = 0.778</td>
<td></td>
<td></td>
<td>Tangibles</td>
<td>Alpha per dimension = 0.825</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.358</td>
<td>.829</td>
<td>5</td>
<td></td>
<td>.403</td>
<td>.827</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>.453</td>
<td>.832</td>
<td>10</td>
<td></td>
<td>.397</td>
<td>.827</td>
<td>10</td>
</tr>
<tr>
<td>12</td>
<td>.355</td>
<td>.829</td>
<td>15</td>
<td></td>
<td>.319</td>
<td>.830</td>
<td>15</td>
</tr>
<tr>
<td>17</td>
<td>.386</td>
<td>.828</td>
<td>20</td>
<td></td>
<td>.462</td>
<td>.825</td>
<td>20</td>
</tr>
<tr>
<td>22</td>
<td>.372</td>
<td>.827</td>
<td>25</td>
<td></td>
<td>.439</td>
<td>.826</td>
<td>25</td>
</tr>
<tr>
<td>27</td>
<td>.361</td>
<td>.829</td>
<td>30</td>
<td></td>
<td>.326</td>
<td>.830</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Responsiveness</td>
<td>Alpha per dimension = 0.761</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.345</td>
<td>.829</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>.427</td>
<td>.827</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>.383</td>
<td>.828</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>.340</td>
<td>.829</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>.469</td>
<td>.831</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>.383</td>
<td>.833</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>.467</td>
<td>.831</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>.422</td>
<td>.833</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Scale Reliability: Cronbach's Alpha = 0.834

As a result, the initial 35 items of the service quality scale (modified SERVQUAL model) remained. After the reliability test, the 35 retained items for the service quality scale were subjected to Principal Component Analysis (PCA) using the Statistical Package for the Social Sciences (SPSS) Version 16.0.1 for Windows to identify the underlying dimensions that customers of Libyan public commercial banks used to
evaluate the service quality of their banks. Although based on previous studies, this scale offered a different combination of variables designed to capture information sensitive to Libya's status as an Arab/Islamic culture and a transition economy, that had the possibility of providing unique results. Therefore, factor analysis was required to ascertain the dimensionality of the service quality scale (SERVQUAL). This step helped to check dimensionality, define dimensions, purify the scale, and establish its construct validity.

The first step was to assure the suitability of the scale to running factor analysis. In order to do this, some commonly used (previous) tests were run. The first aspect to be considered was the result of the correlation matrix. An initial correlation matrix showed that there were many coefficients of 0.30 and above (see appendix 5.1), which is the level required for running factor analysis. A matrix that is factorable should include several sizeable correlations. The expected degree of correlation depends to some extent on sample size, but if no correlation exceeds 0.30, the use of factor analysis is questionable (Tabachnick and Fidell, 2007).

However, high bivariate correlations do not intrinsically mean that the correlation matrix contains factors. It could happen that some variables are related and do not reflect underlying processes that simultaneously affect several variables (Tabachnick and Fidell, 2007). For this reason, it was necessary to undertake further tests to determine if it was feasible to proceed with the factor analysis of the 35 variables of the service quality scale (SERVQUAL). The second step was to check the value of the Kaiser-Meyer-Olkin Measurement of sampling (KMO) (Kaiser, 1970, 1974). The KMO measure of sampling adequacy is an index for comparing the magnitudes of the observed correlation coefficients to the magnitudes of the partial correlation
coefficients. A KMO measure of 0.60 is the minimum accepted in order to run factor analysis to the data, since correlations between pairs of variables can be explained by other variables. This procedure is displayed in Table 5.15.

Table 5.15: Kmo and Bartlett’s Test

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</th>
<th>0.843</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td></td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>4736.812</td>
</tr>
<tr>
<td>df</td>
<td>595</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The results of Table 5.14 show that the current study reached a value of 0.843, which exceeds the minimum requirement proposed by Kaiser. The third step was to use Bartlett's test of sphericity (Bartlett, 1954). In this test all diagonal terms are 1 and all off-diagonal terms are 0. The current study obtained a value of 4736.812 for the test of sphericity. Since the value is large and the associated significance level of 0.000 is small, it is unlikely that the population correlation matrix is an identity.

If the hypothesis that the population correlation matrix is an identity cannot be rejected because the observed significance level is large, researchers are free to consider the use of factor analysis. The KMO value obtained and the highly significant level of the test of sphericity, were both very clear indications that the given set of data were adequate for factor analysis.

**Principal Factor Extraction**

An initial Principal Component Analysis (PCA) of the scale items produced an initial solution of seven components with an eigenvalue exceeding 1, based on Kaiser's criterion. However, there were many items overloaded or with low loading. As recommended, factor analysis was run until a clear pattern was identified. The subsequent factor analysis was run until a clear pattern of four factors was identified.
This led to a final set of four factors with eigenvalues higher than 1, which explain a total of 59.451 percent of the variance. These data are presented in Table 5.16.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Eigenvalue</th>
<th>% of variance</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>4.811</td>
<td>25.916</td>
<td>13.832</td>
</tr>
<tr>
<td>Factor 2</td>
<td>2.901</td>
<td>14.615</td>
<td>27.485</td>
</tr>
<tr>
<td>Factor 3</td>
<td>2.370</td>
<td>10.302</td>
<td>40.430</td>
</tr>
<tr>
<td>Factor 4</td>
<td>1.982</td>
<td>8.618</td>
<td>59.451</td>
</tr>
</tbody>
</table>

For further investigation of the number of factors to be extracted, Cattell’s Scree plot was checked. It was clear from the results that there was quite a clear gap between the first factor and the rest, but followed by another gap after the four factors. Based on both Kaiser’s criterion and the Scree test shown in Figure 5.6, it was decided to retain the four components for the rotated factor solution.

Figure 5.6: Eigenvalues Scree Plot

In view of the levelling out of the scree plot at around the eigenvalue of 1, the researcher decided to rerun factor analysis using an eigenvalue of 0.8: however,
following this factor analysis only one extra item was found to load, and the four
dimensions result was retained.

Varimax rotation was used for the rotation solution. The aim of running Principal
Component Analysis (PCA) was to check the scale dimensionality and identify the
items that best represented the four dimensions to be combined for further analysis.
Therefore, items with ambiguous loadings (closely loaded on more than one
component) were dropped one by one. After reiteratively repeating the factor analysis
procedure, a clear structure of four factors was identified, with all the components
showing a number of strong loadings and all variables loading substantially on only one
component.

As another test of the adequacy of the number of factors, communality values were
inspected. If communality values equal or exceed 1, the number of factors extracted is
wrong (Tabachnick and Fidell, 2007). Communality values for the 23 items in the four
factors did not reach values of 1.00 or above. The highest two reached over 0.60 (item
5, 0.645 and item 10, 0.635). This was further confirmation that the selection of four
factors was suitable for the data at hand. A factor analysis, using principal components
method with Varimax rotation, identified four service quality factors, composed of 23
items. The resulting Varimax rotated factor loading matrices are shown in Table 5.17
under their corresponding dimension. Items were ordered by size of loadings in which
each variable contributed to the factor.
Table 5.17: Factor Loading Structure for the Study Sample

<table>
<thead>
<tr>
<th>Factor 1: Reliability</th>
<th>F1</th>
</tr>
</thead>
<tbody>
<tr>
<td>My bank insists on error-free records. (Reliability, item 21)</td>
<td>.768</td>
</tr>
<tr>
<td>My bank’s employees provide services as promised. (Reliability, item 1)</td>
<td>.761</td>
</tr>
<tr>
<td>The advertised promises of my bank are consistent with its performance. (Reliability item 11)</td>
<td>.747</td>
</tr>
<tr>
<td>My bank provides its customers with accurate information. (Reliability, item 34)</td>
<td>.720</td>
</tr>
<tr>
<td>My bank shows me a sincere interest in solving my problems. (Reliability, item 6)</td>
<td>.699</td>
</tr>
<tr>
<td>In my bank, employees are consistently courteous with me. (Assurance item 12)</td>
<td>.576</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 2: Tangibles</th>
<th>F2</th>
</tr>
</thead>
<tbody>
<tr>
<td>My bank has state-of-the-art technology such as computers and ATMs. (Tangibles item 5)</td>
<td>.791</td>
</tr>
<tr>
<td>Physical facilities of my bank are visually appealing. (Tangibles item 10)</td>
<td>.783</td>
</tr>
<tr>
<td>My bank’s employees look professional and well dressed. (Tangibles item 15)</td>
<td>.748</td>
</tr>
<tr>
<td>The pamphlets and forms produced by my bank are clear and easy to understand. (Tangibles item 20)</td>
<td>.737</td>
</tr>
<tr>
<td>My bank has enough parking spaces and an accessible location. (Tangibles item 25)</td>
<td>.696</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 3: Responsiveness and Empathy</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>The employees of my bank understand customer needs. (Empathy item 24)</td>
<td>.707</td>
</tr>
<tr>
<td>My bank gives me individual attention. (Empathy item 4)</td>
<td>.684</td>
</tr>
<tr>
<td>The employees of my bank have the interests of their customers at heart. (Empathy item 14)</td>
<td>.674</td>
</tr>
<tr>
<td>My bank’s employees are always willing to help me. (Responsiveness item 13)</td>
<td>.657</td>
</tr>
<tr>
<td>Customers at my bank are told exactly when services will be provided. (Responsiveness item 3)</td>
<td>.636</td>
</tr>
<tr>
<td>My bank has convenient operating hours. (Empathy item 9)</td>
<td>.632</td>
</tr>
<tr>
<td>Employees in my bank give prompt service. (Responsiveness item 8)</td>
<td>.604</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 4: Assurance</th>
<th>F4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees in my bank have the knowledge to answer my questions. (Assurance item 17)</td>
<td>.761</td>
</tr>
<tr>
<td>My bank’s employees make customers feel safe in their transaction. (Assurance item 17)</td>
<td>.739</td>
</tr>
<tr>
<td>The employees of my bank instil trust and confidence in me. (Assurance item 2)</td>
<td>.701</td>
</tr>
<tr>
<td>There is security staff in my bank all the time. (Assurance item 27)</td>
<td>.691</td>
</tr>
<tr>
<td>The employees of my bank allocate sufficient time to explain banking services to customers. (Reliability item 31)</td>
<td>.608</td>
</tr>
</tbody>
</table>

Eigenvalue 4.811 2.901 2.370 1.982
Explained variance by factor (%) 25.916 14.615 10.302 8.618

Table 5.17 presents the four factors identified after running factor analysis. In all cases, variables loaded heavily on their specific factor (0.30 or more). The four factors extracted explained a total of 59.451% of the variance, which is above the acceptable level of at least 50% (Tabachnick and Fidell, 2007).

A structure of four components or factors was identified, with Component 1 (Reliability) contributing the highest percentage of the explained variance (25.916 percent), followed by Component 2 (Tangibles) with 4.615 percent, and Components 3 (Responsiveness and Empathy) and 4 (Assurance), contributing 10.302 percent and 8.618 percent respectively.

The four-dimensional structure obtained in this study, however, differs from the structure assumed by Parasuraman et al.'s (1991) proposition. Therefore, the initial assumption of five dimensions in the context of the bank sector (modified SERVQUAL) was not confirmed by these results. However, the emerging pattern does not completely differ from the initial dimensions: Reliability, Assurance, Responsiveness, Empathy and Tangibles.

From the above table it can be seen that with the use of 0.40 as a factor loading cut-off point (Jabnoun and Al-Tamimi, 2003), there were four factors and that the pattern of the loadings was quite clear. A simple structure is clearly present, with several variables correlating highly with each factor and only one factor correlating highly with each variable. The importance of each factor was evaluated by the sizes of eigenvalues and the proportion of variance accounted for by the factor rotation, because these establish both the strength and clarity of the factor. Without doubt, Factor 1 was the most important as it accounted for the largest proportion of the total variance with eigenvalues higher than 3.00 (4.811), and explains 25.916% of the total variance of the
four factors, which was 59.451%. It includes items mainly from the reliability dimension (21, 1, 11, 34, and 6) and only one from the assurance dimension (item 12). Moreover, item "Error-free record" was also a problem for the developers of SERVQUAL (Parasuraman et al., 1994b). They noted that it often loaded by itself, or had significantly lower loadings than the other four reliability items. It is therefore not a surprising result that this item was loaded in the study's factor analysis. It can be seen from table 5.17 that items loaded on the first component clearly represent the notion of how the Libyan public commercial banks had the ability to perform the desired service dependably, consistently and accurately. This ability was being represented through the implementation of appropriate banking policies. The content of the items loaded on this factor allow the researcher to name this factor "Reliability", the same as in the original model.

The rest of the factors did not reach eigenvalues of 3.00, and the percentage of variance was very low in all cases, with all together only explaining 33% of the common variance. Factor 2 accounted for 14.615% of the common factor variance. The items in this factor all come from the tangibles dimension. These items relate to physical facilities, equipment and the appearance of personnel, the level of modern technology such as computers and ATMs that may be available to Libyan public commercial banks, therefore, this factor was named "Tangibles", the same as in the original model.

Factor 3 includes five items from both the responsiveness and empathy dimensions. Although they explain only 10.302% of the common variance, all the items have high loadings, ranging from 0.604 to 0.707. But not only are the loadings surprisingly high, they have obvious meaning. They all refer to adequate provision of services for the amount of customers at the banks. The combination of responsiveness and empathy appears to be natural given the conceptual similarities between the two dimensions.
These dimensions are based on the idea that the bank’s employees understanding the customer needs, they are willing to help, and they give prompt service as well as individual attention. This justifies the name given to this factor, "Responsiveness and Empathy". These characteristics were highlighted by the respondents and factor analysis has clearly confirmed the importance of these variables when evaluating the service quality of the bank sector.

The last factor, it composed of four items from the assurance dimension (17, 7, 2 and 27) and one item from the reliability dimension (item 31). These items relate to the knowledge and courtesy of employees and their ability to inspire trust and confidence. It also indicates perceptions of security and a feeling of safety when making transactions. Some common characteristics allow the researcher to name this factor "Assurance", the same as in the original model.

**Reliability of the new factors after running factor analysis**

After running factor analysis, a final four-factor result emerged, and the items were allocated under a specific dimension. It was necessary to check the reliability of the four new scales. The first sign of internal consistency tested was based on the corrected *item-total correlation* values. These figures indicate the degree to which each item correlates with the total score. Low values (<0.30) here indicate that the item measures something different from the scale as an entire. Table 5.18 shows the results of this procedure.
Table 5.18: Reliability of the New Factors to the Study Sample

<table>
<thead>
<tr>
<th>Factor 1: Reliability</th>
<th>Cronbach’s alpha</th>
<th>Corrected Item-Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>My bank insists on error-free records.</td>
<td>0.81</td>
<td>0.319</td>
</tr>
<tr>
<td>My bank’s employees provide services as promised.</td>
<td></td>
<td>0.344</td>
</tr>
<tr>
<td>The advertised promises of my bank are consistent with its performance.</td>
<td></td>
<td>0.332</td>
</tr>
<tr>
<td>My bank provides its customers with accurate information.</td>
<td></td>
<td>0.458</td>
</tr>
<tr>
<td>My bank shows me a sincere interest in solving my problems.</td>
<td></td>
<td>0.487</td>
</tr>
<tr>
<td>In my bank, employees are consistently courteous with me.</td>
<td></td>
<td>0.436</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 2: Tangibles</th>
<th>Cronbach’s alpha</th>
<th>Corrected Item-Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>My bank has state-of-the-art technology such as Computers and ATMs.</td>
<td>0.82</td>
<td>0.426</td>
</tr>
<tr>
<td>Physical facilities of my bank are visually appealing.</td>
<td></td>
<td>0.430</td>
</tr>
<tr>
<td>My bank’s employees look professional and well dressed.</td>
<td></td>
<td>0.319</td>
</tr>
<tr>
<td>The pamphlets and forms produced by my bank are clear and easy to understand.</td>
<td></td>
<td>0.476</td>
</tr>
<tr>
<td>My bank has enough parking spaces and an accessible location.</td>
<td></td>
<td>0.481</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 3: Responsiveness and Empathy</th>
<th>Cronbach’s alpha</th>
<th>Corrected Item-Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The employees of my bank understand customer needs.</td>
<td>0.79</td>
<td>0.487</td>
</tr>
<tr>
<td>My bank gives me individual attention.</td>
<td></td>
<td>0.365</td>
</tr>
<tr>
<td>The employees of my bank have the interests of their customers at heart.</td>
<td></td>
<td>0.390</td>
</tr>
<tr>
<td>My bank’s employees are always willing to help me.</td>
<td></td>
<td>0.400</td>
</tr>
<tr>
<td>Customers at my bank are told exactly when services will be provided.</td>
<td></td>
<td>0.373</td>
</tr>
<tr>
<td>My bank has convenient operating hours.</td>
<td></td>
<td>0.332</td>
</tr>
<tr>
<td>Employees in my bank give prompt service.</td>
<td></td>
<td>0.448</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 4: Assurance</th>
<th>Cronbach’s alpha</th>
<th>Corrected Item-Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees in my bank have the knowledge to answer my questions.</td>
<td>0.77</td>
<td>0.388</td>
</tr>
<tr>
<td>My bank’s employees make customers feel safe in their transaction.</td>
<td></td>
<td>0.407</td>
</tr>
<tr>
<td>The employees of my bank instil trust and confidence in me.</td>
<td></td>
<td>0.316</td>
</tr>
<tr>
<td>There is security staff in my bank all the time.</td>
<td></td>
<td>0.332</td>
</tr>
<tr>
<td>The employees of my bank allocate sufficient time to explain banking services to customers.</td>
<td></td>
<td>0.403</td>
</tr>
</tbody>
</table>

As Table 5.18 shows, the recommended minimum requirement of 0.30 was achieved by all the variables in inter-item correlation. The second test for reliability was to run Cronbach’s alpha. The results of this test also show that all the new scales achieved an
alpha higher than 0.70, ranging from 0.77 to 0.82. From the findings of Cronbach's alpha if item deleted, the items in the four scales were found to be reliable (see appendix 5.2).

