The Impact of Information Technology on Customer Service in the Jordanian Banking Sector

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A Thesis Submitted in Partial Fulfilment of the Requirements of the University of Salford for the Degree of Doctor of Philosophy, 2005

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List of Abbreviations

AB	Arab Bank PLc
ATM	Automated Teller Machine
ASE	Amman Stock Exchange
BOJ	Bank of Jordan
CBJ	Central Bank of Jordan
EFTPoS	Electronic Funds Transfer Point of Sale
CRM	Customer Relationship Management
EU	European Union
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
GDP	Gross Domestic Product
HBTF	Housing Bank for Trade and Finance
HKJ	Hashemite Kingdom of Jordan
HSBC	Hong Kong & Shanghai Banking Corporation
IPL	Investment Promotion Low
IT	Information Technology
IS	Information System
ISO	International Organisation for Standardisation
JD	Jordanian Dinar
JKB	Jordan Kuwait bank
JNB	Jordan National Bank
MIS	Management Information System
MkIS	Marketing Information System
PC	Personal Computer
PoS	Point of Sale
QIZ	Qualifying Industrial Zones
QSM	Qualitative Satisfaction Model
SPSS	Statistical Package for the Social Sciences
TAM	Technology Acceptance Model
TQM	Total Quality Management
UAE	United Arab Emirates
UK	United Kingdom
USA	United States of America
WTO	World Trade Organisation
WWW	World Wide Web

Notes

- In this research, Italic font style is used to denote terms of interest and / or emphasis.

- The single quote mark '…' is used for indirect quotations, the double quote mark "…" for direct quotations and two brackets to provide further details or alternative terms.

- Wherever the term 'research' is mentioned, it exclusively refers to this work and the term researcher refers to the author of this work, unless otherwise stated.

Acknowledgment

First and foremost, I would like to express my sincere gratitude and appreciation to Dr Gary Warnaby who supervised this research, for his continuous encouragement and patience in guiding me throughout my journey. This research would not have been completed without his valuable support. My sincere appreciation also goes to my second supervisor Professor Roger Mason, for his valued comments and all he has done for me during the research process.

I also wish to record my appreciation for the help and the constructive co-operation received from the academic staff and employees in the School of Management at Salford University, and to the Al Hussein Bin Talal University for granting a scholarship that enabled me to undertake the research. My appreciation is also extended to all those who contributed to this work through their time and effort, in particular, managers and staff in the Jordanian banks, and my colleagues in the School of Management. Special thanks are due to the members of the Jordanian universities for the extensive and very helpful comments on the survey instrument.

It is difficult for me to express adequately my gratitude to my parents who never ceased praying for me and wishing me every success. From the depths of my heart, I acknowledge the love given to me by my wife, and her patience in looking after my children Almjd, Ahmad, Alshahd and Tamador during my period of study in the UK.

My heartfelt thanks also go to my brothers and sisters who showed concern for my studies and health, and to my friends in Jordan and England, particularly my old friend Vernon Spicer. I thank them all and pray that God will keep them safe.

Thank You All

Abstract

During the last two decades the bank marketing literature has been characterised by a concern for service quality and information technology (IT) within the industry. IT and customer service are relatively new 'strategic weapons' for banks, both being concerned with the deployment of information. The two concepts relate to the building and maintenance of long-term profitable relationships between the customer and the bank. With increasing competition it has become necessary for banks to keep ahead of rivals by differentiating themselves and IT is seen as an opportunity to achieve a sustainable 'competitive advantage', especially in terms of improving service quality. In the light of this, the aim of this study is to investigate the influence of IT on the quality of service in the Jordanian banking sector.

To accomplish the study objectives a questionnaire survey was conducted with two independent samples (bank customers and branch managers). The empirical work involved the development of questionnaires which were used for data collection and the study sample consisted of 550 bank customers and 67 branch managers. Initially, the data in the questionnaires were analysed to provide a general description of the respondents' characteristics and their perceptions of individual variables of service quality, IT-based service, customer satisfaction / loyalty and bank selection criteria. The research hypotheses were tested using Kruskal-Wallis, Mann-Whitney, Spearman Correlation Coefficient and *t-tests*.

The main results of the study show a significant and positive relationship between IT and customer service. The more IT is used, the better the perception of service quality be. The results also give another strong indication that IT is playing a crucial role, with regard to bank selection criteria. Additionally, the findings revealed that the least important factor in influencing customers' choice of their banks is higher interest on savings and deposits, which is strongly related to religion and cultural background. On the other hand, it has been found that the most important factors in motivating the adoption of electronic channels by customers are time-saving, followed by the convenience of these channels.

The study suggests several recommendations in order to increase the effectiveness of IT in Jordanian banks and improve their strategic and 'competitive positions'. Finally the thesis ends by setting out an agenda for further work.

CHAPTER 1

INTRODUCTION

CHAPTER 1 : INTRODUCTION

1.1 Introduction

The main purpose of this introductory chapter is to present an overview of the design and implementation of this study. This chapter has been divided into four sections. Section 1.2 discusses the rationale and context of the study. Section 1.3 presents the research objectives. Finally, the organisation of the thesis is outlined in section 1.4.

1.2 Rationale and Context of the Study

Over the past 20 years, the banking industry has witnessed an enormous wave of development, which was the direct result of various factors, one of the most important being information technology (IT) development.

Most banks consider IT as a route for service quality improvement, while others perceive it as a cost-effective expansion strategy (Kim and Davidson, 2004). Whatever the underlying strategy, there is a consensus regarding the importance of understanding the patterns of IT adopted by bank customers (Pikkarainen *et al.*, 2004). It is very important here to note that there are many studies emphasising that financial institutions such as banks are distinguished from other businesses in the amounts of IT they use. Porter and Millar (1985) for instance, have found that banking is one of the most information-intensive sectors. Banks are tending to use IT to improve the quality of their services, increase efficiency and customer satisfaction, and offer wider choices with lower costs to the customer. In other words, banks are using IT for 'competitive advantages'. Lang and Colgate (2003) claim that the relationships between service providers and their customers have been noted to be of importance in the banking industry. Zineldin (2002) has pointed out that the banking industry provides a good and reliable example of an industry that must respond to changes in the environment in order to survive.

However, many of the current studies about the banking market and the use of IT in the banking industry have been conducted in developed countries (Devlin, 1995; Morisi,

1996; Birch and Young, 1997; Colgate, 1998; Dannenberg and Kellner, 1998; Lloyd-Walker and Cheung, 1998; Joseph *et al.*, 1999; Mols *et al.*, 1999; Mols, 1998, 2000, 2001; Zineldin, 2002; Lang and Colgate, 2003; Zhu *et al.*, 2004; Pikkarainen *et al.*, 2004; Kolodinsky *et al.*, 2004). Although there have been some studies conducted in developing countries, such as India (Angur *et al.*, 1999), Turkey (Polatoglu and Ekin, 2001), Kuwait (Edris and Almahmeed, 1997), and the United Arab Emirates (Jamal and Naser, 2002), there is a clear need to undertake more such research in a Third World context. Angur *et al.* (1999) have emphasised that there is a paucity of studies on developing economies in the context of service quality, and specifically IT in the banking sector. Hence, the current study attempts to contribute by focusing on the banking sector of a developing economy, that being Jordan.

Jordan is viewed as one of the major players in the economic and political stability of the Middle East region (Naser, 1998a). In the same spirit, Jordan has adopted a liberal economic policy by attracting investors from different countries (Naser *et al.*, 1999). However, for the above reasons and due to the limitation of the researcher's time and high costs involved in studying more than one country, Jordan has been chosen for this study. Despite Jordan having a small economic base it has a high level of competition in the banking industry. As Jordan has joined the World Trade Organisation (WTO) and signed free trade agreements with the United States of America (USA) and the European Union (EU) (See Chapter 4), there is a need to develop, not only the banking sector, but also all economic sectors in the country to enable Jordan to deal with these developments and the new global environment. In today's fiercely competitive banking environment, Jordanian bankers consider the delivery of 'excellent' service quality to customers a key to success and survival. The banking sector in Jordan is a major part of the financial system, which is considered the fastest growing sector in Jordan (Ministry of Planning and International Co-operation, 2003).

Moreover, there are further good reasons for basing this study in the Jordanian banking sector. These include a healthy open economy with deregulation, and the increase in banking education level among ordinary people (Shaheen, 1997). Banks in Jordan are also considered as the main source of credit in the Jordanian market due to the absence of competition from other institutions or lenders (Akel, 2000). The findings from this

study can provide bankers with valuable insights into how to enhance service quality to induce greater customer satisfaction and positive outcomes.

As noted above, this research is concerned with studying the implementation of IT within the Jordanian banking sector and its impact on customer service. This study concentrates on nine banks which include six Jordanian conventional banks (Arab Bank, Jordan National Bank, Bank of Jordan, Cairo Amman Bank, Housing Bank for Trade and Finance, Jordan Kuwait Bank), one Islamic bank (Jordanian Islamic Bank for Finance and Investment), and two foreign banks, divided into one Arab bank (Egyptian Arab Land Bank), and a Western bank (Standard Chartered Grindlays Bank). These banks represent the major part of the Jordanian banking sector in terms of the number of branches in Jordan (359 branches - 76% of total number of branches). Hence, the importance of this research also stems from this sample as it not only represents the major part of the banking system in Jordan, but also different kinds of banks.