In Factor 4, however, the item ‘the employees of my bank instil trust and confidence in me’ had the lowest value in item-total correlation (0.316). Because this evidence suggests that this item has a weak relationship with the nominated construct, the alpha if item deleted was checked to see if elimination of this item would improve the overall Alpha. Results show that the elimination of this item would not improve the reliability coefficient of the scale. On the basis of this evidence the decision was reached to retain this item. Hinkin (1995) points to the appropriateness of this decision, arguing that elimination of items should take place only to obtain an acceptable reliability coefficient.

5.4 Summary

This chapter has presented the results of a survey involving 404 customers, evaluating service quality in four different Libyan public commercial banks. Survey findings related to all parts of the survey instrument were analysed and possible indications or conclusions from the outcomes were highlighted.

The data collected were analysed using the SPSS (Statistical Package for the Social Sciences) package, along with standard statistical analysis techniques: mean ratings, mode, standard deviation, Mann-Whitney test, Kruskal-Wallis test, and exploratory factor analysis. In short, this chapter provides an analysis of the data concerning the customer perceptions of service quality.

The following chapter provides further discussion and interpretation of the study’s findings that were generated by the modified SERVQUAL customer questionnaire.
Chapter 6  Discussion of Findings

6.1 Introduction

At the time of conducting this research the Libyan banking industry was characterised by a series of rapid and radical changes, and many factors were responsible for the changes taking place in the services provided by the Libyan public commercial banks. Customers were demanding solutions to new financial and investment needs, and the technology available to the banks was becoming more cost-effective; as a result the banks were changing the requirements of potential new business, regulatory processes, and the diversification of banking activities into such areas as trading, leasing and infrastructure finance. The banks believed that the changes they were making would improve their service provision, leading to increases in customer satisfaction and thereby the ability of the banks to retain customers, increase market share and boost profitability (Rust et al., 1999).

Furthermore, good service quality adds value to a company in the form of repeat business, positive word-of-mouth and higher profits. It also results in strengthened management practice, which usually results in improved employee job satisfaction, and therefore increased productivity and better communication within the company, together with the development of a service quality culture. Moreover, a continuous assessment of service quality can bring several benefits, such as identifying areas that would benefit from such improvements, as well as providing evidence of the necessity of quality programmes, and providing a benchmark for future measurement through the development of management support and action plans.
This study has produced a range of important results which will be discussed in some detail in this chapter. In order to complete the analysis begun in the previous chapter, a more in-depth discussion will be conducted in this chapter, which is divided into four sections. The main objective of section 6.2 is to present customers' perceptions regarding the dimensions of service quality, using a modified SERVQUAL model. The dimensionality of SERVQUAL data in the Libyan banking context is presented in section 6.3. The last section (6.4) provides a brief summary of the main findings of this chapter.

6.2 Customer Perceptions of Service Quality Dimensions

According to Bahia and Nantel (2000) perceived service quality in the banking industry is a product of the gap between customers' perceptions of the services given them by the bank (received service) and their expectations prior to the service experience (expected service). For Parasuraman et al. (1985) service quality can be defined as representing the degree and direction of discrepancy between a customer's perceptions of a service, and their expectations. Slightly differently, Grönroos (1984) suggested that there are two types of service quality: technical quality, which involves what customers actually receive from service (i.e. the outcome of the service) and functional quality, which concerns the way in which customers experience the service (i.e. the process of service delivery). There are many instruments for measuring service quality, among which is 'SERVPERF' (Cronin and Taylor, 1992), and 'SERVQUAL' (Parasuraman et al., 1988), while an adaptation of SERVQUAL called the CARTER model has been developed for use in Islamic banking sectors, to measure such items as compliance with Sharia law. However, while an Islamic country, Libya has no history of Islamic
banking, and has a banking system little changed since its foundation under European colonial control in the early twentieth century.

SERVQUAL is the instrument most often used in the measurement of service quality perceptions, and its scale, developed by Parasuraman et al. (1988, 1994), is well known to researchers and has been widely adopted in both original and modified versions for the study of bank service quality (e.g. Bahia and Nantel, 2000; Lassar et al., 2000; Jabnoun and Al-Tamimi, 2003; Cui et al., 2003). SERVQUAL was discussed in some detail in chapter 3 in terms of its features and the criticisms that have been made of it. Parasuraman et al. first published the SERVQUAL in 1988 and it has been subject to many improvements and revisions since. It usually consists of 22 perception items that are distributed throughout five service quality dimensions (Zeithaml et al., 1996; Zeithaml and Bitner, 2000). As mentioned in chapter 3, the researcher took the decision to exclude any measurement of expectation from this study, and chose to modify the SERVQUAL instrument by adding items specifically designed to capture information about areas deemed to be of particular importance to customers in an Arab/Islamic context. These items were all based on previous additions to SERVQUAL found in studies conducted in countries with a similar cultural background to Libya.

Therefore, in this study, only the perception of service quality has been considered. This is due to four main reasons: first, there are conceptual and psychometric problems associated with studies based on differences between perceptions and expectations (Cronin and Taylor, 1992). Second, Babakus and Boller (1992) concluded by using only perception scores, they produced a stronger correlation with independent measures, such as quality, than they were able to achieve with SERVQUAL measures (expectations minus perceptions). Third, perceptions of service quality have often been used in the banking research (e.g. Al Khatib and Gharaiibeh, 1998; Jabnoun and Al-Tamimi, 2003)
as well as in other sectors, such as ‘fast food restaurants’ (e.g. Davies et al., 1999). The researcher was also mindful of the need to make the task of completing the questionnaire as easy as possible for the respondents; hence, he included only the perception section, since it has been mentioned that a disadvantage of the SERVQUAL model is that the questionnaire is too long and complicated (Kasper et al., 1999).

As mentioned earlier, five dimensions of the modified SERVQUAL model (i.e. reliability, responsiveness, assurance, empathy and tangibles) were employed to measure customers’ perception of the service they received. In this specific research respondents were asked to provide opinions with regard to these dimensions. A five point Likert scale was used, with responses ranging from 1= strongly disagree to 5= strongly agree. 540 questionnaires were distributed in Libyan public commercial banks, 404 of which were completed and then used in this study.

The questionnaire items reflected adequate reliability, with the SERVQUAL dimensions reaching a Cronbach’s alpha score of 0.834 percent; this means that the composition of the model used as a whole was characterised by adequate reliability and was therefore quite suitable to measure the perceived level of service quality offered by the Libyan public commercial banks.

The customers’ attitudes towards the service quality offered by the Libyan public commercial banks can be used to assess the level of service quality, the mean score of the service quality dimensions being considered as an indication of the overall level of service quality (Robinson, 1999). On these grounds, the descriptive analysis showed that the actual level of service quality offered by the Libyan public commercial banks, as it was perceived by their customers, was relatively high reflecting a positive perception of banking service quality by Libyan customers, as shown in tables 5.7 to
5.12 in the previous chapter. These findings were for all thirty-five items, the five dimensions of service quality and also for the overall service quality that was used to measure the actual level of service quality in the Libyan public commercial banks. Taking the mean scores for each dimension, and the average of the sum of the scores for each item within the dimensions, it is clear that there was no score below 2.5 (mid-point) on the five-point Likert scale. Furthermore, the overall service quality shown in table 5.12, which is an average of the mean for all service quality dimensions together, gave a result of 3.35. Thus, the highest scoring item was from the dimension reliability *(My bank insists on error-free records)* and lowest scoring item was from the dimension tangibles *(My bank has state-of-the-art technology such as computers and ATMs)*. More specifically, the descriptive statistics of these items in each category are discussed in further detail in the following paragraphs.

**Reliability:** It can be seen from the results presented in table 6.1 that the mean scores of the respondents on the various items relating to reliability ranged from 3.27 to 3.69. In other words, the study sample had similar perceptions towards the statements relating to reliability. A comparison of means revealed that the perception of the reliability of banks did not differ among different age groups of customers. However the highest mean was indicated by the category of 25-34 year olds regarding the statement "My bank insists on error-free records", while the lowest mean was indicated by the category of 45-54 year olds with reference to the statement "My bank shows me a sincere interest in solving my problems", relating more specifically to service recovery, if and when things went wrong.
The results of the questionnaire suggest that banks should pay more attention to service recovery, a finding in line with previous researchers (Spreng, Harrell and Mackoy, 1995; Lewis and Spyarakopoulos, 2001; Colgate and Lang, 2001; Lagrosen, Hashemi and Leitner, 2004). Lagrosen et al. (2004) argue in this context that when errors occur, the service provider takes action in order to provide a new solution acceptable to the customer. Grönroos (1988) claims that service recovery consists of all actions and efforts taken by the service provider to resolve, amend, and restore the loss experienced by the customer as a result of service failure. Baron and Harris (2003) found that service recovery performance influenced overall customer satisfaction. Furthermore, in the technology-based services context, it has been reported that the key to service recovery

Table 6.1: Customer Perceptions Regarding the Reliability Dimension

<table>
<thead>
<tr>
<th>Age of respondents</th>
<th>Reliability items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*Item 1</td>
</tr>
<tr>
<td>Below 25 years</td>
<td>Mean</td>
</tr>
<tr>
<td>N=75</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>25-34 years</td>
<td>Mean</td>
</tr>
<tr>
<td>N=142</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>35-44 years</td>
<td>Mean</td>
</tr>
<tr>
<td>N=114</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>45-54 years</td>
<td>Mean</td>
</tr>
<tr>
<td>N=57</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>55+ years</td>
<td>Mean</td>
</tr>
<tr>
<td>N=16</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Total</td>
<td>Mean</td>
</tr>
<tr>
<td>N=404</td>
<td>Std. Deviation</td>
</tr>
</tbody>
</table>

*Note: using item number rather than writing the whole clause.
lies in enabling the customers themselves to resolve their own problems wherever possible (Baron and Harris, 2003). This can be done by determining the customers’ demands, and showing them how to use information technology-based services to solve such problems. One reason for the importance of service recovery is that customers need to see that banks care about their problems, and find it unacceptable when the banks are slow to deal with problems, or if too much effort is needed to get someone to deal with them. Therefore, an important benefit of efforts devoted to forming service recovery strategies is that it prevents customer defections to alternative service providers, on the basis that, if their problems are resolved in timely and satisfactory manner, the majority of dissatisfied customers will do business again (Lewis and Spyrokopoulos, 2001). Gaining new customers is more costly than keeping existing ones; in other words, a customer is more profitable when she/ he continues to deal with a bank for a long time (Reichheld and Sasser, 1990; Zeithaml et al., 1996). Chakravarty, Widows and Feinberg, (1996, p.29) mention that attracting a new customer can cost “five to six times more” than the cost of keeping an existing customer.

In terms of the managers of Libyan banks, this finding presents something of a dilemma. By the standards of international banking practice, the technology available to customers of Libyan public commercial banks is very limited and unreliable, and the provision of more technology would probably enable customers to have more control over their bank accounts, thus addressing the lowest scoring item in this dimension. However, technology is expensive, and the public commercial banks have limited opportunities to maximize their profitability while they remain state-owned and under the control of the CBL, a restriction not suffered by their competitors in the private commercial banks, or by the international banks establishing a presence in Libya at the time the research was conducted, and set to expand their activities rapidly.
Assurance: Six items were measured relating to this dimension. Table 6.2 shows that customers’ perceptions with regard to these six items were rated as relatively high, ranging from 3.32 to 3.57. As noted previously, the employees of banks in Libya receive regular training courses to improve their technical banking knowledge. These programmes have a vital impact on employee performance in terms of enabling them to respond to both regular and unexpected questions and inquiries from their customers. Furthermore, the professional behaviour of bank employees instils more confidence, which makes customers feel safe in dealing with banks.

Table 6.2: Customer Perceptions Regarding the Assurance Dimension

<table>
<thead>
<tr>
<th>Age of respondents</th>
<th>Assurance items</th>
<th>*Item2</th>
<th>Item7</th>
<th>Item12</th>
<th>Item17</th>
<th>Item22</th>
<th>Item27</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 25 years</td>
<td>Mean</td>
<td>3.44</td>
<td>3.52</td>
<td>3.44</td>
<td>3.37</td>
<td>3.29</td>
<td>3.21</td>
</tr>
<tr>
<td>N=75</td>
<td>Std. Deviation</td>
<td>1.10</td>
<td>1.07</td>
<td>.947</td>
<td>1.11</td>
<td>1.12</td>
<td>1.06</td>
</tr>
<tr>
<td>25-34 years</td>
<td>Mean</td>
<td>3.51</td>
<td>3.57</td>
<td>3.27</td>
<td>3.49</td>
<td>3.48</td>
<td>3.39</td>
</tr>
<tr>
<td>N=142</td>
<td>Std. Deviation</td>
<td>1.08</td>
<td>1.13</td>
<td>.908</td>
<td>1.04</td>
<td>1.15</td>
<td>1.06</td>
</tr>
<tr>
<td>35-44 years</td>
<td>Mean</td>
<td>3.61</td>
<td>3.52</td>
<td>3.44</td>
<td>3.32</td>
<td>3.46</td>
<td>3.26</td>
</tr>
<tr>
<td>N=114</td>
<td>Std. Deviation</td>
<td>1.12</td>
<td>1.17</td>
<td>.852</td>
<td>1.06</td>
<td>1.09</td>
<td>1.15</td>
</tr>
<tr>
<td>45-54 years</td>
<td>Mean</td>
<td>3.49</td>
<td>3.68</td>
<td>3.42</td>
<td>3.63</td>
<td>3.65</td>
<td>3.33</td>
</tr>
<tr>
<td>N=57</td>
<td>Std. Deviation</td>
<td>1.09</td>
<td>1.00</td>
<td>.999</td>
<td>1.03</td>
<td>1.13</td>
<td>.893</td>
</tr>
<tr>
<td>55+ years</td>
<td>Mean</td>
<td>3.50</td>
<td>3.81</td>
<td>3.31</td>
<td>3.56</td>
<td>3.63</td>
<td>3.62</td>
</tr>
<tr>
<td>N=16</td>
<td>Std. Deviation</td>
<td>1.41</td>
<td>.981</td>
<td>.873</td>
<td>1.21</td>
<td>1.26</td>
<td>.957</td>
</tr>
<tr>
<td>Total</td>
<td>Mean</td>
<td>3.52</td>
<td>3.57</td>
<td>3.37</td>
<td>3.44</td>
<td>3.47</td>
<td>3.32</td>
</tr>
<tr>
<td>N=404</td>
<td>Std. Deviation</td>
<td>1.11</td>
<td>1.10</td>
<td>.911</td>
<td>1.07</td>
<td>1.13</td>
<td>1.06</td>
</tr>
</tbody>
</table>

*Note: using item number rather than writing the whole clause.

Responsiveness: According to table 6.3, scores for the respondents’ perceptions regarding the statements relating to the responsiveness dimension range from 3.04 to
3.48. However, in this dimension the mean scores of the all items were relatively high (above the middle point of the scale). This may reflect the fact that bank employees had an appropriate level of education as well as level of training in this area. This can be explained by the policy of most banks under study in selecting their employees according to their level of education. In addition to this selection policy, the banks provided training courses for all their employees. Banking through the use of communication technology is a relatively new development in Libya, but some customers preferred to use telephone-banking services, and the fact that they frequently did not deal with employees face-to-face may have been an important factor, because this meant that more time was available for employees to devote to customers who wanted a high degree of personal contact. Alternatively, the results may simply indicate that Libyan customers place a high importance on personal contact and close personal relationships in business. The relatively high mean scores for this dimension may indicate that customers felt that a genuine cultural need was being met by the personal nature of the service they received.
### Table 6.3: Customer Perceptions Regarding the Responsiveness Dimension

<table>
<thead>
<tr>
<th>Age of respondents</th>
<th>Responsiveness items</th>
<th>*Item3</th>
<th>*Item8</th>
<th>*Item13</th>
<th>*Item18</th>
<th>*Item23</th>
<th>*Item28</th>
<th>*Item32</th>
<th>*Item35</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 25 years</td>
<td>Mean</td>
<td>3.32</td>
<td>3.44</td>
<td>3.32</td>
<td>2.89</td>
<td>3.27</td>
<td>3.01</td>
<td>2.95</td>
<td>2.88</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>1.07</td>
<td>.976</td>
<td>1.04</td>
<td>1.19</td>
<td>1.11</td>
<td>1.02</td>
<td>1.06</td>
<td>1.16</td>
</tr>
<tr>
<td>N=75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-34 years</td>
<td>Mean</td>
<td>3.32</td>
<td>3.36</td>
<td>3.48</td>
<td>3.05</td>
<td>3.50</td>
<td>3.11</td>
<td>3.30</td>
<td>3.05</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>.919</td>
<td>.861</td>
<td>.822</td>
<td>1.00</td>
<td>1.06</td>
<td>1.07</td>
<td>1.07</td>
<td>1.08</td>
</tr>
<tr>
<td>N=142</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35-44 years</td>
<td>Mean</td>
<td>3.28</td>
<td>3.22</td>
<td>3.46</td>
<td>3.09</td>
<td>3.61</td>
<td>3.10</td>
<td>3.23</td>
<td>3.02</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>.955</td>
<td>.890</td>
<td>.932</td>
<td>1.05</td>
<td>.973</td>
<td>1.23</td>
<td>1.03</td>
<td>1.08</td>
</tr>
<tr>
<td>N=114</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45-54 years</td>
<td>Mean</td>
<td>3.25</td>
<td>3.18</td>
<td>3.47</td>
<td>3.12</td>
<td>3.40</td>
<td>3.24</td>
<td>3.12</td>
<td>3.23</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>1.04</td>
<td>.947</td>
<td>.929</td>
<td>1.28</td>
<td>1.15</td>
<td>1.24</td>
<td>1.00</td>
<td>1.15</td>
</tr>
<tr>
<td>N=57</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55+ years</td>
<td>Mean</td>
<td>3.38</td>
<td>3.25</td>
<td>3.50</td>
<td>3.19</td>
<td>3.50</td>
<td>3.31</td>
<td>2.88</td>
<td>3.12</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>1.20</td>
<td>1.39</td>
<td>.894</td>
<td>1.22</td>
<td>1.21</td>
<td>1.25</td>
<td>1.26</td>
<td>1.15</td>
</tr>
<tr>
<td>N=16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Mean</td>
<td>3.29</td>
<td>3.30</td>
<td>3.44</td>
<td>3.05</td>
<td>3.48</td>
<td>3.12</td>
<td>3.17</td>
<td>3.04</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>.983</td>
<td>.929</td>
<td>.913</td>
<td>1.10</td>
<td>1.06</td>
<td>1.14</td>
<td>1.06</td>
<td>1.11</td>
</tr>
<tr>
<td>N=404</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: using item number rather than writing the whole clause.