Practitioners and academics have demonstrated the growing importance of new service delivery channels, to both banks and customers. In the context of the banking industry, Marr and Prendergast (1991) found the main reason for technology adoption by customers to be convenience of time, speed, and convenient location, while non-use was explained by a preference for human contact, close location of a branch with ATMs, and the enjoyment of a personal visit to the bank. Nevertheless, from reviewing the literature the key variables selected to describe IT-based service in banks include ease of use, conservation of time, convenience, accuracy and privacy (Zhu *et al.*, 2002).

In addition, the banking industry was chosen because service quality in this sector is continuously gaining in importance (Akinci *et al.*, 2004). Furthermore, financial services have a number of unique characteristics that distinguish them from other services and physical goods (Parasuraman *et al.*, 1985; Zeithaml and Bitner, 2000; Bahia and Nantel, 2000; Jabnoun and Al-Tamimi, 2003; Zhou, 2004). Zhou (2004:538) has stated that banks have come to accept the view that it is "the quality of service that may better distinguish them over the long run". This uniqueness of services can be derived from the characteristics of services in marketing in general (e.g. intangibility, heterogeneity, inseparability and perishability). Stafford (1996:6) argues that "because financial services, particularly banks that work in the marketplace with generally

undifferentiated products, service quality becomes a primary competitive weapon". Cowling and Newman (1995) mention that quality is now as important as the hygiene factor for service organisations. They add that hygiene is essential for success, but cannot of itself guarantee success. Parallel to this, Angur *et al.* (1999) have stated that service quality has become a key construct in the banking industry.

Parasuraman *et al.* (1988:15) developed a definition of service quality as being "the overall evaluation of a specific service firm, which results from comparing that firm's performance with the customer's general expectations of how firms in that industry should perform". Using this definition, they developed their multidimensional service quality assessment tool known as SERVQUAL. The identification and measurement of their five dimensions of service quality (i.e. empathy, responsiveness, assurance, reliability and tangibles) provide managers with a better understanding of what constitutes quality service from the customer's point of view. In this context, it has been found that most previous studies measuring service quality in the banking sector have used SERVQUAL (Zhu *et al.*, 2002; Cui *et al.*, 2003; Jabnoun and Al-Tamimi, 2003). The SERVQUAL scale has been used in this study to measure service quality dimensions, and this scale is discussed in more detail in Chapter 4.

In spite of the large number of studies, which have concentrated on service quality and customer satisfaction issues, research on the relationships between IT and service quality, customer satisfaction and customer loyalty, specifically in the banking sector has remained limited (Bloemer *et al.*, 1998). Cronin and Taylor (1992) have mentioned that the important relationships between service quality, customer satisfaction, and purchasing behaviour remain, to date, largely unexplored. In the same vein, Oliver (1997) has pointed out that few studies looked at customer loyalty towards the service. This study, however, has taken the relationships between service quality, customer satisfaction, and customer loyalty in the banking sector into account, in order to produce a full picture of these relationships and to help banks to create suitable ways to understand their customers' expectations, satisfy them, and gain their loyalty, within the specific context of a developing country such as Jordan. Nevertheless, in order to measure customers' loyalty in this study, the measurement scale has been developed by

reviewing the literature, and items on this scale are taken from previous studies (i.e. Zeithaml *et al.*, 1996; Bloemer *et al.*, 1999; Pedersen and Nysveen, 2001; Dean, 2002).

To sum up, the prime rationale behind this study is to fill some empirical gaps in the marketing literature in general and the banking literature relating to service quality in particular. At the same time, the outcome will to be of practical importance for those who work in the Jordanian banking sector.

1.3 Research Aim and Objectives

According to above discussion, this research aims to:

- **Investigate and identify the influence of IT on the quality of service in the Jordanian banking sector.**

Based on the above determination of the broad aim, the research objectives can be summarised as follows:

- **To investigate the role of IT used in banking operations in improving service quality,**
- **To investigate the perceptions of branch managers and customers, in the context of the banking system in Jordan,**
- **To identify the criteria on which customers determine their bank selection decision,**
- **To investigate the nature of the factors inhibiting and motivating the adoption by banks of electronic distribution channels, and**
- **To develop a strategy for the management of IT in order to contribute effectively to the achievement of service quality.**

Accordingly, this study tries to answer the following question:

How does IT influence service quality and what are the subsequent implications for customer loyalty?

1.4 Research Structure

This thesis consists of an introductory chapter and seven further chapters. The thesis is structured as follows:

Chapter 2: Information Technology and Banking

This chapter is concerned with reviewing the concepts of IT in the banking sector. It also deals with different information systems (IS) types and the impact of IS on organisations, before providing a comprehensive discussion about IT more specifically. The researcher has outlined various definitions relating to IT, and also explained why businesses need IT, and how IT plays a key role in helping marketers succeed in the market, and particularly in the banking system. This chapter demonstrates how IT can be used as a 'competitive weapon'. Simultaneously, it shows how IT has changed the type of service delivery. It can be seen from this chapter that there are three channels that banks can use to deliver their services to their customers; firstly, the traditional channel (branch), secondly, electronic channels (e.g. ATMs, Internet banking, and Phone banking), and thirdly, the multiple channel strategy that includes both the branch channel and electronic channels. The final section deals with technology acceptance and IT-based services.

Chapter 3: Customer Service

Chapter 3 concerns customer service, which includes the concept of service quality, customer satisfaction and customer loyalty. The researcher has started this chapter by explaining what is meant by the terms 'quality' and 'service' and the features of service (intangibility, inseparability, etc.). The 'SERVQUAL' tool that measures service quality through its five dimensions (tangibles, reliability, responsiveness, assurance and empathy) is then discussed. Customer satisfaction is the second part of this chapter and is discussed in terms of the definition of customer satisfaction and the relationship between service quality and satisfaction. The final section deals with customer loyalty and its types.

Chapter 4: The Hashemite Kingdom of Jordan

Chapter 4 aims to provide general background information about the environment in which the empirical work was conducted; that is the Jordanian banking sector. This chapter starts with a profile of Jordan, in terms of historical, political, geographical and demographic features. This is followed by a description of the Jordanian banking system in general, and the nine banks that have been investigated.

Chapter 5: Research Methodology

Chapter 5 describes and provides a justification for the empirical work of the study. This includes a brief review of research philosophy and a justification of the methodology applied in this research. The procedures related to the questionnaire such as the issues of translating, piloting and details of the study sample are presented in more detail. Finally, the statistical methods used to analyse the data and test the hypotheses, are discussed.

Chapter 6: Empirical Data Analysis and Hypotheses Testing

Chapter 6 presents a general descriptive analysis of the data collected. It contains two main sections. The first section provides a descriptive analysis of the characteristics of respondents (bank customers and branch managers), while the second deals with testing the hypotheses. Nine main hypotheses have been tested by using several statistical tests such as Mann Whitney, Kruskal Wallis and Spearman Correlation.

Chapter 7: Analysis of Results

The main aim of this chapter is to provide a comprehensive discussion of the results concerning four aspects namely; bank selection criteria, perception of service quality dimensions; IT-based services and customer satisfaction / loyalty.

Chapter 8: Summary and Conclusions

This chapter summarises the research findings and conclusions and discusses possible implications. It points out the main contribution of this study, which relates particularly

to bank selection criteria, and its limitations. Some suggestions for future work are considered.

CHAPTER 2

INFORMATION TECHNOLOGY AND BANKING

CHAPTER 2 : INFORMATION TECHNOLOGY AND BANKING

2.1 Introduction

This chapter sheds light on the extent of the use of IT in banking services. In such a 'competitive sector' where quality of service can be a differentiator in the marketplace, the balance between personnel interaction and technologically delivered services must be right if customers are to be retained over time (Curry and Penman, 2004). This chapter has been divided into seven sections.

Section 2.2 presents the general background to IS. Definitions of IT are discussed in section 2.3. The importance of IT and the relationships between IT and business are presented in section 2.4. This section is followed by a discussion on how businesses use IT as a means of 'competitive advantage' (section 2.5). Section 2.6 deals with the different types of distribution channels in the banking industry and technology acceptance and IT-based services. Finally, section 2.7 provides a summary of this chapter.

2.2 Information Systems (IS)

Individuals are involved in the process of decision-making every day. Each time a person is faced with a problem or is dissatisfied with the current status quo, she / he has to make a decision, to solve or to improve. Either way, it seems logical to say that the more information one has, the better will be one's decision. Though this is easy to say, it is quite difficult in reality. Realising the need for information is not enough and additional considerations have to be addressed such as why exactly is the information needed?, what information is required?, when is it needed?, and how can it be acquired?