**Empathy:** It can be seen from the results reported in Table 6.4 that the mean scores for the items relating to the dimension empathy ranged between 3.05 and 3.57. Respondents’ perceptions with regard to empathy appear to be less positive than their perceptions of the previous dimensions (i.e. reliability and assurance). The lowest mean was indicated in the category of respondents below 25 year olds regarding the item “My bank has convenient operating hours”. Meanwhile, the highest mean was indicated by the category of 25-34 year olds, with regard to the item “The employees of my bank have a good relationship with their customers”. It is worth noting here, that within this dimension this item was rated the highest by all age categories. It can be concluded from the results that bankers need to improve their relationships with their customers.
customers. Giving the customer individual attention, understanding the customer’s needs and wants, building a strong relationship with customers are the best ways to do this, not only for young customers, but also for all age categories. It is also worth noting that the lowest mean was for the item “Your bank has convenient operating hours” was similar among three age categories (i.e. 25-34 (2.99); 35-44 (3.02); 45-54 (3.07)). At the same time, the mean of this item for the category 55 year olds and above was 4.31, which was significantly higher. This can be explained by two reasons: first, bank operating hours were 8.30 am - 3.30 pm, and this may have been a source of inconvenience to some customers, particularly those who were working. Because retired customers are able to visit their banks in normal opening hours, this score was, as expected, higher than for older age categories. However, the relatively short daily opening hours in which customers of working age could carry out their transactions may have contributed to overcrowding at hours such as lunchtime and immediately after office hours, which would increase the workload of bank employees at these times. The effect of this phenomenon would be to prevent some customers from receiving the individual attention they wanted from bank employees.
### Table 6.4: Customer Perceptions Regarding the Empathy Dimension

<table>
<thead>
<tr>
<th>Age of respondents</th>
<th>Empathy items</th>
<th>*Item4</th>
<th>Item9</th>
<th>Item14</th>
<th>Item19</th>
<th>Item24</th>
<th>Item29</th>
<th>Item33</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 25 years</td>
<td>Mean</td>
<td>3.33</td>
<td>2.96</td>
<td>3.27</td>
<td>3.40</td>
<td>3.37</td>
<td>3.09</td>
<td>3.03</td>
</tr>
<tr>
<td>N=75</td>
<td>Std. Deviation</td>
<td>1.09</td>
<td>1.19</td>
<td>1.09</td>
<td>1.15</td>
<td>1.06</td>
<td>1.15</td>
<td>1.09</td>
</tr>
<tr>
<td>25-34 years</td>
<td>Mean</td>
<td>3.40</td>
<td>2.99</td>
<td>3.43</td>
<td>3.75</td>
<td>3.23</td>
<td>3.38</td>
<td>3.28</td>
</tr>
<tr>
<td>N=142</td>
<td>Std. Deviation</td>
<td>1.11</td>
<td>1.04</td>
<td>.886</td>
<td>1.11</td>
<td>.912</td>
<td>.913</td>
<td>1.29</td>
</tr>
<tr>
<td>35-44 years</td>
<td>Mean</td>
<td>3.46</td>
<td>3.02</td>
<td>3.41</td>
<td>3.52</td>
<td>3.16</td>
<td>3.49</td>
<td>3.38</td>
</tr>
<tr>
<td>N=114</td>
<td>Std. Deviation</td>
<td>.988</td>
<td>1.02</td>
<td>1.02</td>
<td>1.09</td>
<td>.908</td>
<td>.823</td>
<td>1.04</td>
</tr>
<tr>
<td>45-54 years</td>
<td>Mean</td>
<td>3.44</td>
<td>3.07</td>
<td>3.35</td>
<td>3.47</td>
<td>3.25</td>
<td>3.26</td>
<td>3.53</td>
</tr>
<tr>
<td>N=57</td>
<td>Std. Deviation</td>
<td>1.13</td>
<td>1.24</td>
<td>1.13</td>
<td>1.15</td>
<td>.931</td>
<td>1.11</td>
<td>1.17</td>
</tr>
<tr>
<td>55+ years</td>
<td>Mean</td>
<td>3.50</td>
<td>4.31</td>
<td>3.38</td>
<td>3.56</td>
<td>3.31</td>
<td>3.19</td>
<td>3.31</td>
</tr>
<tr>
<td>N=16</td>
<td>Std. Deviation</td>
<td>1.21</td>
<td>.704</td>
<td>.95743</td>
<td>1.31</td>
<td>1.014</td>
<td>1.11</td>
<td>1.01</td>
</tr>
<tr>
<td>Total</td>
<td>Mean</td>
<td>3.41</td>
<td>3.05</td>
<td>3.38</td>
<td>3.57</td>
<td>3.24</td>
<td>3.33</td>
<td>3.30</td>
</tr>
<tr>
<td>N=404</td>
<td>Std. Deviation</td>
<td>1.08</td>
<td>1.11</td>
<td>1.00</td>
<td>1.13</td>
<td>.945</td>
<td>.981</td>
<td>1.16</td>
</tr>
</tbody>
</table>

*Note: using item number rather than writing the whole clause.*

**Tangibles:** It can be seen from the results reported in Table 6.5, that respondents' perceptions regarding the statements in the 'tangibles' dimension were relatively high (above the middle point of the scale), ranging from 3.05 to 3.43. The lowest mean was indicated in the category of 35-44 year olds, regarding the item "My bank has state-of-the-art technology such as computers and ATMs" (2.92), whilst the highest mean was indicated in the category of 25-34 year olds, with regard to the item "The pamphlets and forms produced by my bank are clear and easy to understand" (3.48).

Generally speaking, the results in Table 6.5 show that state-of-the-art technology (item 5) (e.g., computers and ATMs, etc.) and the physical facilities (item 10) (e.g., saving books, debit or credit cards and chequebook, etc.), were rated the lowest means for all
age categories, at 3.05 and 3.22 receptively. Due to the intangible nature of services, it is often difficult for customers to decide on an appropriate measure of their level of perception of an item, but in this case, they were able to make inferences about service quality on the basis of tangibles that surround the service environment (Kotler et al., 2001). In this context, it can be seen that the tangibility of technology banking services (i.e. ATMs, debit and credit cards, PC banking, etc.) can play a major role in forming customers' preferences and attitudes, since they can use credit or debit cards at any time, to suit their convenience (Lloyd-Walker and Cheung, 1998; Colgate, 1998; Mols, 2001; Zhu et al., 2002).

<table>
<thead>
<tr>
<th>Age of respondents</th>
<th>Tangibles items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*Item 5</td>
</tr>
<tr>
<td>Below 25 years</td>
<td>Mean</td>
</tr>
<tr>
<td>N=75</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>25-34 years</td>
<td>Mean</td>
</tr>
<tr>
<td>N=142</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>35-44 years</td>
<td>Mean</td>
</tr>
<tr>
<td>N=114</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>45-54 years</td>
<td>Mean</td>
</tr>
<tr>
<td>N=57</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>55+ years</td>
<td>Mean</td>
</tr>
<tr>
<td>N=16</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Total</td>
<td>Mean</td>
</tr>
<tr>
<td>N=404</td>
<td>Std. Deviation</td>
</tr>
</tbody>
</table>

*Note: using item number rather than writing the whole clause.*
In summary, the results indicate that customers in the context of Libyan’s banking sector value five dimensions of service quality relatively high, but they rate some of them lower than others, such as the tangibles dimension. It has been suggested that the tangibles and physical surroundings of the service environment can have a significant impact on customers’ perceptions of service quality (Jamal and Naser, 2002). This result confirms the findings in marketing literature in general and service quality in particular, which have reported tangibles as a factor distinctive from the other more subjective dimensions (Bouman and Van der Wiele, 1992; Cui et al., 2003) and the physical appearance of a bank as having the greatest impact on the overall service quality perception (Siu and Cheung, 2001). Furthermore, it could be argued that tangible dimensions such as technology bear no relation to the cultural expectations of Libyan customers, for whom lengthy waits in queues are so familiar to have become almost normal, but who still expect to have their cultural expectations meet in terms of their bank’s treatment of female customers, the time they have with customers service staff when their turn arrives, and the extent to which their particular personal needs are met by a flexible and helpful service response.

6.3 Dimensionality of SERVQUAL Data in the Libyan Banking Context

A broad range of factors and determinants help to explain service quality. Several researchers have developed lists of quality determinants, however the most well known are derived from the work of Parasuraman and his co-researchers from the USA, who found five dimensions of service quality, namely, reliability, assurance, responsiveness, empathy and tangibles. These form the basis of their service quality measurement instrument, SERVQUAL (Parasuraman et al., 1988; Zeithaml et al., 1990). As a result of this work, the SERVQUAL instrument was developed, based on the gap model. The
model works on the principle that service quality is a function of the difference in scores or gaps between expectations and perceptions. One major advantage of SERVQUAL is that it has been able to provide valid and reliable results from research conducted in a wide range of service contexts. Nevertheless, despite the widespread use of SERVQUAL, it has received a certain amount of criticisms. Some researchers have questioned whether it is possible to reduce service quality to five basic dimensions (Parasuraman et al., 1988). They have suggested that SERVQUAL’s dimensions depend on a specific research context, and are therefore not possible to apply universally (Ekinci and Riley, 1999; Brown et al., 1993; Cronin and Taylor, 1992; Teas, 1993; Bouman and Van der Wiele, 1992; Gagliano and Hathcote, 1994; Kang and James, 2004). Some critics maintain that the amount and composition of SERVQUAL’s service quality dimensions is likely to be dependant on the service setting (Brown et al., 1993; Carman, 1990). In some service environments, such as Libyan banking system, it has been suggested that the SERVQUAL instrument needs considerable adaptation (Dabholkar, Thorpe and Rentz, 1996) and that items used to measure service quality should take account of the particular characteristics of the service setting under investigation. Therefore, it is necessary to modify, add or delete some of the items, as required (Carman, 1990). In addition to contextual aspects, researchers also suggest that culture may play a fundamental role in determining the way consumers perceive what constitutes service quality.

In brief, issues and opinions continue to vary with regards to the dimensions of service quality and the extent to which they can be applied (Rust and Oliver, 1994). Users of SERVQUAL and for all those who wish to better understand the concept of service quality in the Libyan banking context in particular, are affected by these issues. Hence, fundamental research into the dimensionality of service quality with consideration of
the contextual circumstances, including the specific industry and the service settings, such as the Libyan banking industry, is still necessary.

6.3.1 The Modified SERVQUAL Battery of Items

Due to the original SERVQUAL model (Parasuraman et al., 1988) having twenty-two items, it has often been argued in the literature that SERVQUAL-based instruments should, without exception, contain this specific number of items. However, there is considerable empirical and theoretical support for a counter argument. Many empirical studies employing a SERVQUAL type model have been conducted with a different number of items, in each case appropriately designed to improve the measurement of the service attributes applying to the service setting under investigation (e.g. Yavas, 1998; Newman, 2001; Tan and Kek, 2004). In fact, the originators of the SERVQUAL model (Parasuraman et al., 1988) proposed at the time that it should be adapted to meet the needs of different service environments under consideration. They also suggest that SERVQUAL could be a basis on which researchers built their own scales, depending on the specific needs of individual studies (Parasuraman et al., 1988). Researchers therefore have grounds for adapting SERVQUAL, but must consider what it is that is different about their research subject and what they wish to capture in the way of information not perhaps within the scope of the original SERVQUAL model.

The modified SERVQUAL in this study initially consisted of items derived from two main sources: a) the generic SERVQUAL items and b) industry specific items. In the light of feedback from the pilot study, twenty of the original twenty-two items of the generic SERVQUAL model were included in the questionnaire employed by this study, after being appropriately reworded, to be readily understood when translated into the Arabic language. Fifteen new items that were meant to capture specific quality issues
particular to in Libyan banks were added to complete a list of thirty-five items in total. (See chapter 4 section 4.7.1).

The twenty-two SERVQUAL items have been widely discussed in the literature during the almost three decades since the creation of the model and will therefore not be elaborated upon here. The rewording of items was thoroughly discussed in chapter 4 (sections 4.7.1 and 4.7.2) and is therefore not considered any further here.

6.3.2 Confirmation of the Modified SERVQUAL Scale Reliability and Validity

Following its initial creation, the reliability coefficient for each of the five dimensions for the perception items ranged from 0.761 to 0.825. This result is consistent with previous study findings (e.g. Carman, 1990; Finn and Lamb, 1991; Babakus and Boller, 1992; Babakus and Mangold, 1992; Headley and Miller, 1993; Taylor and Cronin, 1994). The lowest reliability is 0.59 reported by Finn and Lamb (1991) and the highest reliability is 0.97 reported by Babakus and Mangold (1992).

Regarding the instrument’s validity, a Varimax technique for rotated component analysis was used with a cut-off point for interpretation of the factors at 0.40 or greater. Some items loaded onto the expected dimension for which they were designed. Factor loadings almost were higher than 0.40 so that each item loaded higher on its associated construct than on any other construct. This result is consistent with previous study findings, proving the SERVQUAL’s convergent and discriminant validity (Parasuraman et al., 1985; 1991; 1994; Yavas et al., 2004). SERVQUAL is therefore considered to be an appropriate instrument to investigate perceptions of service quality in the Libyan public commercial banks, and the modifications made to SERVQUAL are shown to be a good fit with the existing dimensions.
6.3.3 Number of Dimensions

This research is intended to extend the understanding of exactly how consumers evaluate service quality within the context of a developing economy, which is a research environment very different from the European and North American contexts that have previously been the almost exclusive focus of service quality research. One of the goals of this study was to identify the perceived dimensions of customer service quality in the Libyan retail-banking sector. The modification of the SERVQUAL instrument along lines suggested by other studies conducted in an Arab/Islamic context was intended to adapt what is a method invented for use in developed countries to provide insights into a developing economy, and one that was in a state of flux between two radically different approaches to economic management, i.e. socialism and capitalism. Hence, the current research reinforces the fact that service quality is a complex and multidimensional construct.

The creators of SERVQUAL proposed that the attributes of service quality are illustrated in five distinct dimensions i.e. reliability, responsiveness, assurance, empathy and tangibles (Parasuraman et al., 1988). However, when this model has been applied, sometimes in customised forms, to a variety of service settings around the world, these dimensions have not always been found. Indeed, much of the criticism of SERVQUAL has centred around the scale’s instability with regard to the number and/or the type of dimensions (Buttle, 1996). The production of different numbers and types of dimensions as result of conducting research has been attributed to factors such as: the country of application (Ford et al., 1993), the service industry under examination (Asubonteng et al., 1996), culture (Imrie et al., 2002; Sureshchander et al., 2002), and the level of market development (Angur et al., 1999; Wang et al., 2003). It is of course
possible that any combination of these factors and others have had an influence on any given study.

The findings obtained from this study show that the modified SERVQUAL model is a multidimensional variable comprising four dimensions with 23 items. These findings are in line with the results of most previous service quality studies with respect to the multifaceted nature of this construct. For instance, most SERVQUAL studies (e.g. Parasuraman et al., 1985, 1988, 1990, 1991, 1993 and 1994; Cronin and Taylor, 1992 and 1994; Avkiran, 1994; Blanchard et al., 1994; Buttle 1996; Angur et al., 1999; Robinson, 1999; Bahia and Nantel, 2000) have conceptualised SERVQUAL as a multifaceted concept. Additionally, Carrillat, Jaramillo and Mulki (2007) reported that there is some concern about the validity of SERVQUAL across borders because research has shown that cultural values influence customer responses. The implication of this concern seems to be that any result which does not deliver the five dimensions of SERVQUAL as they are arranged in the original model indicates a fault with the research instrument. Whereas another interpretation might be that a result which produces, as this study does, four dimensions might provide some insight into what is expected and required of service quality in a particular context, and how the dimensions of service quality are regarded by a particular group of customers.

An example of a research instrument specifically adapted to a particular religious context is the CARTER scale for Islamic banking (Othman and Owen, 2001) which takes account of dimensions relating to customers' religious beliefs and culture, with respect to "compliance with Sharia law". The CARTER model was developed in a Muslim country, similar to Libya, which according to the authors was likely to produce results incapable of being measured by a conventional scale of non-Islamic banking in a
western country, because of the customers’ cultural differences (e.g. see Zeithaml and Bitner, 2003).

However, as mentioned above, the CARTER model is only usually applied to the Islamic banking sector within Muslim countries, if such a sector exists, and while it is sensitive to issues of compliance with Sharia and other strictures of Islamic banking, its focus is narrow. It was rejected as a possible tool for this study because Libya does not have, nor has it ever had, an Islamic banking sector with products and services available that are compliant with Sharia law. Indeed, the prevailing ideologies of Libyan banking may be considered to be Western oriented. Libyan banks evolved from the institutions established by European colonial powers, and some of the practices and even buildings used by Libyan commercial banks are little changed from this time. Additionally, when Libya experienced a violent upheaval in its national institutions in the form of the 1969 revolution, this was not an Islamic revolution, but one that reorganised the country along socialist lines, with state control of the means of production and strict limits set to ability of banks and other businesses to compete with each other. Arab countries are by no means as homogenous as the casual observer might assume, and the Islamic banking industry is still in its infancy even in countries where it has a presence. At the time of writing, the private commercial banks are attempting to introduce products compliant with Sharia, but in terms of the public commercial banks, it is more useful to think of them as basically western banks overlaid with a range of cultural considerations without which they would be unacceptable to Libyan customers; for example, separate serving windows for female customers. However, this is a cultural distinction, and these distinctions should all be taken into account when developing an Arabic banking service quality model. This study proposed the modified SERVQUAL model, which has a five-
According to the results of the statistical analysis of the modified SERVQUAL model in this study, some of the items proposed were found to be significant components of service quality. The results revealed that 23 items were loaded and most of these 23 items loaded strongly. These items comprising the various aspects of service quality in this study suggested that customers distinguish four dimensions of service quality in the case of the retail banking industry in Libya. These four dimensions of customer-perceived service quality are: reliability; tangibles; responsiveness and empathy; and assurance. All the four dimensions have their own unique service quality characteristics inherent in the Libyan retail-banking environment. The variance percentages of these four dimensions were:

- Reliability, with an explaining variance of 25.916%
- Tangibles, with 14.615%
- Responsiveness and Empathy, with 10.302%, and
- Assurance, with 8.618%

The most important service quality dimension, reliability, is loaded as the most important requirement for banks' customers, and referred to as dimension one. This is, as might be expected given the history of Libyan banking, not in agreement with the CARTER scale, where 'Compliance with Sharia law' is loaded as the most important dimension. The dimension of reliability is defined by whether the bank performs its services right the first time, whether the employees are consistently courteous with their customers, whether the bank lives up to its promises, whether the bank insists on error-free records and whether the employees show a sincere interest in solving the
customers' problems. In short, this dimension contains six items related to the banks' ability to perform the promised service accurately and dependably. Performing the service dependably and accurately is at the heart of service quality excellence. When an organisation, such as a Libyan bank, performs a service carelessly, when it makes avoidable mistakes, and when it fails to deliver on promises made to attract customers, it shakes customers' confidence in its capabilities and undermines its chances of earning a reputation for service excellence. The belief that performing services dependably and accurately is paramount to service customers has been strongly supported by previous research (e.g. Zeithaml et al., 1990). According to Zeithaml et al. (1990), service providers' apologies are not acceptable to customers when a firm or bank is careless in performing a service, when it makes frequent mistakes and when it is casual about keeping its service promises. Under these circumstances, customers lose confidence in the firm and little can be done to regain it. The study by Zeithaml and Bitner (2003) further revealed that it is very important to perform a service correctly the first time; in the case that a service problem does occur, by resolving the problem to the customer's satisfaction, the bank can significantly improve customer retention. The identification of reliability as the dimension most important to Libyan customers is not a surprising one, but what is perhaps more interesting is that two of the four items added to this dimension as a result of a close study of modified SERQUAL scales employed in other Arab/Islamic contexts were not found to load to this dimension.

The service quality dimension tangibles was found to be the second most important service quality factor in terms of variance. A plausible explanation for this finding lies in the fact that the dimension 'tangibles' is basically concerned with physical features that customers find it easy to relate to conceptually, such as the appearance of the employees and the banks' buildings, and availability of technology such as computers.
and ATMs etc. This dimension contains five items relating to the tangibles dimension. It is defined by whether the physical facilities and materials associated with the service are visually appealing at the bank. These are all factors that customers notice before or upon entering the bank. Such visual factors help consumers form their initial impressions. A crucial challenge in service marketing is that customers cannot see a service but can see the various tangibles associated with it - all these tangibles, the service facilities, equipment and communication materials are clues about the intangible service. If unmanaged, these clues can communicate to the customers' negative messages about the service and render ineffective the marketing strategy of the company. On the other hand, improving quality through tangibles means attention to the smallest details that competitors might consider trivial. Yet, these visible details can add up for customers and signal a message of caring and competence. In the case of this dimension, one of the items (my bank has an accessible location and enough parking spaces) added to the original SERVQUAL model was found to correlate with this dimension, while one (my bank looks attractive from the outside) did not.

The third dimension, loaded with an explaining variance of 10.30 per cent, was what the researcher will call the 'responsiveness and empathy' dimension, which contains seven items from both of the dimensions responsiveness and empathy, which are regarded as distinct from each other in the original SERVQUAL model, relating to the attitudes and skills of employees. It is defined by variables such as the provision of prompt service, whether the operating hours were convenient, whether the employees gave personal attention to the customers, whether they could understand the customers' needs and whether the employees had the knowledge to respond to customers' needs. It was loaded as the second most important requirement for banks' customers in Arabic culture, and referred to as dimension two in an Arabic environment such as the Libyan
banking sector. The finding of the study that responsiveness and empathy formed one dimension could be a result of differences between customers in Arabic countries, such as Libya, and customers in non-Arabic countries, but what is perhaps most significant in terms of these two dimensions was that none of the items added to either of these dimensions as a result of previous research was found to correlate with the combined dimension of responsiveness and empathy. These results have a number of possible interpretations; it is possible that Libyan customers perceive no difference between the dimensions responsiveness and empathy, and certainly the mean scores for positive overall perception of these dimensions suggest that customers were basically happy with their treatment with regard to this dimension. The fact that none of the items added correlated with this dimension suggests that Libyan customers have different requirements from customers studied in other Arab/Islamic contexts, and that their requirements with regard to empathy and responsiveness were close to those envisaged by the original SERVQUAL model. The combined dimension found by this study can be compared with the result of Jabnoun and Al-Tamimi (2003) in a similar study conducted in the UAE. Their study produced a combined dimension which they named ‘human skills’ and which included items concerned with the human interaction of the service process. In this study, the factor analysis resulted in a combination of the dimensions of responsiveness and empathy, which loaded with items primarily concerned with human interaction and service convenience. However, none of the items added to the dimensions empathy and responsiveness as a result of the literature review actually loaded with the combined dimension produced in the result after factor analysis.

The fourth dimension was found to be ‘assurance’, which contains five items relating to the knowledge and courtesy of employees and their ability to inspire trust and
confidence. It also indicates security and feeling of safety when making the customers’ transactions. Assurance is an essential dimension of service quality, after reliability and responsiveness, in terms of satisfaction (Parasuraman et al., 1988). Assurance has the strongest impact on customer satisfaction that leads to positive word of mouth outcome (Arasli et al., 2005). However, banks, such as a Libyan bank, can create customer satisfaction by ensuring trustworthy behaviour and a reflection of genuine commitments to service provision. Of the two items added to the assurance dimension, one (the employees of my bank provide services with high competence) was found not to load with this dimension, while the other (there is security staff in my bank at all times) did load.

Compared with Parasuraman et al.’s (1991) proposition that SERVQUAL’s dimensions and items represent core evaluation criteria that transcend specific companies and industries, and also the corollary of this proposition that the service quality construct within the context of the banking industry is also made up of reliability, responsiveness, assurance, empathy and tangibles, the five SERVQUAL dimensions, the findings of this study that SERVQUAL produced a four-dimensional structure, would at first sight seem to suggest that Parasuraman et al.’s (1991) claim that SERVQUAL is a generic instrument with good reliability and validity and broad applicability is mistaken. This assumption however rests on the arguments of scholars such as Baker and Lamb (1993) and Finn and Lamb (1991) who argue that the application of an off-the-shelf and purportedly generic service quality scale may not always yield meaningful results. It is the researcher’s contention that while this study returned four dimensions instead of five, and that the majority of the items added to the study (11 out of 15) did not load with these dimensions; this is in itself a meaningful result with much to say about the Libyan public banking sector and Libyan culture, and that it also opens up avenues to
fruitful future research. The implications of these findings will be discussed in more
detail in the final chapter.

In line with the previous argument, Babakus and Boller (1992) have also argued that the
five SERVQUAL dimensions are not generic. They hypothesise that the dimensionality
of service quality may be a function of the type of service investigated, and from this
assumption it is reasonable to suppose that the cultural context of an investigation will
also have an influence.

Other researchers have argued that in addition to industry-specific factors, culture can
also have an impact on the dimensionality of service quality (Winsted, 1997; Imrie et al.
2002; Raajpoot, 2004). For example, both Lam (1997) and Zhao, Bai and Hui, (2002)
employed SERVQUAL in their studies (in Hong Kong and China respectively); but
they did not modify their measurement instruments in order to render them “culturally
sensitive” (a term used in Raajpoot, 2004). Nevertheless, when they observed that the
service quality dimensions of their studies did not correspond to the SERVQUAL
dimensions, they conjectured that local culture might have influenced the evaluation of
service quality.

Similarly, this study conjectures the influence of cultural factors, or Libyan specific
factors, on service quality evaluation. Researchers like Winsted (1997) and Raajpoot
(2004) have advocated the adoption of different measurement instruments for different
cultures. The findings of this study appear to indirectly support their recommendation.
The adoption of culture-specific measurement instruments may also yield more
meaningful and relevant data to the local cultures (Smith and Reynolds, 2002). When
both the industry-specific and culture-specific factors are taken into consideration, the
need for a locally developed scale becomes clear and real.
6.4 Summary

This chapter is concerned with providing the procedures, findings and discussion emerging from the data analysis of this research, presented in Chapter Five. The interpretations of the results have been guided by previous empirical studies in the context of a scrutiny of the relevant literature. The first section gave a brief introduction to this chapter. The second section of this chapter focused on evaluating the five service quality dimensions (i.e. reliability, responsiveness, assurance, empathy and tangibles) by customers in Libyan public commercial banks. The third and final sections were concerned with the dimensionality of SERVQUAL data in the Libyan banking context, and a summary of this chapter respectively. The next chapter will consider the study's principal findings in more detail, and provide recommendations for further study.
Chapter 7  Conclusions and Recommendations

7.1 Introduction

The final chapter of this study presents the conclusions and recommendations derived from the research. In it there is an overall summary of the study's most important findings, together with details of the conclusions drawn from them. The findings of the questionnaire survey were presented and analysed in Chapter Five of this study. There was then a discussion of these findings in chapter six, along with analysis of the integrated with each other; the findings were then reviewed, and validated in terms of their relationship to the literature review. This analysis forms the basis of the research findings. This chapter will discuss briefly some of the significant conclusions that can be drawn from the empirical work. The limitations of the study are then outlined, and this is followed by suggestions for future research directions prompted by the findings of this study.

Service quality is crucial to the success of any business in the banking sector. The importance of service quality resides in the link that exists between service quality on the one hand, and such key business advantages as customer satisfaction, customer loyalty, financial performance and profitability on the other. As a result of this connection, banks are increasingly emphasising the measurement of service quality, and introducing initiatives to improve it, and these facts represented one of the primary motivations in the researcher's decision to examine these efforts by conducting this study.

In an attempt to offer a fuller understanding of the implications of service quality measurement to the banking sector in Libya, this study bases its data collection efforts
on the most frequently used service quality dimensions (i.e. Reliability, Assurance, Responsiveness, Empathy and Tangibles). Therefore, the study employs a modified SERVQUAL model to explain the actual perceived level of service quality in Libyan public commercial banks. A corollary of this observation is that the study provides a test of the extent to which it is possible to use a modified SERVQUAL model to measure the perceived service quality in Libyan commercial banks, in light of the fact that the result of factor analysis produced four dimensions instead of five.

Several researches have severely criticised SERVQUAL, mainly in terms of the extent to which it is possible to apply it to different cultures and industries, and the value of its items and dimensions in explaining areas for which it was not originally intended. However, the debate continues to draw supporters and detractors, and the SERVQUAL model has been adapted and employed extensively in a variety of service contexts throughout the world (e.g. Wang et al., 2003; Tahir and Wan Ismail, 2005) and it is still the scale most often employed by both academics and managers (e.g. Brady, Cronin and Brand, 2002). Therefore, an effort to enhance the understanding of the degree to which this model is capable of being applied across cultures and industries is valuable in strengthening and extending this knowledge base. This research adds to the body of literature by reporting its findings of the application of a customised SERVQUAL model that was designed for measuring service quality in Libyan public commercial banks, and which was tested for reliability, validity and dimensionality.

As stated in chapter one, the main aims of this study were:

- To investigate the actual levels of service quality perceived by customers of Libyan banks using an existing (modified) SERVQUAL instrument.
• To test the extent to which it is possible to use a modified SERVQUAL model, and to identify whether the SERVQUAL model produced a five-dimensional construct within the context of the Libyan banking industry.

• To draw conclusions from the study data regarding the current state of customer perceptions of service quality, their implications for Libyan banking in a process of rapid change, and what they can reveal about service quality in a particular cultural context.

The statistical techniques of mean values and factor analysis were utilised to achieve these aims of this study, in which a non-random sample of customers of the Libyan public commercial banks (i.e. Gumhouria bank; National Commercial Bank, Wahda Bank and Sahara Bank) was taken.

7.2 Summary of the Research Findings

There are three major results which can be drawn from this study: Firstly, the level of service quality offered by the Libyan public commercial banks, as it was perceived by their customers was relatively high. Secondly, the theoretical five-factor structure of the SERVQUAL model was not confirmed in the Libyan banking context. Additionally, it was found that the majority of the items added to the SERVQUAL dimensions in the expectation that they would provide insight into an Arab/Islamic context did not load with any of the service quality dimensions identified by the study, or with each other.

The findings are presented in more detail in the following sub-sections:-
7.2.1 The Findings Relating to the Actual Level of Service Quality As Perceived By the Customers of Public Commercial Banks in Libya

The first aim of this research was the examination of the actual levels of service quality perceived by customers of Libyan banks using an existing (modified) SERVQUAL instrument. A summary of this is presented in table 7.1. All of this suggests that the actual level of service quality offered by the Libyan public commercial banks as it is perceived by their customers was relatively high.

All the results summarised in table 7.1 were previously presented and discussed in Chapters 5 and 6 (sections 5.3.3 and 6.2).

Table 7.1: Summary of the Mean Values of Customers’ Perceptions of Service Quality

<table>
<thead>
<tr>
<th>Title</th>
<th>Number of Items</th>
<th>Mean Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items of reliability</td>
<td>8</td>
<td>ranging from 3.27 to 3.69</td>
</tr>
<tr>
<td>Items of assurance</td>
<td>6</td>
<td>ranging from 3.32 to 3.57</td>
</tr>
<tr>
<td>Items of responsiveness</td>
<td>8</td>
<td>ranging from 3.06 to 3.48</td>
</tr>
<tr>
<td>Items of empathy</td>
<td>7</td>
<td>ranging from 3.07 to 3.57</td>
</tr>
<tr>
<td>Items of tangibles</td>
<td>6</td>
<td>ranging from 3.05 to 3.43</td>
</tr>
<tr>
<td>Reliability dimension</td>
<td>8</td>
<td>3.46</td>
</tr>
<tr>
<td>Assurance dimension</td>
<td>6</td>
<td>3.44</td>
</tr>
<tr>
<td>Responsiveness dimension</td>
<td>8</td>
<td>3.23</td>
</tr>
<tr>
<td>Empathy dimension</td>
<td>7</td>
<td>3.33</td>
</tr>
<tr>
<td>Tangibles dimension</td>
<td>6</td>
<td>3.29</td>
</tr>
<tr>
<td>Overall Service Quality</td>
<td>35</td>
<td>3.35</td>
</tr>
</tbody>
</table>

The major findings indicate that the actual level of service quality that was offered by public banks to their customers was relatively high in the majority of the 35 items and all the five SERVQUAL dimensions. This means that for the mean scores for each dimension, and for each item within the dimensions, it is clear that there was no score
below 2.5 on the five-point Likert scale. Furthermore, the overall service quality shown in table 7.1, which is an average of the means for all service quality dimensions together, gave a result of 3.35. These results indicate also that, although, customers in the context of Libyan's banking sector value all five dimensions of service quality relatively high, they rate some of them lower than others, such as the tangibles dimension. Jamal and Naser, (2002) suggest that the tangibles attributes and physical surroundings of the service environment can have a significant impact on customers' perceptions of service quality, and the results of this study confirm the findings found within marketing literature in general, and that of service quality in particular, which have reported tangibles as a factor distinctive from the other more subjective dimensions (Bouman and Van der Wiele, 1992; Cui et al., 2003) and the physical appearance of a bank as having the greatest impact on the overall service quality perception (Siu and Cheung, 2001).

7.2.2 The Results Relating to the Construct of the Modified Servqual Model within the Context of the Libyan Banking Industry

These results provide evidence which enables an answer to the second aim of this research (examination of whether it is possible to use a modified SERVQUAL model, and to identify whether SERVQUAL model is a five-dimensional construct within the context of the Libyan banking industry). A summary of these results is presented in table 7.2. These results indicate that SERVQUAL was a valid instrument to employ in the research context, but also that the five-dimension construct was not found, and that service quality in the research context was a four-dimensional construct.
Table 7.2: Summary of the Results Relating to the Construct of the Modified SERVQUAL Model

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Eigenvalue</th>
<th>% of variance</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>4.811</td>
<td>25.916</td>
<td>13.832</td>
</tr>
<tr>
<td>Tangibles</td>
<td>2.901</td>
<td>14.615</td>
<td>27.485</td>
</tr>
<tr>
<td>Responsiveness and Empathy</td>
<td>2.370</td>
<td>10.302</td>
<td>40.430</td>
</tr>
<tr>
<td>Assurance</td>
<td>1.982</td>
<td>8.618</td>
<td>59.451</td>
</tr>
</tbody>
</table>

The results summarised in table 7.2 are presented as follows:

The variance percentages of these four dimensions were:

- Reliability, with an explaining variance of 25.916%
- Tangibles, with 14.615%
- Responsiveness and Empathy, with 10.302%, and
- Assurance, with 8.618%

The modified SERVQUAL model that was constructed for measuring service quality in the Libyan banking industry on the basis of the SERVQUAL model was found to be appropriate for assessing service quality. The model consisted of thirty-five items: twenty items from the generic SERVQUAL battery supplemented by fifteen items that were added to capture specific quality issues considered relevant to Libyan banks as financial institutions operating in a distinctive service environment characterized by an Arab/Islamic society and culture. Tests for reliability and validity found the model to be reliable, valid and capable of measuring customers' service quality perceptions.

A main feature of the criticism directed at the SERVQUAL model is that in some cases not all its attributes and dimensions are replicated in their entirety. Critics have pointed out that the items and dimensions of the generic SERVQUAL model sometimes fail to
reflect the attributes of service quality in all industries and settings, and that results tend to vary depending on the nature of the industry investigated, the culture it operates in or the time the study is conducted. Hence, SERVQUAL's stability is generally considered relative rather than absolute (Marwa, 2005). Factor analysis of the items of the modified SERVQUAL model shows that the theoretical dimensionality of service quality in terms of reliability, responsiveness, assurance, empathy and tangibles, was not empirically confirmed. Instead, a four-dimensional structure emerged from the analysis, which was actually produced by the combination of two of the dimensions (responsiveness and empathy) of service quality that correspond to the specific attributes of service. This combination can be attributed to one or two reasons. The first reason was that Libyan bank customers did not distinguish between two of the dimensions of service quality, which were responsiveness and empathy. Second, the dimensions existed, but were not effectively represented in the modified SERVQUAL battery of items, which therefore needs to be adapted in order to be applied to this context.