Before defining an information system, the distinction between data and information must be made. Data can be defined as raw facts, consisting of factual elements or comments that describe something, while information represents data that has been processed, organised, and integrated to provide more insights (Post and Anderson,

2000). Information has also been defined as the reduction of uncertainty (Arrow, 1984, cited in Liebenau and Backhouse, 1990). In other words, data are symbols, means, marks, and individual elements that are rarely used for decision-making; whereas information is data with meanings that are utilised in decision-making (Schutheis and Sumner, 1998). The data source can be anything: a picture, a speech, a document, etc. However, to be useful, data must be organised, managed, and stored, and the resulting information must be meaningful and useful for managers and decision-makers. Managers need information, which in the specific context of marketing should include customer details such as transaction history, purchases, lifestyle, and demographic information (Britton and Foster, 1994).

An IS contains information about significant people, places, and things within the organisation or in the environment surrounding it. The quality of information rests on three pillars: accuracy, timeliness, and relevance (Jimba, 1999). A system can be defined as "a group of elements that are integrated with the common purpose of achieving an objective" (Bocij *et al.*, 2003:37). An organisation such as a firm or a functional area fits this definition. The organisation consists of resources (personnel, materials, machines, money and information) that work together towards achieving particular objectives that are specified by the management. McLeod (1998) pointed out that not all systems have the same combination of elements, but the usual component parts are input, transformation, output, control mechanism and feedback.

Four activities in an IS produce the information that organisations need for making decisions, controlling operations, analysing problems and creating new products and services (Laudon and Laudon, 2002). These activities are:

- Inputs: capturing or collecting raw data from within the organisation or from its external environment;
- Processing: converting this raw input into a more meaningful form (outputs);
- Outputs: transferring the processed information to the people or activities where it will be used. For example, finished products and human services; and

- Feedback: Information systems also require feedback. This is output that is returned to appropriate members of the organisation to help them evaluate or correct the input stage.

Accordingly, ISs have been defined in various ways. For instance, as "a group of interrelated components that work collectively to carry out input, processing, output, storage and control actions in order to convert data into information products that can be used to support forecasting, planning, control, co-ordination, decision making and operational activities in an organisation" (Bocij *et al.*, 2003:43).

Laudon and Laudon (2002:7) have defined an IS as "a set of interrelated components that collect (or retrieve), process, store, and distribute information to support decision-making, co-ordination, and control in an organisation".

Other definitions of ISs include:

"Any organised combination of people, hardware, software, communication network, that transforms, and disseminates information in an organisation" (O'Brien, 2001:7).

"An information system is an organised set of components for collecting, transmitting, storing, and processing data in order to deliver information to action" (Zwass, 1998:5).

"An information system is a collection of components that collect, store, analyse, and disseminate information for a specific purpose" (Turban *et al.*, 1996:7).

In summary, an IS can be defined as combinations of elements that work together (processing data) in order to achieve (information) a specific aim, and to do that, these elements must interact with each other.

ISs can be split into many types, the characteristics of which are detailed below.

Open Systems: are those that interact with the external environment, outside the system boundary (the scope of the system itself). They also respond to changes in the environment and they modify its operation accordingly. Examples of open systems include human beings, plants and business organisations (Bocij *et al.*, 2003). Open

systems operate in an external environment and exchange information and material within that environment, the external environment consists of the activities external to the system boundary with which the system can interact. For example, a marketing system, which is an open system, operates in an environment of competition. If a competitor introduces new technology by providing customers with on-line order entry terminals, the marketing function must adapt to the change in the environment, otherwise it remains at a 'competitive disadvantage' (Schutheis and Sumner, 1998).

Closed Systems: are self-contained and neither influence, nor are influenced by the external environment (Roland and Bee, 1999).

Formal Systems: rest on accepted and fixed definitions of data and procedures for collecting, storing, processing, disseminating and using these data. In other words, a formal system operates with predefined rules that are relatively fixed and not easily changed. Formal systems can be either computer-based or manual. Manual systems use paper and pencil technology, whereas computer-based information systems rely on computer hardware and software technology to process and disseminate information (Laudon and Laudon, 2002).

Informal Systems: informal systems rely on unstated rules of behaviour. Social behaviour is sustained notwithstanding rules. Usually, an informal system stems from the terms of norms, which are created by social interaction. There is no formal agreement on what is information, or on how it will be stored and processed, but systems are essential for the life of an organisation (Laudon and Laudon, 2002). Liebenau and Backhouse (1990:105) have argued that the "real information system is the system built on norms and which interacts through interpersonal communication". The informal system is dynamic because people can adjust to meet changing circumstances. People using an informal system have the capacity and flexibility to recognise new conditions, and the structures in the informal system are normative and therefore adaptable. Meanings and intentions are used within the informal system in a dynamic way and must be interpeted in order to create formality, while the rules in the formal system must be followed and are only changed when the management wants to respond to the environment (Liebenau and Backhouse, 1990).

Managers rely on a combination of information sources in both formal and informal networks, but they have to take into consideration that formal systems are limited, and therefore they must have the capability of responding to the changes that occur in the external environment in order to keep the value of information. Systems now tend not to be designed to execute a certain function but to offer a capability to be used by business managers. E-mail is an example of such a capability. The format of the communication is left to the person, while the capability to pass messages over distance remains the domain of the machine.

2.3 Definitions of IT

In today's information age, managers are looking for ways to use IT to support their strategies. IT primarily facilitates a firm's ability to foresee and respond more quickly to the changing marketplace (Porter, 1985). The dynamic nature of the environment change creates many opportunities and threats. Hence, most companies attempt to know and scan the environment to reduce uncertainty and to facilitate effective decisions (Dallaire, 1992; Baines, 1998).

IT is one of the most important tools available to managers to help them to cope with change. More importantly today, IT is the glue that holds the organisation together and helps management to control and create its business (O'Brien, 2001). As mentioned before, IT has influenced what is known as information systems. Hence, it is worth distigushing between the two terms, i.e. information system and information technology.

IT has been defined "as the various technologies that are used for the creation, acquisition, storage, dissemination, retrieval, manipulation and transmission of information" (Jimba, 1999:80). This definition is similar to that provided by the UK Department of Industry, which defines IT as "the acquisition, processing, storage and dissemination of vocal, pictorial, textual and numeric information by a microelectronics-based combination of computing and telecommunication" (Fletcher, 1999: 238). Post and Anderson (2000) confirm that the term IT represents the various types of hardware and software used in an information system, including computers and networking equipment.

This definition echoes that offered by Turban *et al.* (1996:9), who state that "IT, in its narrow definition, refers to the technological side of an information system. It includes hardware, databases, software networks, and other devices. As such, it can be viewed as a subsystem of an information system. Sometimes, the term IT is also used interchangeably with IS, or it may even be used as a broader concept that describes a collection of several information systems, users, and management for an entire organisation". It should be noted here, that some researchers such as Bocij *et al.* (2003) disagree with Turban *et al.* (1996) that the term IT can be used interchangeably with IS. Bocij *et al.* argue that the scope of the terms used is different: "the stress in IT is on the technology while IS not only refers to technology, but also to how it is applied and managed to contribute to the business" (Bocij *et al.*, 2003:44).

In general, IT is a term used to describe *technologies* that enable the organisation to record, store, retrieve, process and receive / provide information. That includes modern technologies such as computers, facsimile, transmission, telecommunication and personnel and resources dedicated to supporting these capabilities.

2.4 Businesses and IT

Engaging and exploiting the opportunities offered by IT is one of the most important topics for almost any modern organisation. It widely accepted that the importance of IT within a business environment has increased significantly over the past few years (Joseph *et al.*, 1999; Ryssel *et al.*, 2004; Kim and Davidson, 2004). As noted above, IT is reshaping the basics of business. Customer services, operations, product and marketing strategies, and distribution channels of services and products are heavily, or somtimes even entirely, dependent on IT. The computers that support these functions can be found on the desk, on the shop floor, in the store, even in briefcases. It can be seen that IT has become an everyday part of businesses (O'Brien, 2001).

IT is the 'lifeblood' of any business or organisation. With technology, companies can give customers access to information about a wide range of products and services. New developments in IT such as the Internet, telecommunication, etc., have created unprecedented opportunities. IT, for example, enables firms to stay close to the

customer. Mulligan and Gordon (2002) highlight the benefits of IT in improving customer service levels by providing more new forms of service delivery; while Leverick *et al.* (1997) point out that IT allows consumers to participate in product design and manufacturers to respond to customers' needs in a quick manner. There is no doubt that IT plays a key role in helping marketers keep their positions in the market. Porter and Millar (1985) have observed that the information revolution is affecting the nature of competition in three vital ways:

- It changes industry structure and alters the rules of competition. The structure of an industry is embodied in five 'competitive forces' that are, the power of buyers, the power of suppliers, the threat of new entrants, and the threat of the substitution of products or services, and rivalry among existing competitors. IT can change an industry's structure by increasing the power of buyers, raising barriers to entry, and influencing the threat of substitution.