Studies which result in a reduced number of service quality dimensions are not unusual, especially among those conducted within the banking industry in developing countries (e.g. Jabnoun and Al-Tamimi, 2003; Jabnoun and Khalifa, 2005; Kumar et al., 2009). It is possible that the nuances of distinction between such concepts as empathy and responsiveness are not clear in the minds of customers in less developed economies, and that while the number of items included in a SERVQUAL-based questionnaire might need to be increased, the resulting dimensions are always likely to be few in number. In accounting for the combination of dimensions in the results of their study investigating commercial banks in the UAE, Jabnoun and Al-Tamimi (2003 p.465) observe that "the combination of reliability and assurance appears to be natural given the conceptual
similarities between the two dimensions. The same argument can be made about the combination of the empathy and responsiveness."

While the evidence collected by the study does not provide conclusive evidence to explain the four-dimensional construct of SERVQUAL, the researcher, as a Libyan citizen, offers the following observations that may be of assistance to understanding the context in which this result was produced.

First, Libyan customers are accustomed to long periods of waiting, not only in banks but also in other service environments, to receive the service they require. Customers do not object to waiting, as long as they feel they will receive close personal attention when their turn comes, and that their specific individual needs will be met. Therefore, generally speaking, in the Libyan mind, the dimensions of responsiveness and empathy are sometimes regarded as a single concept: to respond in a Libyan service context means to empathise with the customer.

Second, Libyan banking is no more immune from the effects of influence resulting from close ties of family or friendship than any other part of Libyan society. Often it is not necessary to wait for service if a customer has a friend or relative amongst the bank's staff, and in addition a certain flexibility may be applied to the regulations regarding the services and products made available to the customer in these circumstances. It is not overstating the case to state that most Libyan customers make their choice of bank not on the products they offer or the rates they pay, for these are standardised within the public commercial banking sector by the CBL, but on who they know or are related to on a particular bank’s staff, or whether the branch is within their neighbourhood where they feel comfortable that their individual needs will be recognised. Again, and
generalising widely, this leads to a conflation of the concepts of responsiveness and empathy within the Libyan mind.

7.2.3 The Implications of the Findings from the Modified Servqual Model for Libyan Banking

A close reading of the research on service quality in general, and into studies which had employed the SERVQUAL model in particular, suggested that the applicability of SERVQUAL was relative rather than absolute, and that many researchers added to the original SERVQUAL questionnaire by adding items to the dimensions of the instrument. Taking research conducted in societies and cultures similar to Libya's as a guide, the researcher identified 15 items that were to be added to the 20 items of the original SERVQUAL model, (see appendix 7.1). These items included some general points appropriate to almost any economy (e.g. 'My bank increases the number of employees or serving windows when crowded') and some very specific to an Arab/Islamic context (e.g. 'My bank allocates serving windows to serve female customers').

The researcher anticipated that these additional items would provide valuable extra information about the composition of the SERVQUAL dimensions and lead to a more comprehensive instrument suitable for the Libyan context. The surprising result was that only four of these additional items correlated with the four dimensions produced by SERVQUAL, and these were mostly concerned with the more measurable aspects of service offering (e.g. 'There are security staff in my bank all the time'. A full list of items and their inclusion or exclusion from the dimensions returned can be found in appendix 7.2).
The result returned by this study suggests that the original SERVQUAL model would have been appropriate to the Libyan banking context in an unmodified form, which can be interpreted thus: the SERVQUAL instrument, while successful in capturing the elements of service quality important to Libyan customers, failed to reflect the influence of culture on the Libyan banking environment, and did not take into account the cultural standards without which Libyan customers would not tolerate a service environment. The item ‘My bank allocates serving windows to serve female customers’ introduced to the responsiveness dimension to capture evidence of cultural influence is a good illustration of this point: it did not load with the responsiveness-empathy dimension, but it did achieve a high mean score from customers in their perception of service quality, suggesting that it represented an important element of their satisfaction with their bank. This would indicate a need to find some way of capturing the influence of culture on Libyan banking, either in the form of an additional dimension added to the SERVQUAL model or some other model capable of defining the cultural limits beyond which service quality becomes unacceptable to Libyan customers. This need is particularly urgent in the context of Libya’s rapidly changing banking sector, open to increasing foreign competition and the influence of new technology on the speed and efficiency of service transactions. This is an area where Libyan commercial banks may be able to retain a competitive advantage over their international rivals, if they can fully understand the cultural factors most important to their customers.

To aid the managers of Libyan commercial banks in assessing the dimensions of service quality most important to their customers, figure 7.1 gives a visual representation of the importance of each dimension in comparison with the others, according to the perceptions recorded in the field research. The size of each dimension depends on the
eigenvalue assigned to it in factor analysis, and its consequent contribution to the percentage of variance (see table 5.16).

Figure 7.1: Customer Perceptions of the Importance of Service Quality Dimensions

Figure 7.1 illustrates the importance of reliability to the customers of Libyan commercial banks, and shows that it was considerably more important than the other three dimensions, which were more similarly sized. The figure suggests that management improvement efforts should therefore be aimed at items in the reliability dimension; however, it is also necessary to consider the dimensions in the light of their overall mean scores for perceptions of levels of service quality. For example, reliability was identified by factor analysis as the most important dimension, and also received the highest overall mean score for service level, suggesting that customer needs are largely being met in this dimension. However, the second most important dimension, tangibles, received the lowest overall mean score, suggesting that effort and investment are needed to improve the fabric and appearance of Libyan commercial banks. Furthermore, the lowest mean score for any single item was for an item in the tangibles dimension, inquiring about the availability of modern technology and ATMs (item 5), indicating that this was an area where customers felt Libyan banks needed to improve. Clearly, modern technology is also an area where foreign banks are likely to be strong, and there is therefore a strong competitive imperative to invest in this area as a response to the findings of this study. Figure 7.1 helps Libyan banking managers and practitioners to
make decisions on issues such as: resource allocation; marketing strategy; recruitment and training decisions. It also establishes a basis for further research in the Libyan banking sector, and other sectors of the economy. For example, the findings of this study have obvious implications for retailing in Libya, because this is another area where the provision of high service quality can provide organisations with a competitive advantage over other retailers selling the same products at the same price. Retail managers need to know whether customers rank the dimensions of service quality in the same order as the findings of this study, and if their comparative importance is the same.

In terms of the banking sector, it is clear that even before the revolution of February 17th, the Libyan economy was in a state of flux between a socialist economic model and a more liberal, capitalist approach. The findings of this study in terms of the cultural standards that Libyan customers expect from their banks suggest that the new Libyan banking system that emerges must take account of the findings of this study, and commission new research to ensure that the kind of banking they offer to Libyans is appropriate and sympathetic to their wishes.

7.3 Contribution to Knowledge

The current study sought to fulfil several primary research objectives, which were outlined in chapter 1. The first was to investigate the actual levels of service quality perceived by customers of Libyan banks using an existing (modified) SERVQUAL instrument. The second objective was to test the extent to which it was possible to use a modified SERVQUAL model, and to identify whether the SERVQUAL model produced a five-dimensional construct within the context of the Libyan banking industry. The third objective was to draw conclusions from the study data regarding the
current state of customer perceptions of service quality, and to assess their implications for the future of Libyan banking, together with an analysis of what they can reveal about service quality in a particular cultural context.

Based on a review of the relevant literature, and taking into account the findings of this research, among the study's most important contributions is its use of a modified SERVQUAL model as the first study, in the researcher's knowledge, in the Libyan banking sector to do so. In addition, like other studies conducted in Arab countries, the results of this study indicate that the responsiveness and empathy dimensions were regarded by Libyan customers as one dimension, for reasons not identified but speculated upon above in 7.2.2. Discussion of the principal contributions of the study is presented below:

1) A review of the literature on service quality and customer satisfaction reveals that, prior to this study, little, if any, information existed related to the measurement of the actual level of service quality as it is perceived by customers in the Libyan banking sector. A comprehensive search also failed to uncover any study relating to the measurement of service quality through the perceptions of bank consumers in the Libyan banks sectors. This is therefore an area that has not been previously researched and it was obvious that a significant gap in the literature existed, and this suggested that an empirical study was both justified and necessary.

2) In developed economies on the other hand, the issues of this study, with respect to service quality, have been widely researched. However, in many developing economies, of which Libya is an example, there is very little previous research and consequently a lack of data in the area of service quality in the financial services sector (Yavas et al., 1997; Angur et al., 1999; Sureshchandar et al., 2002, 2003).
Because of the above, this research studies customers' perceptions of service quality in Libyan public commercial banks in order to extend the body of knowledge in both areas, and for the benefit of those responsible for forming policy and shaping service development in these banks. In view of the gap in the literature on bank service quality that exists, this study aims to focus on the Libyan banking sector as an example of banking service offered within the specific cultural environment of a developing Arab country in transition from a socialist to a market economy. One contribution is therefore an addition to the so far very limited number of studies on service quality conducted in developing economies in general, and particularly in Arab countries, and this study therefore provides a basis for drawing comparisons between Libya and other Arab and developing economies, in addition to comparison with more advanced economies.

3) The point was made in chapter 3 that service industries are unstable, and that they change according to the countries they operate in and/or over time. Therefore, it can be concluded that service quality is also unstable, and customer perceptions of what constitutes service quality changes over time, and between cultures are likely to be subject to change. Therefore, the use of SERVQUAL in its generic form, instead of following a process of appropriately customising the model, may result in losing important information on the quality issues of the industry under consideration. On the other hand, customisation is not without its dangers either. Extensive customisation might cause limitations to the comparability and generalisability of results. Therefore, models of the SERVQUAL type should be constructed so that they incorporate any additional customised attributes within the general framework of the SERVQUAL scale. This research contributes towards making stronger the case that SERVQUAL is indeed applicable across cultures and industries, provided
that it is appropriately customised to capture the service attributes of the industry in which it is applied. Further, the findings from applying and testing the model on evidence from Libyan banks contribute to the existing knowledge on the dimensionality of the SERVQUAL model and offer support for considering the dimensionality of the model as industry and/or culture specific (Ford et al., 1993; Asubonteng et al., 1996). Furthermore, the research makes a contribution to the general body of knowledge on service quality.

4) As a specific contribution to the development of the SERVQUAL model, this study's findings have implications for future researchers which arise from its modification of the SERVQUAL instrument. The modifications made by the researcher in terms of items added to the basic SERVQUAL framework were selected from the Arabic literature on SERVQUAL on the basis of their value to previous studies conducted in similar cultures on the same industry sector, and were intended to reflect cultural considerations particular to the Arab world. These items were then subjected to scrutiny by a panel of Libyan banking experts before being added to the SERVQUAL based questionnaire used to collect the study's field data. All of this was done in the expectation that the items would load with the SERVQUAL dimensions in which they were placed and provide a richer perspective of customer perceptions of banking in a developing, Arab country.

However, the results obtained provide no support for the method adopted. The items added to the research instrument did not, with a few exceptions, appear within the result's SERVQUAL dimensions, and furthermore the expected five dimensions were reduced to four. It is the researcher's contention that this outcome has certain implications for future research:
Any attempt to modify the SERVQUAL model should certainly consider the literature, but not confine itself to past modifications found there.

Being mindful that SERVQUAL is an instrument for measuring customer perceptions, researchers should include customers in the process of developing a research instrument appropriate for a particular sector, industry, business or culture. This involvement could take the form of the use of focus groups after consideration of the literature but prior to testing the instrument through a pilot study. Members of the focus group would consist of customer representatives of the study population: for example, they could be, in a study similar to this, customers of Libyan commercial banks who are presented with a context for service quality in banking and asked, without reference to specific SERVQUAL items, for the attributes they look for in a banking service. They should be asked what is acceptable, what is desirable and what is necessary for them to have a high perception of service quality in their bank.

This information should then be used to design items which can be added to SERVQUAL’s basic framework to provide a model which is sensitive to the customers of a particular sector in a particular culture. Subsequent amendment through submission of the instrument to a panel of experts and the pilot study may lead to changes in wording of some items, or even their exclusion, but the modifications that remain should be derived from the opinions of a sample of customer representatives of the study’s population.

To conclude, it can be stated that the study’s cultural applicability is principally to the Arabic context, and that while the findings show that many items added to SERVQUAL to measure cultural sensitivities did not load with the dimensions returned, they did
receive a high mean score from the customers (for example, see item 23, table 5.9). However, in terms of the number of dimensions found, and the combination of two or more dimensions in the minds of Arab customers, this study produced a result similar to those found in many other studies conducted in Arab counties or regions, and its relevance is primarily to banking systems in other Arabic countries. The conclusion must be that although the research instrument and methodology adopted were not sufficiently sensitive to capture these cultural dimensions, they existed nonetheless and were extremely important to Libyan banking customers, and are likely to be important to customers throughout the Arabic region. Therefore, those responsible for banking services in these regions need to be increasingly aware of the cultural requirements of their customers.

Attention to the stages outlined above should produce a research instrument which addresses the factors most important to the customers under investigation and a research result that accurately reflects perceptions of service quality in a particular setting, providing a fuller perspective of cultural, social and political influences on the delivery of high quality service.

### 7.4 Recommendations of the Research

Attempts to measure service quality have the potential to provide specific data that can be used in quality management to achieve the goal of an organisation being capable of monitoring and improving the quality of its services. The ability to assess service quality, and to use this assessment to provide a better understanding of how the various dimensions affect overall service quality, enables organisations to design and implement initiatives designed to produce a more efficient service delivery process. The identification of the strengths and weaknesses of a bank’s service quality efforts enables
organisations to increase the efficiency of their allocation of resources, thereby improving internal service efforts and ultimately offering an enhanced service experience to their external customers. The findings of this research also suggest that service providers should not ignore the cultural factors which make their service offering acceptable (or otherwise) to their customers.

This study, which identified the actual level of service quality (perceptions of service quality) in the Libyan public commercial banks, shows that there are some low levels of perception in respect of certain items (i.e. identified problems) which are shown to have existed among customers of commercial banks towards the service quality they offered. As a result, an important recommendation is that more research should be conducted in this area to provide practical suggestions for improvements in this area. The management of commercial banks must continue to monitor their customers' perceptions of the service levels provided on an on-going basis, because the increasingly competitive nature of Libya’s banking industry means that low customer perceptions may translate into customer dissatisfaction and defection. This kind of monitoring can be achieved through scheduled customer audits and a defined programme of customer service evaluations. These measures would allow the management of the banks surveyed to decide what actions they need to take, when to take them, and in which area of service provision they are deficient. Careful monitoring of the perceptions of Libyan customers is of particular importance at this time, given the enormous challenges facing Libyan public commercial banks in terms of the competition from the private commercial sector and the entrance of foreign competitors to the market.

Amongst new financial services organisations, one of the most influential factors in their early success is good service quality, and it is not overstating the case to assert that
a competitive advantage in banking derives to a large extent from superior service quality. In response to the international drive towards quality in the financial services sector, and in view of Libya's aspiration to become globally recognised in this sector, at the present time it is clearly appropriate for the management of the commercial banks under consideration to closely review their corporate quality programmes and customer service systems. Furthermore, they also need to assess whether their performance measures are measuring quality as it is perceived by their own customers rather than according to a generic checklist. The changes necessary have the potential to be expensive in terms of resources such as employee time and effort, but the management of these banks must recognise the imperative need for such measures, and find ways to circumvent such difficulties, or face increasing defections to more competitive international banks. Banks need to monitor their competitors as well as themselves, and understand that choice gives power to customers in the modern banking industry. Benchmarking information about their competitors enables bank management to make effective decisions with regard to service provision and quality, and reliable information concerning the perceptions of their customers contributes to efforts to retain them.

Libyan banks should evaluate service quality on a continual basis in order to create improved customer perceptions and thereby attain a competitive advantage in the marketplace. The formulation and implementation of effective and rigorous service quality policies is vital to this effort, and such practice leads to improvements in the levels of service quality provided by every bank and consequently an overall improvement in the services of the whole national industry, contributing to Libya's desire to compete in the international marketplace. In order to provide these improvements at a corporate level, it is necessary for work processes to be improved and standardized throughout a bank, and they should be simple and easily reproduced to
make them compatible with the needs and expectations of customers. Combined, these measures should have the effect of improving staff effectiveness and efficiency.

It is necessary for banks to continually assess and reassess customer perceptions of their services in order to decide whether the bank is meeting, exceeding or fail in to meet the expectations of their customers. This kind of appraisal, however, represents a considerable task, due to the complex and dynamic nature of customer service. Furthermore, service is likely to vary greatly between different branches of a bank and at different times. Therefore, each bank’s management needs to bend its efforts not only to the evaluation of their customer perceptions of what their bank offers, but also to ensuring that the levels of quality service offer exceed the expectations of customers. In addition, the banks will need a reliable set of comparative criteria, and robust and consistent measurement instrument that tests all factors relevant to customers and their level of perception of service quality. It is expected that this study can contribute to the design of such an instrument, and suggests some areas on which banks should concentrate their attentions.

Banks need to conduct customer surveys regularly and increase the quantity and quality of their research in the area of service quality in order to improve the services they offer. This study’s results indicate a need for better external communications to transmit the changes and improvements made to customers effectively, so that the expectations engendered are realistic and accurate. As a result, there needs to be direct interaction with customers to provide the insight into customer expectations necessary, and banks need to develop a practice of monitoring to achieve this: the researcher’s observations of existing practice in Libyan banks during the period in which the field research was conducted suggests that such monitoring is very rare. In order to rectify this situation, managers must devote more time and resources to interaction with customers and have
direct contact with the delivery of services to customers, by experiencing service delivery for themselves. Service marketers should offer service training programmes to improve awareness of customer expectations among both management and front-line service provision staff. It is then the responsibility of management to communicate the acceptable levels of service standard to the staff. The banking sector, in public commercial banks, requires investment in employee training programmes to provide employees with a more comprehensive understanding of service quality, especially at front line levels. Since "personalised service" is identified as an area of importance to Libyan customers, future employee training programmes need to concentrate on interpersonal communication improvements and other customer care factors in order to begin meeting their customers' requirements. When employees are able to interact with customers professionally they inspire confidence, and this confidence enables the customer to feel that any service failures will be dealt with quickly and efficiently, and that front-line employees will show empathy, thus ensuring that service delivery is consistent with service expectations. The result of such improvements will be high customer satisfaction and retention, as well as extending the zone of tolerance for service failures that customers permit a service provider. A further benefit is likely to be increased recommendation of the bank to other potential customers, and improvements in the loyalty customers feel towards the bank. Another factor peculiar to banks in developing countries is that in many cases customers are not familiar with the new technology being introduced to Libyan banks, and by the same token staff are also not familiar with the new technology currently penetrating the Libyan banking market; as a result, there is an urgent need for more training and education to help both of these groups. Given the Libyan banking sectors international aspirations, they need to become successful electronic service providers, therefore their management need to recognise
that electronic services have a huge initial impact on customer perceptions and behaviours, and that if they are not educated as to their benefits in terms of convenience, and shown how to use them effectively, confidence in such systems can be lost and is very difficult to recapture. However, initiatives of this kind should not lose sight of what it is in their current service offering that customers find attractive and reassuring, bearing in mind that this study produced a relatively high overall mean score for perceptions of service quality. The results indicate that Libyan public commercial banks are well regarded by their customers, and pinpointing exactly what the elements of service provision that contribute to this sense of regard will be a critical factor in the future success of the banks.