- It creates 'competitive advantage' by giving companies new ways to outperform their rivals by lowering costs (IT can alter a company's cost in any part of the value chain), enhancing differentiation (IT makes it possible to customise products), and changing 'competitive scope' (IT can alter the relationship between 'competitive scope' and 'competitive advantage', the technology increases a company's ability to co-ordinate its activities regionally, nationally, and globally). In this context, Ryssel *et al.* (2004) have pointed out that companies are part of a marketplace where different types of organisations come together and exchange information, services and products. Therefore in using IT, a company can do business and interact with other organisations in spite of being geographically dispersed.

- It spawns whole new businesses, often from within a company's existing operations, by making new businesses technologically feasible, creating derived demand for new products and creating new businesses within old ones.

There is a true value of IT, in that it offers an opportunity to make a life-long customer. On the other hand, rejecting or not using IT effectively may leave companies behind

their competitors (Ryssel *et al.*, 2004). Thus, it is essential today for companies to know as much as they can about customers and to treat them with maximum care and attention. In this context, Laudon and Laudon (2002) have stated that instead of treating customers as exploitable sources of income, businesses are now viewing them as long-term assets to be nurtured through customer relationship management (CRM). CRM focuses on managing all of the ways that a company deals with its existing and potential new customers. In other words, CRM can be facilitated by the data acquired and captured on the corporate database. Products and services can be customised to suit the needs of customer or groups of customers, thus breeding customer loyalty (Singh, 2004). CRM is both a business and technology discipline that uses information systems to co-ordinate all of the business processes surrounding the company's interactions with its customers in sales, service, and marketing. Laudon and Laudon (2002) state that in the past, a company's processes for marketing were highly compartmentalised and did not share much essential customer information. Some information on a specific customer might be stored and organised in terms of that person's account with the company. Other pieces of information about the same customer might be organised by products that were purchased. There was no way to consolidate all of this information to provide a unified view of a customer across the company. CRM tools try to solve this problem by integrating the company's customer-related processes and consolidating customer information from multiple communication channels such as telephone, e-mail and the Web, hence enabling the company to put one coherent face to the customer.

Indeed, IT has many benefits not only for companies, but also for customers. Customers usually look for more convenient ways of dealing with their companies, while companies look for innovative and effective methods to reach their customers. In resorting to IT, both may be able to make their dreams come true; but, at the same time, it should be borne in mind that IT is not a luxury in homes, offices, or otherwise, rather a means to attain goals.

2.4.1 IT in the Banking Sector

Lloyd-Walker and Cheung (1998) pointed out that in the banking industry, IT can assist the delivery of superior quality customer services by ensuring a fast, accurate and reliable service. However, there are many studies emphasising that financial institutions such as banks are distinguished from other businesses in dealing with the quantity of IT (Porter and Millar,1985; Johnston and Carrico, 1988; Applegate *et al.*, 1999; Kim and Davidson, 2004). These institutions must give more attention to IT in order to deal efficiently and effectively with enormous quantities of information. As already mentioned, banking and financial services are among the industries where IT has had the most significant impact. Kim and Davidson (2004) have stated that the banking industry environment has become IT-intensive. Porter and Millar (1985) emphasised that the banking industry has a high IT content in both product and process as do newspapers and airlines, compared with other industries such as 'oil refining and cement'. This is shown in Figure 2:1 below.

Figure 2:1: Information intensity matrix

Information intensity of the value chain	Information content of the product	
	Low	High
high	Oil Refining	Banking Newspapres Airlines
Low	Cement	

Source: Porter and Millar (1985:15)

As seen in Figure 2:1, the banking sector has a high content of information in the products and services that are offered to customers and a high intensity of information in its operations. This is echoed by Applegate *et al.* (1999) who stressed that the financial institutions are among the industries where IT has the most significant impact.

Applegate *et al.* (1999) explained that the strategic impact of IT as applied to banking is very high; as is the strategic impact of existing operating systems. They discuss several companies suggesting that any company would occupy one of the four segments in the matrix shown in Figure 2:2 below.

Figure 2:2: Position of information systems in various types of companies

Strategic impact of existing operating systems			
	high	Factory A,1988 C E	Strategic A,1992
	low	Support H,D F	Turnaround B,G
		Low	High
Strategic impact of application development portfolio			

Key:

A- Major bank 1988 and 1992

B- Major insurance company

C- Medium size grocery chain

D- US$100 million distributor

E- Major airline

F- Major chemical company

G- Major process industry manufacturers

H- Insurance broker

Source: Applegate *et al.* (1999:22-23)

Strategic: in this category, IT is essential for executing current strategies and operations and the new IT applications in development are crucial to future 'competitive success'. IT strategy is the backbone of such firms' competitive success and receives considerable attention. Banks have fallen into this category.

Turnaround: some firms receive considerable IT support for operations, but are not absolutely dependent on the totally uninterrupted, fast response-time, cost-effective functioning of IT to achieve operating objectives. Their new IT applications, however, are absolutely necessary to enable the firm to achieve its strategic goals.

Factory: some firms are heavily dependent on cost-effective, totally reliable IT operational support to enable internal operations to run smoothly. For the firms in this category, even a one-hour disruption in service or deterioration in response times has severe operational, competitive, and financial consequences.

Support: for some firms, the strategic impact of IT on operations and future strategy is low, and the strategic impact of the IT applications in development, viewed realistically, is quite limited.

A third study concluded that there are large differences among companies in how important IT is to the overall strategies. Johnston and Carrico (1988) point out that those companies can be split into three categories:

- Type (1) or Traditional: IT supports operations but is of no strategic relevance. Companies focus IT efforts primarily on improving administrative and managerial information systems such as accounting and decision support (e.g. oil industry, office equipment and hotel chain);

- Type (2) or Evolving: IT supports strategy. Companies define and develop strategies at the corporate and business unit level (e.g. food products, industrial products and supermarket chain);

- Type (3) or Integrated: IT is integrated into the strategy. Companies use IT to create new products and services, to alter linkages with suppliers and customers,

and ultimately to establish new standards of performance in their industries (e.g. financial services, airlines and pharmaceutical distributor).

In 1993, a study conducted in the United States by the Bureau of the Census showed that the workers in the finance industry used computers more than in any other industry (Bureau of the Census, 1993, cited in Morisi, 1996). At the same time, Watkins (1998) has also recorded that the largest industry spender on IT and the largest employer of IT professionals is the banking industry.

Generally speaking, from the above discussion it can be seen that IT is considered the backbone in the financial and banking industry. The banking industry has undergone dramatic change in the last decade. Previously the branch office was the first and only channel that banks used to offer their services to their customers (Mols, 1999). Customer access to the bank's financial services and products was generally limited to the hours in which the branch was opened, and also services and products provided by the bank were relatively limited. The branch office, in which customers did the majority of their financial transactions, was the primary representative of the bank. In today's markets, things are different. New 'competitive pressures' have emerged because of non-banking institutions providing similar services and products, and foreign banks entering domestic markets. Customers have become more intelligent in their buying patterns, less loyal to a particular bank, and more demanding of products and services that fit their specific financial needs and time schedules. As a result, customers dictate where, how and when they will conduct their financial affairs.

In this new environment, and in order to respond to customer and market demands, financial services institutions must provide greater convenience, increased accessibility of financial services and products, and deliver new, better-targeted products and services faster, to survive and be successful in the long term (Watkins, 1998). At the same time, total operations and development costs must be maintained or reduced. All of this must be done to acquire or maintain a significant percentage of the customer's financial transactions and establish an acceptable profit margin.

As a result, the decision to design, implement and use an IT structure should be based on its ability to meet customer needs and the bank's business objectives. IT should enable the bank to improve its performance by the rapid development of new and existing delivery channels for greater customer accessibility (Kim and Davidson, 2004).

2.5 Using IT for Competitive Advantage

The statement that people use the same language to mean different things or a different language to mean the same thing is just as true concerning strategy, as it is in many other contexts. Bennett notes, "many people use the words 'strategies', 'plans', 'policies' and 'objects' interchangeably" (Bennett, 1996:4). The term strategy comes from a Greek word, Strategia - The art of war, which means army leader (Feurer and Chaharbaghi, 1997).

Practitioners and researchers have proposed many definitions of the term strategy. According to the early scholars in this field, such as Andrews (1971), strategy is a rational decision-making process by which the organisation's resources are matched with opportunities arising from the 'competitive environment'. Quinn (1980), on the other hand, defines strategy as a pattern or plan that integrates an organisation's major goals, policies and action sequences into a cohesive whole. This is echoed by Mintzberg (1994), who presents five definitions of strategy: as a plan (rules leading to a goal); a ploy (a trick to beat competitors); a pattern (a way of behaving) a position (a safe place); and a perspective (a vision, a set of assumptions). Johnson and Scholes (1999:10) have defined strategy as "the direction and scope of the company over the long term which achieves advantages for the organisation through its configuration of resources within a changing environment to meet the needs of markets and fulfil stakeholder expectations".