Libyan public commercial banks should take account of the mean scores for quality perception achieved by the different SERVQUAL dimensions in order to devise strategies that will improve the overall level of service quality. Notwithstanding this, Libyan commercial banks should focus their attention on the service quality dimensions that matter most to their customers, namely reliability and tangibles, in order to improve their levels of service quality more effectively and efficiently. Therefore, the emphasis of efforts at improvement in these areas should be directed towards initiatives such as improvements to the appearance of their branches and employees, and to the physical facilities of the banks. Banks need to consider the visual representation of their branding and the materials and equipment associated with service provision, including the use of the latest banking technology, alongside a professional appearance and attitude amongst their staff as a contribution to the reliability dimension. When the Libyan public commercial banks make promises to their customers these should be supported by the resources and staff empowerment capable of delivering on them, and staff should be trained to show sympathy with their problems, as well as aiming to provide the correct
service to the customer first time, in a timely fashion, and with the maintenance of accurate bank records. Based on the actual level of analysis of items concerning these dimensions, items such as the physical facilities of bank, the promises banks make to customers, the sympathy shown by bank personnel to customer’s problems, and the provision of the correct, timely and appropriate service to the customer the first time all received different levels of evaluation in this study. Using this data, a bank would be able to focus its attention on these two aspects (dimensions) of quality with a view to improving its image among existing and potential customers. Therefore, there remains considerable room for improvement among Libyan public commercial banks in the provision of service quality to bank customers, and it is greatest within these dimensions. Future improvements to bank service provision must make reliability their top priority, and services must be developed to make them simpler, faster, more reliable, more effective, and more responsive to meeting the needs of customers, thereby offering increased value to customers.

To conclude, in order for public commercial banks to compete more efficiently and effectively in the marketplace, they need to be more sensitive to meeting customers’ requirements with regard to the quality dimensions most important to them: reliability and tangibility.

7.5 Limitations and Directions for Further Research

7.5.1 Limitations of the Study

As is the case with any study, this research is subject to certain limitations. Despite the care taken in structuring this research, these limitations have inevitably had some effect on its overall contribution. The major limitations can be summarised as follow:
First, the study restricted itself to metropolitan centres of Libya in the far Eastern and Western areas. Because of distance and time constraints, this study was not able to conduct research in rural and suburban areas of the country. The areas studied included the largest cities and therefore contain the largest population and greatest number of banks. Banks in the Southern, less populated region of the country were not visited.

Second, the study population selected was the customers of Libya's public commercial banks. Therefore, this limits the ability of the study to generalise its findings, because it does not include the customers of private commercial banks in its study sample.

Third, the research objectives were addressed through a methodology which limited itself to a single method of data collection (the questionnaire survey), due to a number of constraints outlined in the methodology chapter. Furthermore, service quality was measured using only customers' perceptions, rather than exploring the difference (gap) between expectations and perceptions. This choice, however, was justified in chapters 3 and 6, and although many researchers believe that it is helpful to include expectations in the measurement of service quality, many counter arguments also exist.

Fourth, another difficulty was one that is typically associated with research which is dependent on data collected through a survey: there is no practical means for the researcher to ensure that respondents reply truthfully and sincerely when completing a survey. Furthermore, it is not possible to ensure that the essence of each question is always understood in the way the researcher intended. Given these restrictions, it is possible to conclude that in some cases respondents may have provided answers that did not represent their actual views, or which reflect a misunderstanding of the intention or content of a question. However, to overcome such difficulties, the researcher cross-referenced the data across the various levels of investigation to reduce the degree of the
discrepancies that may have occurred. Further efforts to overcome this limitation in future research could concentrate on the changes to designing the research instrument outlined in this chapter (section 7.3) and/or the adoption of an interview process to validate the findings of the survey.

Lastly, and perhaps the most important limitation of the study in terms of what it set out to achieve lies in the methodological tradition in which it stands. As a quantitative, questionnaire based study using an adapted SERVQUAL model, the study adopted a methodology appropriate to investigation of service quality in a particular sector. However, attempts to overlay a cultural dimension on this methodology with the addition of items derived from previous Arab-based studies of a similar nature proved to be unsuccessful. The factor analysis showed that for the most part these items did not load with any dimension. So, while the findings of this study remain valid and useful, the method adopted did not produce the expected result, and this is probably due to a reliance on the literature and the flexibility of the SERVQUAL instrument. It is possible that the items derived from other Arab studies of service quality were not relevant to Libyan customers, or that they were relevant but failed to load with any of SERVQUAL's existing dimensions, and that SERVQUAL therefore lacks sensitivity to cultural issues of service quality in different cultures. Therefore, as an example of potentially fruitful avenues to further research discussed below, the following methodology might be considered. Firstly, an exploratory study designed to produce a research instrument a sensitive to the Libyan banking environment: this could be derived from interviews or focus groups with small samples of Libyan bank customers, and would provide a set of items distinctive from the traditional SERVQUAL list. Secondly, these items could then be used in the same way that the adapted SERVQUAL model was in this study, to form the basis of a questionnaire survey assessing
perceptions of service quality. Finally, factor analysis could be used as in this study to produce a set of dimensions unique to the Libyan environment. This approach has the advantage that it is capable of being adapted to any research environment, and would provide insight to a specific culture, rather than relying on items transferred from similar cultures. The approach of using banking (or other) customers to develop a set of additional items would provide the adapted SERVQUAL model with a greater degree of cultural sensitivity, and would provide a methodological precedent for researchers into other sectors of the economy to follow. Potential directions for future research are discussed in more detail below.

7.5.2 Directions for Future Research

Attempts to study service quality are important, but also challenging. Given that no consensus exists about a definition of service quality, and that there is no generally accepted tool for its measurement, it is necessary that future efforts to measure perceptions of service quality in the research context should continue to advance understanding of the concepts and the methods employed in this study, to provide fuller data to measure and improve service quality in Libyan banks. Specific recommendations as to the development of a model tailored to a particular sector and/or culture are given above, and in future research additions to the conceptualisation of service quality such as including expectations based on customer feedback from a preliminary focus group in its measurement may produce fruitful and useful results. Many researchers discuss this topic, including Carman (1990), Babakus, and Boller (1992), who make several suggestions of use to future research. As a movement in this direction, further research could also focus at the same time or as part of a process on the development of service quality and its impact on customer satisfaction leading to an
improvement in market share and profitability. The efforts of both staff and their managers are crucial to achieving such improvements. Staff must achieve excellence in accordance with established service standards, while management need to play an active role in communicating these standards and encouraging their staff to meet the expectations of customers. In addition, the findings of the research suggest that an area not included in the five dimensions of SERVQUAL but of significance to a full understanding of the research context is the issue of culture and its influence on the provision of service quality, and customer perceptions of it.

Culture can be considered central to attempts to understand the results of this study. Certain characteristics of the Libyan banking industry and the attitudes of its customers were provided in chapter 2, and the literature review provides examples of similar studies conducted into banking systems in Arab countries, which were used to provide contributions to the research instrument’s battery of items. However, the crucial link between Libyan culture, which while it is Arabic and Islamic must also be considered distinctive, consisting as it does of many characteristics outlined in chapter 2 such as the importance of kinship and friendship ties, was not established at the stage of designing the research instrument, and the findings therefore represent interesting insights into Libyan customer perceptions, and valuable data for management practise in Libyan banks, but do not necessarily provide all the information SERVQUAL is capable of providing.

Much previous research into service quality measurement, particularly in the banking sector, has concentrated on its measurement from the customers’ perspective. Further research is needed into service quality measurement, taking account of the perspectives of the banks’ services of both managers and employees, and this would enable these
banks to monitor their progress, and gain a deeper understanding and interaction with the needs and requirements of their customers, providing additional information about the elements of service quality that customers regard as valuable and desirable, and those which they regard as indispensible and rooted in their cultural values.

In the future, efforts to replicate the study, which include international customers in the sample, would be appropriate and relevant. As a result of these changes, Libyan banks are beginning to offer services to a range of international customers such as business people, travellers, tourists, students and expatriates, and in doing so they are effectively providing services at an international level, becoming an exporter of financial services. Therefore, the elements of service quality regarded as desirable or indispensible to Libyan customers may be regarded in quite a different light by customers from outside Libya.

There have been many previous studies which have investigated service quality in the banking sector. They have adopted many different approaches to the evaluation and comparison of service quality, such as: evaluation only of the customers’ perceptions of service quality in the banking sector (Al Khatib and Gharaibeh, 1998; Jabnoun and Al-Tamimi, 2003); the difference between the expectation of customers and their perceptions of the actual service quality they receive (Kangis and Voukelatos, 1997, and Sharma and Mehta, 2005); and evaluation which is based dividing customers into different groups (Athanassopoulos, 1997). Other researchers have attempted to measure the service quality taking account of the different cultures in which it is offered (Petridou et al., 2007) and customer nationality (Lewis, 1991) as well as dividing customer according to differences in their stages of life (Galloway and Blanchard, 1996). However, one area which all of these studies have so far not taken into account is the influence of the customer’s business activity (commercial, agricultural, industrial
etc.,) on perceptions of service quality. A potentially fruitful area for future research would involve comparing the perceptions of customers in different commercial groups, as a means to evaluate customer perceptions of service quality based on specific commercial needs; this research could be extended to combine both the perceptions and expectations of customers in different commercial groups, in order to determine if certain types of commercial activity are significantly affected by expectations and perceptions of service quality.

Future research aimed at improving the Libyan service sector in general requires an extension of size and scope of this research, which should be replicated not only within the banking industry, but also within other sectors strongly dependent on service for gaining a competitive advantage, such as travel agents, higher education, tourist services and health care, bearing in mind the recommendations for research instrument design outlined above.

In addition to the above, future researchers may wish to focus on the findings produced by the Mann-Witney test of the service quality perceptions of male and female customers (table 5.4), which shows that significant differences existed in the dimensions empathy and responsiveness. Research could be designed to account for these differences, if they are replicated.

Finally, the study's results indicate that the dimension most important to Libyan customers was reliability, followed by the tangibility dimension. With respect to the tangibility dimension, this result contradicts previous studies. With this in mind, it is clear that more research is necessary to investigate whether or not the fact that the tangibles dimension proved to be so prominent is peculiar to the Libyan context, in comparison with previous studies.
7.6 Conclusion

This concluding chapter has presented observations and recommendations on the principal findings of the study, and its limitations have been addressed, together with recommendations for further research.

The study’s aim was to investigate the levels of service quality provided by the Libyan public commercial banking sector. The main conclusions that can be drawn from the findings of this study are summarised as follow:

Firstly, the literature review undertaken in this study suggests that banking service quality may be regarded as central to the successful performance of a bank. High levels of service quality help the bank to project a better image, which consequently leads to attracting and retaining customers. Secondly, according to the results of this study, the levels of service quality being produced by Libyan public banks are adequate according to the perceptions of their customers, but doubts must remain whether these levels are competitive by international standards. Several constraints on the development of service quality emerged in the course of the study, most notably: the UN sanctions and the various trade embargos inflicted by the West on Libya have had a negative impact on all sectors of the economy and most particularly on the banking system. Despite enormous efforts by the banks since the lifting of the UN sanctions, they have been unable to lift their service quality offerings to the level of international standards, or to sufficiently enhance the status of these banks, and there are still many difficulties to be overcome in terms of staff development, banking structure and regulations and IT facilities. Thirdly, service quality enhancement within the Libyan banking sector, and the importance of high-quality customer service is a recent development in the conceptual understanding of managers responsible for the provision of banking services,
and it is developing slowly because the public’s perception of the banks is still rooted in a traditional notion that banks compete not on the services and products they offer, but in the level of responsiveness they offer to the specific needs of each individual customer.

Fourthly, if the Libyan banking sector is going to achieve levels of service quality and customer satisfaction that make them competitive against international standards, it is necessary that banks are perceived to be providing more for their customers in terms of service, value and sensitivity to changing demands. This will become more important as foreign banks enter the market with new management ideas and high technology equipment, and also as the private commercial banks begin to develop services and products compliant with Islamic law, and Libyan customers for the first time are offered a complete Islamic banking alternative.

The findings of this study suggest that further research aimed at the measurement and assessment of service quality in this sector is necessary, focusing on efforts to improve communication between the banks and their customers, in addition to ongoing training for bank employees, and finally attempts by the banks to make improvements in dimensions of service quality most important to their customers. Implicit in these initiatives must be a recognition that Libyan customers are going to be confronted with a whole new area of choice, and that their response to this choice is at present unpredictable.

In terms of the study’s limitations, these were identified to be its focus on narrow geographic areas in Libya, confining the study to customers of public commercial banks, and the inability of the researcher to assure the truthfulness and sincerity of the respondents’ data while completing the survey. Finally, suggestions for areas of further
research have been offered, including recommendations that researchers could make
greater efforts to explain and develop the concept and measurement of service quality
and customer satisfaction in the banking industry, especially taking more account of the
viewpoint of those involved in service provision. Such research could focus different
client groups, and the need they have according to their activities and sectors, or as they
relate to Libyan culture and tradition, in order to contribute to the development and
improvement of the whole Libyan service sector.
References


275


Ford, J. W., Joseph, M., & Joseph, B. (1993). *Service quality in higher education: a comparison of universities in the United States and New Zealand using SERVQUAL: manuscript, Old Dominion University, Norfolk, VA.*


282


283


286


296


### Appendix 4.1: The Original SERVQUAL Scale

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Excellent XYZ companies will have modern-looking equipment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The physical facilities at excellent XYZ companies will be visually appealing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Employees of excellent XYZ companies will be neat-appearing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Materials associated with the service (such as pamphlets or statements) will be visually appealing in an excellent XYZ companies.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>When excellent XYZ companies promise to do something by a certain time, they will do so.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>When a customer has a problem, excellent XYZ companies will show a sincere interest in solving it.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Excellent XYZ companies will perform the service right the first time.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Excellent XYZ companies will provide their services at the time they promise to do so.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Excellent XYZ companies will insist on error-free records.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Employees of excellent XYZ companies will tell customers exactly when services will be performed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Employees of excellent XYZ companies will give prompt service to customers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Employees of excellent XYZ companies will always be willing to help customers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Employees of excellent XYZ companies will never be too busy to respond to customers’ requests.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>The behaviour of employees of excellent XYZ companies will instil confidence in customers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Customers of excellent XYZ companies will feel safe in their transactions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Employees of excellent XYZ companies will be consistently courteous with customers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Employees of excellent XYZ companies will have the knowledge to answer to customers’ questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Excellent XYZ companies will have give customers individual attention.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Excellent XYZ companies will have operating hours convenient to all their customers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Excellent XYZ companies will have employees who give customers personal attention.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Excellent XYZ companies will have the customers’ best interests at heart.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>The employees of excellent XYZ companies will understand the specific needs of their customers.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Perceptions Section

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>XYZ has modern-looking equipment.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>XYZ’s physical facilities are visually appealing.</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>XYZ’s employees are neat-appearing.</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Materials associated with the service (such as pamphlets or statements)</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>When XYZ promises to do something by a certain time, it does so.</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>When you have a problem, XYZ shows a sincere interest in solving it.</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>XYZ performs the service right the first time.</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>8</td>
<td>XYZ provides its services at the time it promises to do so.</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>9</td>
<td>XYZ insists on error-free records.</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>10</td>
<td>Employees of XYZ tell you exactly when services will be performed.</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>11</td>
<td>Employees of XYZ give you prompt service.</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>12</td>
<td>Employees of XYZ are always be willing to help.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Employees of XYZ are never be too busy to respond to your requests.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>The behaviour of employees of XYZ instils confidence in customers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>You feel safe in your transactions with XYZ.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Employees of XYZ are consistently courteous with you.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Employees of XYZ have the knowledge to answer to your questions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>XYZ gives you individual attention.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>XYZ has operating hours convenient to all its customers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>XYZ has employees who give you personal attention.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>XYZ has your best interests at heart.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Employees of XYZ understand the specific needs.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 4.2: The English Version of the Study Questionnaire

Faculty of Business, Education & Professional Studies
Gloucestershire University

**Study’s Questionnaire**

Dear Bank Customer:

Thank you for taking the time to complete this survey. The purpose of this survey is intended to measure the perceived service quality of your main bank and will constitute a significant contribution to academic and practical efforts to develop Libyan banking. As individuals have their own impressions it is important for you to answer each question as you see it. There is no right or wrong answer.

All data is kept confidential. Questions are designed not to identify individuals. Individual responses are aggregated with other data to further protect individuals.

If there is any portion of the questionnaire that needs clarification or if you have any questions concerning the study please feel free to contact me at 092 552 9463 or eaelmabrouk@yahoo.com Thank you for your assistance in providing this valuable information.