It is important to note that there are many different perspectives on strategy in business literature. According to Porter (1987) strategy is a term which has a large number of meanings and has been used in many forms. For Porter, strategy is fundamentally about how to position a company in its 'competitive environment' in a way which allows it to gain advantage against its rivals. Indeed, there are numerous definitions of strategy, for example, in one issue of the Journal of Business Strategy, Bacon, Harrison and Rice set out their views respectively as: "strategy as a part of the overall planning process, it is the part that gets you from where you are to where you want to be. It is like a bridge or a road map" (Bacon, 1995:64). Whereas Harrison states "strategy is a plan of action developed in response to strengths, weaknesses, opportunities, and challenges. A

successful strategy is evolutionary, requiring vision and adaptability in response to constant change" (1995:64). While Rice (1995:64) has defined strategy as "the means by which objectives are accomplished. It defines the 'how' to accomplish the 'what' (objectives). Strategy is designed by assessing market factors: customer needs, position in the market, the competition, and the resulting issues and opportunities facing the firm. It defines the overall approach to be followed in establishing a framework for investing resource and implementing action plans to establish a sustainable competitive advantage in achieving a defined business objective".

In general, these definitions of the concept of strategy relate to corporate strategy, which is the strategy that guides the corporation or enterprise as a whole. Business units within large organisations have business strategies related to their specific product-market situation (Porter, 1987). From corporate or business strategy, marketing strategy, manufacturing strategy, personnel strategy, financial strategy and IT strategy are derived.

2.5.1 Marketing Strategy

Different scholars and practitioners have defined the term marketing in various ways. Kotler *et al.* (2001:5) have defined marketing as "a social and management process by which individuals and groups obtain what they need and want through creating and exchanging products and value with others". According to the American Marketing Association marketing is "the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organisational objectives" (Kotler *et al.*, 2001:36).

On the other hand, *marketing strategy* is "a set of alternatives, policies and rules that guides over time the firm's marketing effort - its level, mix and allocation - partly independently and partly in response to changing environment and competitive conditions" (Kotler, 1980:181). Alternatively, Peter *et al.* (1999:10) defined marketing strategy as: "a plan design to influence exchange to achieve organisational objectives, it is intended to increase the probability or frequency of consumer behaviour, such as frequenting particular stores or purchasing particular products". Krueger (1995:64) has

defined marketing strategy as "knowing your customers and their needs and helping them espouse those needs. Knowing your customer as well as you possibly can is important". In a 'competitive environment', the starting point is to identify the 'competitive position', set business objectives, which will comprise revenue, market share and profit requirements, then formulate the strategy necessary to achieve a new position. Recent dramatic changes in the marketing environment have caused many companies to rethink the role of the marketing strategies; the centrepiece task of competitive marketing strategy is to move a business from its present position to a stronger competitive one. This must be done by adapting and responding to external trends and forces such as competition, market changes, technology, and developing and matching corporate resources and capabilities with the firm's opportunities.

2.5.2 IT Strategy

It has been common in recent decades to highlight IT as an important tool for an organisation to obtain 'strategic advantage'. Laudon and Laudon (2002) see strategic information systems as the computer systems at any level of the organisation that change goals, operations, products, services or the environment relationship to help the organisation gain a 'competitive advantage'.

IT has become a strategic part of most businesses, enabling the redefinition of markets and industries and the strategies and designs of firms competing with them. The purpose of strategy is to improve the company's future both by minimising threats and optimising benefits and it is important to note that change comes through the implementation, not through the plan. Boar (1997) sees the purpose of strategy as being to provide direction, concentration of effort (focus), constancy of purpose (perseverance), and flexibility (adaptability) as a business relentlessly strives to improve its position in all strategic areas.

Besides what has been mentioned earlier there are many opportunities by which an organisation can gain 'competitive advantage' through using IT.

2.5.2.1 Create Barriers to Entry

In many industries, organisations have improved operational efficiency by investing heavily in IT in order to maintain or improve their position in the industry (Kim and Davidson, 2004). Building barriers to additional competition can be done not only through providing a service that is difficult to copy, but also features that keep the customer 'hooked' (McFarlan, 1984). Often, the IT that banks use is extremely complex and requires organising, maintenance and development. This means that newcomers to the industry must be prepared to make a large initial expenditure, the level of which may need to be so high that an entry barrier is created that deters or prevents new competitors from entering the industry. New technologies can also decrease barriers to entry. For example, electronic banking has removed the requirement for a branch network (Bocij *et al.*, 2003).

IT can be a crucial barrier to new entrants into retail banking. Such entrants need information to become players, and whilst they may be able to purchase some information, the rest can be assembled only gradually over time. Hence, the more information banks gather on their customers, the more difficult it will become for new entrants to break into the market (Colgate, 1998). Nevertheless, Porter (2001) has mentioned that the Internet as a part of IT tends to expand the geographic market, which means bringing many more companies into competition with one another.

2.5.2.2 Strengthening Customers' and Suppliers' Relationships

It has become evident that in a competitive marketplace developing and maintaining relationships with existing customers is as important, if not more so, than attracting new ones (Lang and Colgate, 2003). Lang and Colgate have stated that relationship marketing involves more than two parties, normally extends beyond the buyer and seller relationship and encompasses a series of transactions. One of the most common ways of using IT is to develop services which are of higher quality, can be delivered faster, and are more cheap or tailored to an individual customer's exact needs (Laudon and Laudon, 2002; Watkins, 1998). Zhu *et al.* (2004) have stated that the new technologies such as the Internet are becoming significant strategic areas for financial institutions, to meet

customer needs / wants and to keep up with competitors. Organisations need to build switching barriers such as financial barriers, or increase the number of products / services that customers hold, thus increasing the feeling of being 'locked in' (Colgate and Lang, 2001). Linking an organisation's IT to the ITs of its customers and suppliers can help to strengthen business relationships, since it can be used extensively in market research and customer analysis. In addition, improved and faster communication giving more accurate information creates a better link between the company and its customer. This can be achieved through improved customer-based databases. This new closeness gives a better understanding of customer needs and that knowledge gives a company new opportunities for providing value-added services and additional sales to the customer. As an example, IT can be used to provide higher levels of customer services, thereby encouraging clients to remain loyal to the company.

In the banking industry, Radding (1989) found that without a customer database relationship banking is almost impossible. The customer databases, he adds, aid staff by giving them ready access to information that they need in order to solve customers' problems and to cultivate good relationships by cross-selling. IT, in essence, enables the bank to build up a complete picture of individual customers. This information can then be used to forge stronger ties with them.

2.5.2.3 Building Switching Costs

Switching costs are defined as the cost of changing services in terms of time, monetary and psychological costs (Dick and Basu, 1994). A major emphasis in IT has been to find ways to build switching costs into the relationships between a firm and its customers. That is, investments in IT have attempted to make the customer dependent on the continued use of it, they become reluctant to change to a firm's competitors (O'Brien, 2001). Electronic home banking is a good example of this, where the user having finally learned the system, sees little incentive in changing to a new one. The reasons for increased switching costs include financial considerations, in that the customer has paid so much that change is not reasonable, or psychological reason in that the customer has become used to the system. Switching costs give increased power for the bank over its

customers, enabling them to charge higher prices (McFarlan, 1984). On the other hand, Kim and Davidson (2004) have stated that if banks effectively use IT strategy to improve 'competitive advantage', they are likely to 'reduce' administrative expenses and 'increase' market share as well as profitability.

2.5.2.4 Spawning New Businesses

Investing in IT often helps to stimulate business innovation. Porter (2001) has argued that the Internet has shaped some new types of business, such as on-line auctions and digital marketplaces. Introducing a new process control system, for instance, might ultimately result in the development of new product features or new product lines. IT can lead to products or services that are 'higher quality', that can be delivered faster, or that are cheaper and convenient (McFarlan, 1984).

In general, the organisation can begin to develop new products and services by maximising its use of existing resources. For example, a travel agent might create a mailing list from its customer database so that customers can be offered a new product or service, such as travel insurance or car rental; also companies can use IT in order to establish a resource base that can be drawn upon to develop new ideas. On the other hand, an organisation that has failed to invest effectively in its information systems may lack essential resources, such as hardware, software and trained personnel, and be unable to explore new methods (Bocij *et al.*, 2003). Porter and Millar (1985) point out that IT can spawn new business in three ways: it makes new business technologically feasible, for example, modern imaging and telecommunications technology blend to support new facsimile services; IT can spawn new business by creating derived demand for new products or services, and IT creates new businesses within old ones. A firm with information processing embedded in its value chain may have excess capacity or skills that can be sold outside. IT investments can ensure a level of flexibility and adaptability enabling companies to respond to unforeseeable changes and to produce an increased range of products (Lloyd-Walker and Cheung, 1998).

2.5.2.5 Retain Customers

Chakravarty *et al.* (1996:29) have pointed out that attracting a new customer can cost "five to six times more" than the cost of keeping an existing customer. Hence, in order to compete successfully, companies should look for customer retention. Many authors highlight the importance of retaining customers. For example, Rust and Zahorik (1993) looked at market share from three sources: retained market share; market share gained from new competitors; and market share obtained from new customers, and found that retention rate is seen to be the most important component (Rust and Zahorik, 1993). IT can reduce customer attrition through the operation of many of the functions listed above. For example, through strengthening customer relationships and the creation of switching costs. IT helps banks to serve their customers by delivering a variety of financial services quickly at the nearest location, if not anytime and anywhere. Thus, current customer satisfaction should be improved as well as new customers attracted (Kim and Davidson, 2004).

2.5.2.6 Reduce Perceived Risk

IT can offer banks more information about their customers; at the same time customers can obtain much information about services and products that banks offer to them. Complete and accurate information about the customer can enable the bank to reduce the risk in transacting with the customer by establishing whether the customer is likely to default on a loan, for example. This will then assist the bank in the decision of whether to reject the application for the loan or the setting of an interest rate to reflect this risk (Colgate and Lang, 2001).

In summary, a successful corporate strategy and corresponding operations strategy must focus on the customers. The design strategy of the service *delivery channel* is an essential part of the operations strategy. In other words, the key to survival and success for companies is to deliver to the customer a service and an associated distribution channel to which the customer wants to frequently return to make purchases or receive the services (Pikkarainen *et al.*, 2004).

2.6 The Distribution Channels Structure in Retail Banking

In today's global marketplace, selling a product / service is sometimes easier than physically getting it to customers. Banks and any other businesses must decide the best way to store, handle, move and offer their products and services, so that they are available to customers in the right assortments, at the right time and in the right place. The effectiveness of logistics will have a significant impact on both customer satisfaction and company cost. At the same time, a poor distribution system can destroy an otherwise good marketing effort and resources (Kotler *et al.*, 2001).

The development of IT presents many opportunities for the extension and development of services to the customer. Companies have increasingly turned to IT to help them perform vital marketing functions in the face of the rapid changes in today's environment. This change has been influenced by the development of storage and speed of data transfer, particularly in using ATM, Internet, PC banking, phone banking and electronic funds transfer point of sale, known as EFTPoS (O'Brien, 2001). Banks must use all of these tools carefully in order to achieve their goals. This can be done by knowing more and more about customers, competitors and the market in general, through the marketing information system (MkIS) which will give the company a clear picture about its environment and thus make decision-making more efficient and effective.

According to Kotler *et al.* (2001:266) "a marketing information system consists of people, equipment and procedures to gather, sort, analyse, evaluate and distribute needed, timely and accurate information to marketing decision makers". Meanwhile, McLeod (1998:463) has pointed out that the MkIS can be defined as "a computer-based system that works in conjunction with other functional information systems to support the firm's management in solving problems that relate to marketing the firm's products". McLeod stressed that this definition has two elements; the first one is that all the functional information systems (manufacturing information systems, financial information systems and human resources information systems) must work together, and the second one is that problem-solving support is not limited to marketing managers.

MkIS can provide a 'competitive advantage' to a bank, enabling it to be managed more effectively than its competitors, the reason being that it is not the technology that is difficult to copy, but the information contained within an MkIS (Buttery and Tamaschke, 1996; Colgate, 1998). This is echoed by Violano (1989) who found that through innovations in the marketing information system, the information services function can have a more direct role in the ability of marketing to achieve a bank's business goals.

Kaynak and Whiteley (1999) have mentioned that applying the marketing concept to banks requires three conditions, namely: banks should think in terms of what the banking experience means to the customer, what type of services customers seek the most, and most importantly, how customers want their services delivered.

The distribution channel of financial services has rapidly changed and it is an extremely dynamic area that has been totally revolutionised (Meidan *et al.*, 1997), with the key for successful marketing now being 'customer service' (Lewis, 1989). Advanced competition in the financial services industry has forced even the most reluctant institutions to analyse the opportunities offered by new technologies in the delivery of financial products and services (Filotto *et al.*, 1997). Financial distribution channels are capable of providing an opportunity for differentiating themselves in the market by offering delivery services to customers in ways that are unique and valued by customers, such as Internet banking, ATMs and phone banking (Thornton and White, 2001).

In the marketing of the bank's financial services the service salesperson requires significant input from the customer if the service is to be successfully delivered (Julian and Ramaseshan, 1994). It is important to examine how the delivery of service differs from more traditional manufacturing and delivery of goods. The delivery of customer service is complex, dynamic, and dependent upon customer expectations and perceptions (Cascio, 1995). Unlike the manufacturing and distribution of products, the delivery of customer service is not generally a highly routine or structured task. Besides, many scholars have researched tolerance levels of consumers' preferences for technology instead of the human touch, and how customers want to gain their services from the bank, in other words, how the services are delivered (Kelley, 1989; Mols, 1999, 2000; Thornton and White, 2001). The growth of technology in the delivery of services

has had a dramatic effect on the nature of the distribution forms in the banking sector, suggesting that the type of distribution of financial services will remain a 'competitive weapon' (Thornton and White, 2001).

Many researchers (Stern and Sturdivant, 1987; Stern *et al.*, 1996; Mols, 2001) have argued that the 'ideal', 'perfect' distribution channel can be determined by exploring what the customers want in terms of service outputs from the distribution channel, how much they are willing to pay for a given service level, how the services can be provided to them, and what the costs of the alternative distribution channels are. Based on the answers to these questions, it is possible to determine which distribution channel most efficiently meets customers' desires (Mols, 1998). The distribution strategy is concerned with how to communicate and deliver service to the customer most effectively. At the same time, the choice of distribution strategy is based on considerations about, among other things, how to maintain a strong market position by attracting and retaining profitable customers (Howcroft and Kiely, 1995). Ramsay and Smith (1999) and Meidan *et al.* (1997) have argued that a successful delivery channel must:

- Meet what the customer wants in the most efficient way;
- Have long-run adaptability in being able to handle new products and services; and
- Compete effectively with emerging channels.

According to the above discussion, the most important things here are cost and benefit, from the point of view of banks and their customers. The cost of using IT is different from that of other available distribution channels, and the service output which banks provide to their customers is different from the service output provided by the branch-based channels.

Some banks have customers who ask for electronic channels. The banks consider them to be important distribution channels and are quick to introduce and promote them to their customers. Other banks have only a few customers who want to use the electronic

channels and these banks are more hesitant to introduce them. Some of those customers invest time and resources in becoming PC literate and in getting to know online banking (Internet), or they learn to use IT for conducting their banking activities. Other consumers do not want to use IT banking services; they do not become PC literate and do not become familiar with the Internet. These different customer segments are not likely to have the same wants and are not likely to be willing to pay the same price for electronic banking. The interaction between the adoption and promotion of electronic channels by the banks and the changes in the customer segments will lead to changes in the process where the structure of the distribution channel is adapted to the new environment. However, this is not likely to happen overnight because of barriers and temporal constraints (Carman and Tournois, 1998). For example, some banks will have invested in a huge branch network, which will be of no use if all or most of its customers want to switch to an electronic channel, and the customers will be tied to their present bank and its distribution channel because of habits, and perceived social, psychological and financial risks associated with switching banks. Besides, they will have to spend time searching and evaluating alternative banks in order to find one that is more suitable.

The alternative distribution channel strategies are identified and discussed in the following sections:

2.6.1 Branch Distribution Channel

The branch network has traditionally been the main distribution channel for retail banking services, because it was the most convenient way of processing the myriad transactions that resulted from a largely cash and cheque-based society. The branch-banking segment consists mainly of older, non-computer literate persons, who value personal relationships (Heskett *et al.*, 1997). These customers value the face-to-face contact with the bank teller and emphasise a trustful relationship. They do not own or use a PC and do not work with information technology. This channel is suitable for delivering services based on face-to-face interaction, and it targets a very large segment

of bank customers. This is echoed by Ramsay and Smith (1999), who found in their study that customers still want face-to-face service in their banking.

The problem with this branch-based strategy is that it is expensive and likely to lead to a decreasing number of customers because more customers have become computer literate and more time convenience oriented. Growth may be maintained through mergers and acquisitions, but only a few banks will have the luck and the skills necessary for such a strategy (Mols *et al.*, 1999). Since the introduction of IT services into the banking industry, the growth of traditional, full-service bank branches has slowed significantly (Deng *et al.*, 1991, cited in Meidan *et al.*, 1997). Howcroft and Beckett (1996) confirmed this in their study which was conducted on branch networks in UK. They found that the role of the branch network has become less important in the delivery of basic bank services, and the number of bank branches operating in the UK has declined by over 4% from 37.7% in 1983, coming down to 33.5% in 1993.

Looking for, and developing alternative distribution channels, is important not only in terms of reducing costs and improving competitiveness, but also in terms of a financial institution's ability to maintain the existing customer base and to attract new customers (Kimball and Gregor, 1995; Thornton and White, 2001). Developing new distribution channels is of interest to banks for many reasons:

- The electronic channels can give customers far more freedom to choose the time and place (better service output) in the form of a broader and deeper product / service assortment, less waiting time, and a higher market decentralisation. This may attract new customers, increase the revenue of the innovative firms and consequently lead to higher profits over a long period of time (Mols *et al.*, 1999; Akinci *et al.*, 2004).