<table>
<thead>
<tr>
<th>Sentences (Banking service quality dimensions)</th>
<th>Degree of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
</tr>
<tr>
<td>Rel1 My bank’s employees provide services as promised.</td>
<td></td>
</tr>
<tr>
<td>Ass1 The employees of my bank instil trust and confidence in me.</td>
<td></td>
</tr>
<tr>
<td>Res1 Customers at my bank are told exactly when services will be provided.</td>
<td></td>
</tr>
<tr>
<td>Emp1 My bank gives me individual attention.</td>
<td></td>
</tr>
<tr>
<td>Tan1 My bank has state-of-the-art technology such as computers and ATMs.</td>
<td></td>
</tr>
<tr>
<td>Rel2 My bank shows me a sincere interest in solving my problems.</td>
<td></td>
</tr>
<tr>
<td>Ass2 My bank’s employees make customers feel safe in their transaction.</td>
<td></td>
</tr>
<tr>
<td>Res2 Employees in my bank give prompt service.</td>
<td></td>
</tr>
<tr>
<td>Emp2 My bank has convenient operating hours.</td>
<td></td>
</tr>
<tr>
<td>Tan2 Physical facilities of my bank are visually appealing.</td>
<td></td>
</tr>
<tr>
<td>Rel3 The advertised promises of my bank are consistent with its performance.</td>
<td></td>
</tr>
</tbody>
</table>

Section 1

Each of the following statements concerns your feelings or perceptions about your main banking provider. For each statement, please show the extent to which you believe your main bank has that feature: / where (5) means that you ‘strongly agree’, (4) ‘agree’, (3) ‘neither agree nor disagree’, (2) ‘disagree’, while (1) means you ‘strongly disagree’.
<table>
<thead>
<tr>
<th>Sentences (Banking service quality dimensions)</th>
<th>Degree of Agreement</th>
<th>strongly disagree</th>
<th>disagree</th>
<th>neither agree nor disagree</th>
<th>agree</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ass3 In my bank, employees are consistently courteous with me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res3 My bank’s employees are always willing to help me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emp3 The employees of my bank have the interests of their customers at heart.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tan3 My bank’s employees look professional and well dressed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rel4 My bank offers a wide range of financial products and services.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ass4 Employees in my bank have the knowledge to answer my questions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res4 The employees of my bank are ready to respond to their customers’ request.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emp4 The employees of my bank have a good relationship with their customers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tan4 The pamphlets and forms produced by my bank are clear and easy to understand.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rel5 My bank insists on error-free records.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ass5 The employees of my bank provide services with high competence.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res5 My bank allocates serving windows to serve female customers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emp5 The employees of my bank understand customer needs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of Agreement</td>
<td>strongly disagree</td>
<td>disagree</td>
<td>neither agree nor disagree</td>
<td>agree</td>
<td>strongly agree</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------</td>
<td>----------</td>
<td>-----------------------------</td>
<td>-------</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td><strong>Sentences (Banking service quality dimensions)</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Tan5 My bank has enough parking spaces and an accessible location.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rel6 The employees of my bank have complete knowledge of the banking services and products provided.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ass6 There is security staff in my bank all the time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res6 My bank expands the hours of business in case of customer need.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emp6 The employees of my bank are keen to provide additional services to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tan6 My bank looks attractive from the outside.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rel7 The employees of my bank allocate sufficient time to explain banking services to customers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res7 My bank increases the number of employees or serving windows when crowded.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emp7 The employees of my bank always listen carefully to my complaints.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rel8 My bank provides its customers with accurate information.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res8 The employees of my bank answer telephone calls promptly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

306
### Section 2

<table>
<thead>
<tr>
<th>Gender:</th>
<th>Male ()</th>
<th>Female ()</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age:</td>
<td>Below 25 years ()</td>
<td>From 25 to less than 34 years ()</td>
</tr>
<tr>
<td>Educational Level:</td>
<td>High school ()</td>
<td>Diploma/some college study ()</td>
</tr>
</tbody>
</table>

How many banks do you use?

1 □  2 □  3 □  4 □  more than 4 □

How many times in a month do you visit a branch of your most used bank?

- Less than once/ month □
- 1-2 times/ month □
- 3-4 times/ month □
- 5-6 times/ month □
- more than 6 times/ month □

Main Bank:

- Gumhouria Bank □
- National Commercial Bank □
- Wahda Bank □
- Sahara Bank □

Is there anything else you would like to tell us about the quality of service provided by your bank? If so, please use this space for that purpose.

..........................................................................................................................................................
..........................................................................................................................................................
..........................................................................................................................................................
..........................................................................................................................................................
..........................................................................................................................................................
..........................................................................................................................................................
..........................................................................................................................................................
..........................................................................................................................................................
..........................................................................................................................................................
..........................................................................................................................................................
..........................................................................................................................................................
..........................................................................................................................................................

...Thank you very much for your cooperation....
الموضوع: ملء استمارة استببان

عزيزي المشارك

 السلام عليكم ورحمة الله وبركاته،

يرغب الباحث في القيام بدراسة استطلاعية عن (قياس جودة الخدمات المصرفيّة المقدمة في قطاع المصارف الليبية) وذلك لِلليلة درجة التخصص الدقيق "الدكتوراه" في علم إدارة الأعمال.

إن مشاركتك في الإجابة على العبادات الواردة في هذا الاستبيان لها دور مهم في الوصول إلى نتائج ميزة تخدم أهداف هذا البحث. فأملي كبيرة في أن تأخذ هذه الاستمارة عنابة خاصة من طرفكم وأن تكون إجاباتكم دقيقة ومعبرة عن الواقع أفضل تعبير.

الباحث
المبروك عبد الجواد امبارك
جامعة غلوسترشير
شلتنهام، المملكة المتحدة

308
الجزء الأول: أسئلة البحث
كل عبارة من العبارات الآتية تتعلق بشروطك أو تفهمك إتجاه الخدمة المصرفيَّة التي تحصل عليها فعلًا من مصرفك الرئيسي الذي تتعامل معه. الرجاء إختيار رقم العبارة التي تتفق مع أو تعبر عن سمع من سمات مصرفك: 

(3) تعني موافق بشدة. (2) تعني موافق. (1) تعني غير موافق و غير راضٍ. تعني محاذٍ.

<table>
<thead>
<tr>
<th>العبارات (أبعاد جودة الخدمة المصرفيَّة)</th>
<th>موافقاً تمامًا 5</th>
<th>موافقاً 4</th>
<th>محاذ 3</th>
<th>غير موافقاً 2</th>
<th>غير موافقاً 1</th>
<th>درجة الموافقة</th>
</tr>
</thead>
<tbody>
<tr>
<td>موظفو مصرفٍ يقدمو الخدمة المطلوبة وفقاً للموعد المحدد لها.</td>
<td>Rel1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>سلوك موظفو مصرفٍ يغرس الأمان والثقة.</td>
<td>Ass1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>الزياني في مصرفٍ يتعلمون بموعد تقديم الخدمة.</td>
<td>Res1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>مصرفٍ يمنحني رعاية فردية خاصة.</td>
<td>Emp1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>مصرفٍ لديه تقنية حديثة مثل أجهزة الكمبيوتر والآلات المصرفيَّة الإلي.</td>
<td>Tan1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>مصرف يتعامل مع مشكلتي ويصلي لحلها.</td>
<td>Rel2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>موظفو مصرفٍ يجعلوا الزياني يشعرون بالأمن في تعاملاتهم مع مصرفهم.</td>
<td>Ass2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>موظفو مصرفٍ يقدمو خدمات فورية وسرعة.</td>
<td>Res2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ساعات الدوام في مصرفٍ مناسبة.</td>
<td>Emp2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>المظهر العام لمراقب مصرفٍ جذاب وملتَّه.</td>
<td>Tan2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>إن الوعد المعلنة من قبل مصرفي تتفق.</td>
<td>Rel3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>في مصرفي الموظفين يعملون في سلوك مهذب.</td>
<td>Ass3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>موظفو مصرفٍ مستعدين دائماً لمساعدتي.</td>
<td>Res3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>موظفو مصرفٍ يجعلوا ملحتي في مقدمة اهتماماتهم.</td>
<td>Emp3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>موظفو مصرفٍ يتبينون بحسن المظهر وأناقة الملبس.</td>
<td>Tan3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>مصرفٍ يعرض تشكيلة واسعة من المنتجات والخدمات المالية.</td>
<td>Rel4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>موظفو مصرفٍ يمكنهم المعرفة والفهم الكافي للرد على استفساراتي.</td>
<td>Ass4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>موظفو مصرفٍ على استعداد للرد على استفسارات زبائنتهم.</td>
<td>Res4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>موظفو مصرفٍ لديهم علاقات جيدة مع زبائنتهم.</td>
<td>Emp4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>الرأي</td>
<td>موافق تماماً</td>
<td>موافقاً</td>
<td>محاذر</td>
<td>موافقاً غير</td>
<td>موافق تماماً</td>
<td>درجة الموافقة</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>---------</td>
<td>--------</td>
<td>-------------</td>
<td>-------------</td>
<td>----------------</td>
</tr>
<tr>
<td>الكلبات والبعوضات المتضمنة من قبل مصرفي واضحه وسهولة الفهم.</td>
<td>Tan4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>مصرفي يحتوي بسجلات دقيقة لمعاملاته.</td>
<td>Rel5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>موظف مصرفي يوفرو الخدمات بكفاءه عالية.</td>
<td>Ass5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>مصرفي يخصص نماذج خاصة بخدمة النساء.</td>
<td>Res5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>موظف مصرفي يتلقينا احتياجات بشكل دقيق.</td>
<td>Emp5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>مصرفي لديه موافق كافيه للسيارات وسهولة الوصول.</td>
<td>Tan5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>موظف مصرفي لديهم المعرفة الكافية بالخدمات والمنتجات المتوفرة.</td>
<td>Rel6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>يوجد رجال أمن في محل مصرفي بشكل دائم.</td>
<td>Ass6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>مصرفي يزيد ساعات العمل وفقا لحاجته.</td>
<td>Res6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>موظف مصرفي متخصصين بتقديم خدمات إضافيه.</td>
<td>Emp6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>مصرفي يبدا جذاب المظهر من الخارج.</td>
<td>Tan6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>موظف مصرفي يعطي الوقت الكافي من أجل شرح خدمات المصرفي للزوار.</td>
<td>Rel7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>مصرفي يزيد من عدد الموظفين أو نواة تقديم الخدمة في حالة وجود إزعاج.</td>
<td>Res7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>موظف مصرفي دائماً يستمعون بعناية لشكوى.</td>
<td>Emp7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>مصرفي يزود زبائه بالمعلومات الدقيقة.</td>
<td>Rel8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>موظف مصرفي يجيبوا على المكالمات الهاتفية بشكل سريع وفوري.</td>
<td>Res8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
الجزء الثاني: البيانات الشخصية للزبون

• الجنس:
  □ ذكر
  □ أنثى

• العمر:
  □ أقل من 25 سنة
  □ من 25 إلى أقل من 34 سنة
  □ من 35 إلى أقل من 44 سنة
  □ من 45 إلى أقل من 54 سنة
  □ 55 سنة أو أكثر

• المستوى التعليمي:
  □ الثانوية العامة أو ما يعادلها
  □ دبلوم عالي
  □ جامعي
  □ دراسات عليا

كم عدد المصارف التي تتعامل معها؟:

□ أكثر من 4
□ 4
□ 3
□ 2
□ 1

ما هو عدد المرات في الشهر التي تزور فيها مصرفك الأكثر استعمالاً:

□ 1 إلى 2 مرات
□ من 3 إلى 4 مرات
□ من 5 إلى 6 مرات
□ أكثر من 6 مرات

اسم مصرفك الرئيسي:

□ مصرف التجاري الوطني
□ مصرف الجهورية
□ مصرف الصحاري

هل لديك أي شيء آخر تود أن تخبرنا عنه بخصوص جودة الخدمة التي يقدمها مصرفك؟ إذا كان كذلك، يرجى استخدام هذه الفراغ لبيانه.

الشكر الجزيل والامتنان على حسن تعاونكم...

311
Appendix 4.4: A Summary of the Feedback of the Pilot Study

A summary of the feedback and action taken as a result of the pilot study

<table>
<thead>
<tr>
<th>Item</th>
<th>Item before amended</th>
<th>Feedback and action taken</th>
<th>Item after amended</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My bank’s employees provide services as promised.</td>
<td>#</td>
<td>My bank’s employees provide services as promised.</td>
</tr>
<tr>
<td>2</td>
<td>My bank is sympathetic to solving my problems.</td>
<td>Expression checking</td>
<td>My bank shows me a sincere interest in solving my problems.</td>
</tr>
<tr>
<td>3</td>
<td>My bank performs the service right the first time.</td>
<td>Deleted/ overlap with item 4</td>
<td>The advertised promises of my bank are consistent with its performance.</td>
</tr>
<tr>
<td>4</td>
<td>The advertised promises of my bank are consistent with its performance.</td>
<td>#</td>
<td>My bank offers a wide range of financial products and services.</td>
</tr>
<tr>
<td>5</td>
<td>My bank offers a wide range of financial products and services.</td>
<td>#</td>
<td>My bank offers a wide range of financial products and services.</td>
</tr>
<tr>
<td>6</td>
<td>My bank insists on error-free records.</td>
<td>#</td>
<td>My bank insists on error-free records.</td>
</tr>
<tr>
<td>7</td>
<td>The employees of my bank have complete knowledge of the banking services and products provided.</td>
<td>#</td>
<td>The employees of my bank have complete knowledge of the banking services and products provided.</td>
</tr>
<tr>
<td>8</td>
<td>The employees of my bank allocate sufficient time to explain banking services to customers.</td>
<td>#</td>
<td>The employees of my bank allocate sufficient time to explain banking services to customers.</td>
</tr>
<tr>
<td>9</td>
<td>My bank provides its customers with banking services by telephone banking.</td>
<td>Deleted/ overlap with item 24</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>My bank provides its customers with accurate information.</td>
<td>#</td>
<td>My bank provides its customers with accurate information.</td>
</tr>
<tr>
<td>11</td>
<td>The behaviour of employees in my bank instils confidence in me.</td>
<td>Expression checking</td>
<td>The employees of my bank instil trust and confidence in me.</td>
</tr>
<tr>
<td>12</td>
<td>I feel safe in all my transactions at my bank.</td>
<td>Expression checking</td>
<td>My bank’s employees make customers feel safe in their transaction.</td>
</tr>
<tr>
<td>13</td>
<td>In my bank, employees are consistently courteous with me.</td>
<td>#</td>
<td>In my bank, employees are consistently courteous with me.</td>
</tr>
<tr>
<td>14</td>
<td>Employees in my bank have the knowledge to answer my questions.</td>
<td>#</td>
<td>Employees in my bank have the knowledge to answer my questions.</td>
</tr>
<tr>
<td>15</td>
<td>The employees of my bank provide services with high competence.</td>
<td>#</td>
<td>The employees of my bank provide services with high competence.</td>
</tr>
<tr>
<td>16</td>
<td>There is security staff in my bank all time.</td>
<td>#</td>
<td>There is security staff in my bank all the time.</td>
</tr>
<tr>
<td>17</td>
<td>Customers at my bank are told exactly when services will be provided.</td>
<td>#</td>
<td>Customers at my bank are told exactly when services will be provided.</td>
</tr>
</tbody>
</table>
A summary of the feedback and action taken as a result of the pilot study (Cont.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Item before amended</th>
<th>Feedback and action taken</th>
<th>Item after amended</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Employees in my bank give prompt service.</td>
<td>#</td>
<td>Employees in my bank give prompt service.</td>
</tr>
<tr>
<td>19</td>
<td>My bank’s employees are always willing to help me.</td>
<td>#</td>
<td>My bank’s employees are always willing to help me.</td>
</tr>
<tr>
<td>20</td>
<td>Employees in my bank are never too busy to respond to my requests.</td>
<td>Expression checking</td>
<td>The employees of my bank are ready to respond to their customers' request.</td>
</tr>
<tr>
<td>21</td>
<td>My bank allocates serving windows to serve female customers.</td>
<td>Confirmed by customers</td>
<td>My bank allocates serving windows to serve female customers.</td>
</tr>
<tr>
<td>22</td>
<td>My bank expands the hours of business in case of customer need.</td>
<td>#</td>
<td>My bank expands the hours of business in case of customer need.</td>
</tr>
<tr>
<td>23</td>
<td>My bank increases the number of employees or serving windows when crowded.</td>
<td>#</td>
<td>My bank increases the number of employees or serving windows when crowded.</td>
</tr>
<tr>
<td>24</td>
<td>The employees of my bank answer telephone calls promptly.</td>
<td>#</td>
<td>The employees of my bank answer telephone calls promptly.</td>
</tr>
<tr>
<td>25</td>
<td>My bank provides its customers with banking service access through the phone.</td>
<td>Deleted/ not applicable</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>My bank gives me individual attention.</td>
<td>#</td>
<td>My bank gives me individual attention.</td>
</tr>
<tr>
<td>27</td>
<td>My bank has convenient operating hours.</td>
<td>#</td>
<td>My bank has convenient operating hours.</td>
</tr>
<tr>
<td>28</td>
<td>Employees at my bank give me personal attention.</td>
<td>Deleted/ overlap with item 26</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>My bank has my best interests at heart.</td>
<td>Expression checking</td>
<td>The employees of my bank have the interests of their customers at heart.</td>
</tr>
<tr>
<td>30</td>
<td>The employees of my bank have a good relationship with their customers.</td>
<td>#</td>
<td>The employees of my bank have a good relationship with their customers.</td>
</tr>
<tr>
<td>31</td>
<td>My specific needs are taken care of by the employees of my bank.</td>
<td>Deleted/ overlap with item 32</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>The employees of my bank understand customer needs.</td>
<td>#</td>
<td>The employees of my bank understand customer needs.</td>
</tr>
<tr>
<td>33</td>
<td>The employees of my bank are keen to provide additional services to me.</td>
<td>#</td>
<td>The employees of my bank are keen to provide additional services to me.</td>
</tr>
<tr>
<td>34</td>
<td>The employees of my bank are always listening carefully to my complaints.</td>
<td>#</td>
<td>The employees of my bank always listen carefully to my complaints.</td>
</tr>
</tbody>
</table>
A summary of the feedback and action taken as a result of the pilot study (Cont.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Item before amended</th>
<th>Feedback and action taken</th>
<th>Item after amended</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>My bank has modern looking equipment.</td>
<td>Expression checking</td>
<td>My bank has state-of-the-art technology such as computers and ATMs.</td>
</tr>
<tr>
<td>36</td>
<td>Physical facilities of my bank are visually appealing.</td>
<td>#</td>
<td>Physical facilities of my bank are visually appealing.</td>
</tr>
<tr>
<td>37</td>
<td>My bank’s employees are professional.</td>
<td>Expression checking</td>
<td>My bank’s employees look professional and well dressed.</td>
</tr>
<tr>
<td>38</td>
<td>The pamphlets and forms produced by my bank are clear and easy to understand.</td>
<td>#</td>
<td>The pamphlets and forms produced by my bank are clear and easy to understand.</td>
</tr>
<tr>
<td>39</td>
<td>My bank has parking places for customer vehicles.</td>
<td>Expression checking</td>
<td>My bank has enough parking spaces and an accessible location.</td>
</tr>
<tr>
<td>40</td>
<td>My bank looks attractive from the outside.</td>
<td>#</td>
<td>My bank looks attractive from the outside.</td>
</tr>
</tbody>
</table>
### Appendix 5.1: Correlation Matrix (Items of the Service Quality Scale)