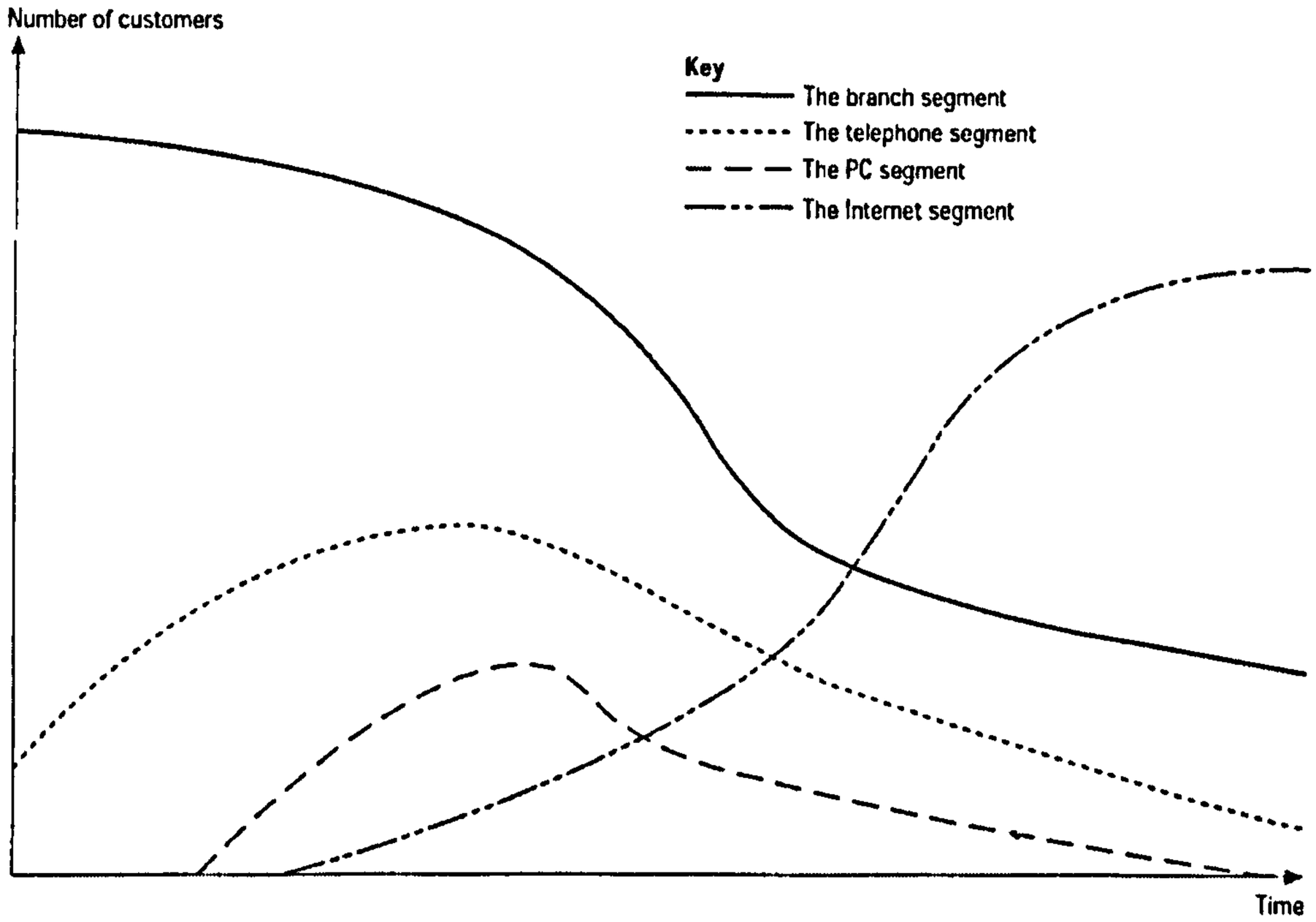
- With new electronic distribution channels, there are new payment methods, for instance, ATMs and point-of-sale terminals, which customers can use in shops, enterprise terminals and the public places. The development of the chip technology makes the use of a variety of cash card systems feasible (Mols, 2001).

- Banks need to increase the use of cost efficient channels rather than branch-based networks and lower costs may lead to lower prices for the customers. Banks achieve notable cost savings by offering online banking services, since it has been proved that online banking channel is the cheapest delivery channel for banking products once established (Morisi, 1996; Katz and Aspden, 1997; Ramsay and Smith, 1999; Mols *et al.*, 1999; Thornton and White, 2001; Pikkarainen *et al.*, 2004).

- The new electronic channels (remote distribution) may change the way in which firms interact with their customers and may facilitate direct marketing, relationship marketing and mass customisation, and thus increase customer loyalty. Banks have reduced their branch networks and downsized the number of their staff, and these actions have paved the way to self-service channels as many customers felt that branch banking took too much time and effort (Mols, 1998; Mols *et al.*, 1999; Pikkarainen *et al.*, 2004).

- The number of customers demanding the Internet-based channel is likely to increase in the future as can be seen in Figure 2:3. With the increase in computer literacy and the availability of computers and the fall in the costs of computers and Internet access, there has been a considerable growth in the segment of consumers preferring Internet banking. This will change the optimal distribution channel structure for most retail banks (Mols *et al.*, 1999).

Figure 2:3: Possible developments in customer segments



Source: Mols *et al.* (1999:40)

2.6.2 Electronic Distribution Channels

Since the mid-1990s, there has been a fundamental shift in banking delivery channels towards using self-service channels such as online banking (Pikkarainen *et al.*, 2004). However, the current market environment allows for new competitors to emerge and different methods for accessing a financial institution's services have also been developed (Thornton and White, 2001). In today's global and dynamic business environment, channel management is a vital part of a bank's overall business plan, as it is the vehicle through which customer interaction takes place. It is very important, therefore, that banks constantly evaluate their distribution channels, and eliminate any weaknesses that are evident (Ramsay and Smith, 1999). Furthermore, Akinci *et al.* (2004) have mentioned that banks worldwide have become more interested in diversifying their traditional service delivery channels.

The adoption of technology into financial industries is becoming a strong trend as service providers are now being urged by industrial bodies to invest in technology as a

way of securing their future in the electronic age (Joseph *et al.,* 1999; Kim and Davidson, 2004). Kelley (1989) has noted that the role of technology in financial institutions is to reduce costs and remove uncertainties. However, the use of computers in banking first began as long ago as the early 1950s, when the first large commercial computer was built for the Bank of America (Morisi, 1996). Now, there are many types of IT banking services as follows:

2.6.2.1 Automated Teller Machine (ATM)

Probably the most visible aspect, to the customers, of technological development in banking is that of ATMs, which since their introduction have revolutionised the delivery of financial services. The first ATM was installed at a bank in Valdosta, Georgia, in 1971 (Morisi, 1996). ATMs lured customers away from other financial institutions by cutting the cost of delivering bank services and increasing the convenience of such services. At the same time, ATMs raised the cost of competition, forcing some smaller banks that could not afford the investment in new technology to merge with larger banks (O'Brien, 2001). Leblanc (1990) found that the main reason for using ATMs is ease of use, improving the quality of services and reducing costs.

ATMs appeared not only at bank locations but also in supermarkets, airports, and other locations where people gather, and they offer 24 hours a day / seven days a week service for customers.

2.6.2.2 Internet Banking

Mols (1998) has pointed out that the Internet is an extremely important new technology, which has changed the distribution channel structure of retail banking. The Internet evolved from a research and development network established in 1969 by the US Defence Department to enable corporate, academic institutions and researchers to communicate with E-mail and share data and computing resources (O'Brien, 2001). However, nowadays the Internet represents the largest implementation of Internetworking, linking hundreds of thousands of individual networks all over the world (Laudon and Laudon, 2002).

The banking industry is considered as one of the industries, which seems to be most affected by the Internet (Cronin, 1997; Dannenberg and Kellner, 1998; Barnatt, 1998; Mols, 1998; Rotchanakitumnuai and Speece, 2003). For banks, the Internet is a new distribution channel, which offers a lower waiting time and a higher spatial convenience than traditional branch banking, and it is therefore attractive to a large and quickly growing segment of bank customers.

By using the Internet, it is possible for banks to offer a number of home banking services, such as a variety of banking, bill payment, and money management services 24 hours daily. For example, customers can get up-to-date balance information on deposit and loan accounts, transfer funds between accounts, and communicate with their banks by e-mail (Mols, 2000).

Customers are connected to the Internet for the use of e-mail, and for the search of information about special interests, etc. Internet banking customers do not put a high value on the personal relationship with the local bank; they are relatively price conscious, affluent and well educated. Today, this segment consists mostly of younger customers and more males than females (Katz and Aspden, 1997). Pedersen and Nysveen (2001) have stated that although Internet users are found in most demographic categories, in general they are young and well educated. Parallel to this, Curry and Penman (2004) have confirmed that customers over the age of 66 preferred to use a branch on a face-to-face basis and obtain a personal service.