<table>
<thead>
<tr>
<th>Rel1</th>
<th>Rel2</th>
<th>Rel3</th>
<th>Rel4</th>
<th>Rel5</th>
<th>Rel6</th>
<th>Rel7</th>
<th>Rel8</th>
<th>Ass1</th>
<th>Ass2</th>
<th>Ass3</th>
<th>Ass4</th>
<th>Ass5</th>
<th>Ass6</th>
<th>Res1</th>
<th>Res2</th>
<th>Res3</th>
<th>Res4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.000</td>
<td>0.999</td>
<td>1.000</td>
<td>1.000</td>
<td>0.189</td>
<td>0.336</td>
<td>0.165</td>
<td>1.000</td>
<td>0.450</td>
<td>0.337</td>
<td>0.428</td>
<td>0.208</td>
<td>0.336</td>
<td>0.450</td>
<td>0.274</td>
<td>0.254</td>
<td>0.124</td>
<td>0.230</td>
</tr>
<tr>
<td>0.499</td>
<td>1.000</td>
<td>0.400</td>
<td>0.336</td>
<td>0.165</td>
<td>1.000</td>
<td>0.016</td>
<td>1.000</td>
<td>0.450</td>
<td>0.337</td>
<td>0.428</td>
<td>0.208</td>
<td>0.336</td>
<td>0.450</td>
<td>0.274</td>
<td>0.254</td>
<td>0.124</td>
<td>0.230</td>
</tr>
<tr>
<td>0.400</td>
<td>1.000</td>
<td>0.400</td>
<td>0.336</td>
<td>0.165</td>
<td>1.000</td>
<td>0.016</td>
<td>1.000</td>
<td>0.450</td>
<td>0.337</td>
<td>0.428</td>
<td>0.208</td>
<td>0.336</td>
<td>0.450</td>
<td>0.274</td>
<td>0.254</td>
<td>0.124</td>
<td>0.230</td>
</tr>
<tr>
<td>0.189</td>
<td>0.336</td>
<td>0.165</td>
<td>1.000</td>
<td>0.450</td>
<td>0.337</td>
<td>0.428</td>
<td>0.208</td>
<td>1.000</td>
<td>0.336</td>
<td>0.450</td>
<td>0.274</td>
<td>0.254</td>
<td>0.124</td>
<td>0.230</td>
<td>0.130</td>
<td>0.060</td>
<td>1.000</td>
</tr>
<tr>
<td>0.450</td>
<td>0.336</td>
<td>0.165</td>
<td>1.000</td>
<td>0.450</td>
<td>0.337</td>
<td>0.428</td>
<td>0.208</td>
<td>0.336</td>
<td>0.450</td>
<td>0.274</td>
<td>0.254</td>
<td>0.124</td>
<td>0.230</td>
<td>0.130</td>
<td>0.060</td>
<td>1.000</td>
<td>0.499</td>
</tr>
<tr>
<td>0.336</td>
<td>0.336</td>
<td>0.165</td>
<td>1.000</td>
<td>0.336</td>
<td>0.336</td>
<td>0.165</td>
<td>1.000</td>
<td>0.336</td>
<td>0.450</td>
<td>0.274</td>
<td>0.254</td>
<td>0.124</td>
<td>0.230</td>
<td>0.130</td>
<td>0.060</td>
<td>1.000</td>
<td>0.499</td>
</tr>
<tr>
<td>0.274</td>
<td>0.254</td>
<td>0.124</td>
<td>0.230</td>
<td>0.274</td>
<td>0.254</td>
<td>0.124</td>
<td>0.230</td>
<td>0.274</td>
<td>0.254</td>
<td>0.124</td>
<td>0.230</td>
<td>0.130</td>
<td>0.060</td>
<td>1.000</td>
<td>0.499</td>
<td>1.000</td>
<td>0.400</td>
</tr>
<tr>
<td>0.254</td>
<td>0.254</td>
<td>0.124</td>
<td>0.230</td>
<td>0.254</td>
<td>0.254</td>
<td>0.124</td>
<td>0.230</td>
<td>0.254</td>
<td>0.254</td>
<td>0.124</td>
<td>0.230</td>
<td>0.130</td>
<td>0.060</td>
<td>1.000</td>
<td>0.499</td>
<td>1.000</td>
<td>0.400</td>
</tr>
<tr>
<td>0.124</td>
<td>0.124</td>
<td>0.060</td>
<td>0.060</td>
<td>0.124</td>
<td>0.124</td>
<td>0.060</td>
<td>0.060</td>
<td>0.124</td>
<td>0.124</td>
<td>0.060</td>
<td>0.060</td>
<td>1.000</td>
<td>0.499</td>
<td>1.000</td>
<td>0.400</td>
<td>0.336</td>
<td>0.165</td>
</tr>
</tbody>
</table>

315
Correlation Matrix (items of the service quality scale) (Cont.)

<table>
<thead>
<tr>
<th></th>
<th>Res5</th>
<th>Res6</th>
<th>Res7</th>
<th>Res8</th>
<th>Emp1</th>
<th>Emp2</th>
<th>Emp3</th>
<th>Emp4</th>
<th>Emp5</th>
<th>Emp6</th>
<th>Emp7</th>
<th>Tan1</th>
<th>Tan2</th>
<th>Tan3</th>
<th>Tan4</th>
<th>Tan5</th>
<th>Tan6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Res1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res5</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res6</td>
<td>.284</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res7</td>
<td>.379</td>
<td>.268</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res8</td>
<td>.352</td>
<td>.155</td>
<td>.454</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emp1</td>
<td>.296</td>
<td>.161</td>
<td>.103</td>
<td>.136</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emp2</td>
<td>.193</td>
<td>.346</td>
<td>.120</td>
<td>.390</td>
<td>.100</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emp3</td>
<td>.479</td>
<td>.331</td>
<td>.240</td>
<td>.359</td>
<td>.465</td>
<td>.293</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emp4</td>
<td>.393</td>
<td>.315</td>
<td>.375</td>
<td>.302</td>
<td>.118</td>
<td>.340</td>
<td>.347</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emp5</td>
<td>.345</td>
<td>.374</td>
<td>.420</td>
<td>.330</td>
<td>.336</td>
<td>.314</td>
<td>.413</td>
<td>1.000</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emp6</td>
<td>.462</td>
<td>.248</td>
<td>.322</td>
<td>.332</td>
<td>.263</td>
<td>.251</td>
<td>.444</td>
<td>.365</td>
<td>.185</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emp7</td>
<td>.343</td>
<td>.269</td>
<td>.211</td>
<td>.287</td>
<td>.197</td>
<td>.197</td>
<td>.276</td>
<td>.426</td>
<td>.290</td>
<td>.301</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tan1</td>
<td>.347</td>
<td>.220</td>
<td>.295</td>
<td>.115</td>
<td>.137</td>
<td>.391</td>
<td>.107</td>
<td>.270</td>
<td>.261</td>
<td>.338</td>
<td>.115</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tan2</td>
<td>.123</td>
<td>.337</td>
<td>.428</td>
<td>.245</td>
<td>.395</td>
<td>.367</td>
<td>.118</td>
<td>.221</td>
<td>.330</td>
<td>.335</td>
<td>.127</td>
<td>.543</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tan3</td>
<td>.106</td>
<td>.188</td>
<td>.281</td>
<td>.325</td>
<td>.251</td>
<td>.347</td>
<td>.266</td>
<td>.195</td>
<td>.261</td>
<td>.190</td>
<td>.222</td>
<td>.471</td>
<td>.423</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tan4</td>
<td>.352</td>
<td>.314</td>
<td>.121</td>
<td>.185</td>
<td>.397</td>
<td>.130</td>
<td>.166</td>
<td>.293</td>
<td>.154</td>
<td>.140</td>
<td>.104</td>
<td>.490</td>
<td>.489</td>
<td>.396</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tan5</td>
<td>.244</td>
<td>.224</td>
<td>.329</td>
<td>.349</td>
<td>.130</td>
<td>.192</td>
<td>.122</td>
<td>.109</td>
<td>.348</td>
<td>.233</td>
<td>.263</td>
<td>.416</td>
<td>.465</td>
<td>.369</td>
<td>.439</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Tan6</td>
<td>.131</td>
<td>.170</td>
<td>.277</td>
<td>.385</td>
<td>.407</td>
<td>.362</td>
<td>.208</td>
<td>.105</td>
<td>.156</td>
<td>.343</td>
<td>.156</td>
<td>.382</td>
<td>.475</td>
<td>.390</td>
<td>.392</td>
<td>.398</td>
<td>1.000</td>
</tr>
</tbody>
</table>
## Appendix 5.2: Reliability of the New Service Quality Dimensions for This Study

<table>
<thead>
<tr>
<th>No.</th>
<th>Dimension</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach’s Alpha if Item Deleted</th>
<th>No.</th>
<th>Dimension</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach’s Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reliability</td>
<td>Alpha = 0.81</td>
<td></td>
<td></td>
<td>Responsiveness &amp; Empathy</td>
<td>Alpha = 0.79</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Responsiveness</td>
<td>.319</td>
<td>.819</td>
<td>24</td>
<td>Empathy</td>
<td>.487</td>
<td>.820</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>.344</td>
<td>.818</td>
<td>4</td>
<td></td>
<td>.365</td>
<td>.817</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>.332</td>
<td>.818</td>
<td>14</td>
<td></td>
<td>.390</td>
<td>.816</td>
</tr>
<tr>
<td>34</td>
<td></td>
<td>.458</td>
<td>.821</td>
<td>13</td>
<td></td>
<td>.400</td>
<td>.815</td>
</tr>
<tr>
<td>6</td>
<td>Tangibles</td>
<td>.487</td>
<td>.820</td>
<td>3</td>
<td>Assurance</td>
<td>.373</td>
<td>.816</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>.436</td>
<td>.814</td>
<td>9</td>
<td></td>
<td>.332</td>
<td>.818</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td></td>
<td>.448</td>
<td>.813</td>
</tr>
<tr>
<td></td>
<td>Alpha = 0.82</td>
<td></td>
<td></td>
<td></td>
<td>Alpha = 0.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Assurance</td>
<td>.426</td>
<td>.814</td>
<td>17</td>
<td></td>
<td>.388</td>
<td>.816</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>.430</td>
<td>.815</td>
<td>7</td>
<td></td>
<td>.407</td>
<td>.819</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>.319</td>
<td>.819</td>
<td>2</td>
<td></td>
<td>.316</td>
<td>.815</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>.476</td>
<td>.811</td>
<td>27</td>
<td></td>
<td>.332</td>
<td>.818</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>.481</td>
<td>.812</td>
<td>31</td>
<td></td>
<td>.403</td>
<td>.815</td>
</tr>
</tbody>
</table>

Total Scale Reliability: Cronbach’s Alpha = 0.823
### Appendix 7.1: A Full List of the Items That Was Used in This Study

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reliability</strong></td>
<td>Rel1</td>
</tr>
<tr>
<td></td>
<td>Rel2</td>
</tr>
<tr>
<td></td>
<td>Rel3</td>
</tr>
<tr>
<td></td>
<td>Rel4</td>
</tr>
<tr>
<td></td>
<td>Rel5</td>
</tr>
<tr>
<td></td>
<td>Rel6</td>
</tr>
<tr>
<td></td>
<td>Rel7</td>
</tr>
<tr>
<td></td>
<td>Rel8</td>
</tr>
<tr>
<td><strong>Assurance</strong></td>
<td>Ass1</td>
</tr>
<tr>
<td></td>
<td>Ass2</td>
</tr>
<tr>
<td></td>
<td>Ass3</td>
</tr>
<tr>
<td></td>
<td>Ass4</td>
</tr>
<tr>
<td></td>
<td>Ass5</td>
</tr>
<tr>
<td></td>
<td>Ass6</td>
</tr>
<tr>
<td><strong>Responsiveness</strong></td>
<td>Res1</td>
</tr>
<tr>
<td></td>
<td>Res2</td>
</tr>
<tr>
<td></td>
<td>Res3</td>
</tr>
<tr>
<td></td>
<td>Res4</td>
</tr>
<tr>
<td></td>
<td>Res5</td>
</tr>
<tr>
<td></td>
<td>Res6</td>
</tr>
<tr>
<td></td>
<td>Res7</td>
</tr>
<tr>
<td></td>
<td>Res8</td>
</tr>
<tr>
<td><strong>Empathy</strong></td>
<td>Emp1</td>
</tr>
<tr>
<td></td>
<td>Emp2</td>
</tr>
<tr>
<td></td>
<td>Emp3</td>
</tr>
<tr>
<td></td>
<td>Emp4</td>
</tr>
<tr>
<td></td>
<td>Emp5</td>
</tr>
<tr>
<td></td>
<td>Emp6</td>
</tr>
<tr>
<td></td>
<td>Emp7</td>
</tr>
<tr>
<td><strong>Tangibles</strong></td>
<td>Tan1</td>
</tr>
<tr>
<td></td>
<td>Tan2</td>
</tr>
<tr>
<td></td>
<td>Tan3</td>
</tr>
<tr>
<td></td>
<td>Tan4</td>
</tr>
<tr>
<td></td>
<td>Tan5</td>
</tr>
<tr>
<td></td>
<td>Tan6</td>
</tr>
</tbody>
</table>

**Note:**
- Items in green are part of the original SERVQUAL model.
- Items in yellow were added to the modified SERVQUAL as a result of the literature research.
## Appendix 7.2: A Visual Representation of the Source and Factor Analysis Loading of the Modified SERVQUAL Items

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reliability</strong></td>
<td></td>
</tr>
<tr>
<td>Rel1</td>
<td>My bank's employees provide services as promised.</td>
</tr>
<tr>
<td>Rel2</td>
<td>My bank shows me a sincere interest in solving my problems.</td>
</tr>
<tr>
<td>Rel3</td>
<td>The advertised promises of my bank are consistent with its performance.</td>
</tr>
<tr>
<td>Rel4</td>
<td>My bank offers a wide range of financial products and services.</td>
</tr>
<tr>
<td>Rel5</td>
<td>My bank insists on error-free records.</td>
</tr>
<tr>
<td>Rel6</td>
<td>The employees of my bank have complete knowledge of the banking services and products provided.</td>
</tr>
<tr>
<td>Rel7</td>
<td>The employees of my bank allocate sufficient time to explain banking services to customers.</td>
</tr>
<tr>
<td>Rel8</td>
<td>My bank provides its customers with accurate information.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assurance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ass1</td>
<td>The employees of my bank instill trust and confidence in me.</td>
</tr>
<tr>
<td>Ass2</td>
<td>My bank's employees make customers feel safe in their transactions.</td>
</tr>
<tr>
<td>Ass3</td>
<td>In my bank, employees are consistently courteous with me.</td>
</tr>
<tr>
<td>Ass4</td>
<td>Employees in my bank have the knowledge to answer my questions.</td>
</tr>
<tr>
<td>Ass5</td>
<td>The employees of my bank provide services with high competence.</td>
</tr>
<tr>
<td>Ass6</td>
<td>There is security staff in my bank all the time.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responsiveness</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Res1</td>
<td>Customers at my bank are told exactly when services will be provided.</td>
</tr>
<tr>
<td>Res2</td>
<td>Employees in my bank give prompt service.</td>
</tr>
<tr>
<td>Res3</td>
<td>My bank's employees are always willing to help me.</td>
</tr>
<tr>
<td>Res4</td>
<td>The employees of my bank are ready to respond to their customers' requests.</td>
</tr>
<tr>
<td>Res5</td>
<td>My bank allocates serving windows to serve female customers.</td>
</tr>
<tr>
<td>Res6</td>
<td>My bank expands the hours of business in case of customer need.</td>
</tr>
<tr>
<td>Res7</td>
<td>My bank increases the number of employees or serving windows when crowded.</td>
</tr>
<tr>
<td>Res8</td>
<td>The employees of my bank answer telephone calls promptly.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Empathy</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emp1</td>
<td>My bank gives me individual attention.</td>
</tr>
<tr>
<td>Emp2</td>
<td>My bank has convenient operating hours.</td>
</tr>
<tr>
<td>Emp3</td>
<td>The employees of my bank have the interests of their customers at heart.</td>
</tr>
<tr>
<td>Emp4</td>
<td>The employees of my bank have a good relationship with their customers.</td>
</tr>
<tr>
<td>Emp5</td>
<td>The employees of my bank understand customer needs.</td>
</tr>
<tr>
<td>Emp6</td>
<td>The employees of my bank are keen to provide additional services to me.</td>
</tr>
<tr>
<td>Emp7</td>
<td>The employees of my bank always listen carefully to my complaints.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tangibles</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tan1</td>
<td>My bank has state-of-the-art technology such as computers and ATMs.</td>
</tr>
<tr>
<td>Tan2</td>
<td>Physical facilities of my bank are visually appealing.</td>
</tr>
<tr>
<td>Tan3</td>
<td>My bank's employees look professional and well dressed.</td>
</tr>
<tr>
<td>Tan4</td>
<td>The pamphlets and forms produced by my bank are clear and easy to understand.</td>
</tr>
<tr>
<td>Tan5</td>
<td>My bank has enough parking spaces and an accessible location.</td>
</tr>
<tr>
<td>Tan6</td>
<td>My bank looks attractive from the outside.</td>
</tr>
</tbody>
</table>

**Note:**
Items in green are part of the original SERVQUAL model.
Items in yellow were added to the modified SERVQUAL as a result of the literature research.
Pink endings indicate that this item loaded with one of the four dimensions produced by factor analysis.
Red endings indicate items that did not load with any of the four dimensions produced by factor analysis.