Internet banking is determined by the interaction of the technological developments, the customers' changing requirements and the managers' attitudes in the banks. Santos (2003) has noted that the Internet, if probably utilised, can be a powerful tool to increase overall service quality. At the same time, she has emphasised that the websites' designs should include ease of use, good appearance, linkage, structure and layout and lastly good content. In this case the interrelationship between technological development and customer behaviour is likely to increase Internet banking. Equally important are managers' perceptions and expectations of Internet banking. If they primarily regard Internet banking as a self-service channel, fewer resources will be allocated to its development than if it is viewed as an important media for communication between the

banks and their customers and a possibility for building close relationships and practising one-to-one marketing (Mols, 2000).

Internet banking strategy requires radical changes for many banks. They have to reduce their number of branches and foster new competences. However, this strategy has the advantage that it aims at serving the fastest-growing customer segment, offering a new way to distribute 'digitalisable services', and thus it will be a means to gain market share. In addition it is a low-cost strategy, because the Internet is the cheapest distribution channel. The Internet may also make it easier for the customers to search and compare the offerings of different banks (Mols, 2000). In this sense, Santos (2003) stated that because the Internet offers opportunities for faster and cheaper communication than others types of IT, banks should take advantage of this and improve their service quality.

On the other hand, the disadvantage is that it is difficult for Internet banks to differentiate their offerings (Birch and Young, 1997). Thus, the market is more transparent and the competition is fiercer. For example, Hamill (1997) predicts that the Internet will lead to a narrowing of price differentials and, as described by Birch and Young (1997), it may become increasingly difficult to earn a profit because of intense price competition. However, others have argued that online Internet-based connections with customers can be a means to build relationships and to customise the offerings to them (Hotchkiss, 1997; Rosen, 1997).

However, problems with technical and legal security and privacy seem to be the most important thing that may affect usage of Internet banking by customers (Ramsay and Smith, 1999; Pikkarainen *et al.*, 2004). Daniel (1999) identifies security as the most influential factor affecting customer acceptance of Internet banking. However, Ramsay and Smith (1999) have stated that constantly improving encryption technology will help to overcome this problem (i.e. security). Therefore, another problem might be to convince new customers that they can trust the bank, in the cases when the bank is not very well known and has no important physical attendance (Birch and Young, 1997).

2.6.2.3 PC Banking

A personal computer (PC), which is sometimes referred to as a microcomputer, is one that can be placed on a desktop or carried from room to room (Laudon and Laudon, 2002). Early versions of PC banking were expensive, complicated and did not achieve a sufficient level of customer acceptance (Mols, 2001; Mols *et al.*, 1999), but today PC banking is cost-effective, and it is also convenient (Katz and Aspden, 1997; Tilden, 1996). Besides, a larger number of more complex banking operations can easily be handled using a PC. The customers belonging to the PC segment are all computer literate, they have a modem and many of them are Internet users. Most of them have a credit card and do not value the personal interaction in a bank branch. They like the convenience and time saved by using PC banking.

2.6.2.4 Telephone Banking

Telephone banking is one of the electronic channels that banks use for delivering services to their customers. It is used as an alternative, or a supplement to, the traditional way of delivering services via branches (Morisi, 1996). By using this channel banks can lower their cost profile compared to when they provide services through branch networks. Moreover, using telephone banking can reduce the cost of bank transactions (Morisi, 1996). Hall *et al. (*1999) have found that telephone banking transactions cost about half of branch banking transactions, at US$ 0.54 against US$ 1.07.

Ahmad and Buttle (2002) have stated that the benefits to customers of using telephone banking are convenience and control. Bank customers are able to deal with their banks 24 hours a day and seven days a week, at places convenient and private to them, such as their home. Customers also have added benefits in the form of lower charges on services and higher interest rates for their deposits, which result from the bank's lower cost of operation. It is, therefore, not surprising to know that the number of users of telephone banking services is growing. In 1999, about one in five customers of established financial institutions, which include banks, used call centres and this ratio is expected to increase, to one in three by 2004 (Chartered Institute of Bankers, 1999).

Because the telephone banking strategy has the telephone as its most important distribution channel, it relies on a more impersonal form of contact than the branch banking strategy. The advantages connected with this strategy are that all customers with access to a telephone are potential customers and that it is less costly than the branch banking strategy. Thus, it gives access to a large segment and a large geographical coverage without large-scale investments. It also relies on thoroughly tested and secure technology.

2.6.2.5 Electronic Funds Transfer (EFT)

Morisi (1996) has stated that point-of-sale (PoS) transactions at retailers are another use of ATM technology. EFT systems are a major form of electronic payment system in the banking and retailing sector which allow a customer to pay for her / his purchases at a retailer's store by transferring money from the customer's bank account to the retailer's bank account immediately (Abdul-Muhmin, 1998). EFT systems use a variety of information technologies to capture and process money and credit transfers between banks and businesses and their customers. For instance, banking networks support teller terminals at all bank offices and ATMs at locations throughout the world. Banks may also support pay-by-phone services allowing customers to use their telephones as terminals to pay bills electronically. In addition, wide area networks may connect PoS terminals in retail stores to bank EFT systems making it possible for customers to use credit or debit cards to sell the services or products (O'Brien, 2001). PoS transactions can be either on-line or off-line. With an online transaction, the customer uses an ATM card and enters a PIN into a keypad, and her / his account is debited immediately, while, an off-line debit card is associated with a major credit card company and carries the company's logo. Instead of entering a PIN, the customer signs for the purchase, and the sales amount is debited from the customer's account within a few days (Morisi, 1996).

2.6.3 The Multiple Channel Strategy

Without a doubt, it is not easy to meet customer needs through a single channel. For that reason, banks usually seek fulfilment of their customers' needs by offering them many

types of delivery channels in order to keep them and attract new customers (Pikkarainen *et al.*, 2004). Devlin (1995) indicated that a financial institution's distribution mix, such as the appropriate mix of branches, ATMs and phone banking, rather than its product and service, such as savings and loan rates, could be used to differentiate itself in the financial industry. Lang and Colgate (2003) have stated that the effort of developing a relationship with the customer can derive from any one of these channels (i.e. branch or electronic distribution channels) or more likely, a combination of them.

In fact, customers may prefer to use more than one distribution channel (Mols, 1998). Hence, besides the 'pure' segments there will be customers who will use different distribution channels for different purposes. They will use the branch for obtaining financial advice in connection with major decisions such as buying a new house, whereas for bill payment and retrieval of up-to-date balance information on deposit and loan accounts, they will use telephone, PC or Internet banking. This customer segment may be labelled the multiple channel segments.

This segment also allows banks to hedge their bets by making a number of smaller investments in PC / Internet banking systems, while simultaneously continuing a traditional branch banking strategy. In other words, it is a less risky strategy (Courtney *et al.*, 1997). However, this 'hedging strategy' is not entirely without problems, since multiple channels are likely to lead to conflicts between the branches and the departments responsible for the electronic distribution channels. It can be difficult to motivate the front-line personnel in the branches to promote these home-banking services knowing that it leads to cannibalisation and unemployment. The strategy can also result in customer problems because they may have difficulties in accepting a wide price differential between the services offered through the branches and the services offered through, for example, the Internet (Moriarty and Moran, 1990). In sum, despite these obstacles, branch and non-branch services complement each other.

2.6.4 Technology Acceptance and IT-Based Services

It has been mentioned earlier to compete nationally and globally, many organisations invested heavily in IT for many reasons, for instance to support organisational decision making and planning, cutting costs, strengthening customers' and suppliers' relationships, retain customers, producing more without increasing costs, improving the quality of services and products. IT banking offers many benefits to banks as well as to customers. It has been proved that electronic channels are the cheapest delivery channel for banking products, once established (Sathye, 1999, Mols, 2001; Wang *et al.*, 2003a; Eriksson *et al.*, 2005). At the same time, banks have reduced their branch networks and downsized the number of service staff, which have facilitated the adoption of self-service channels as many customers felt that branch banking took too much time and effort (Karjaluoto *et al.*, 2003). Therefore, it is important to find out the reasons why people decide to use or not to use IT banking services. This knowledge will help banks to improve their services and build strong relationships with their customers. The technology acceptance model (TAM) (Davis *et al.*, 1989) provided a theoretical base for examining the factors contributing to technology acceptance in organisations.

TAM is an information systems theory that models how users come to accept and use a technology, which was introduced by Davis in 1989 (Davis, 1989). The key goal of TAM is to provide a basis for tracing the impact of external factors on internal beliefs, attitudes, and intentions. TAM suggests that when users are presented with a new technology, there are two main factors that influence their decision about how and when they will use it, namely: *'perceived usefulness'* and *'perceived ease of use'* (Davis *et al.*, 1989).

According to Davis *et al.* (1989) people tend to use or not use an application to the extent they believe it will help them perform their job better. This first variable is referred to as the perceived usefulness of IT technology; even if potential users believe that a given application is useful, they may, at the same time believe that the system is too hard to use and that the performance benefits of usage are outweighed by the effort of using the application. In addition usage is theorised to be influenced by the perceived ease of use. In this context, the importance of training and pre-education in

the use such technologies is even more emphasised (Davis *et al.*, 1989; Ramsay and Smith, 1999; Mattila *et al.*, 2003; Rotchanakitumnuai and Speece, 2003).

Perceived usefulness refers to "the prospective user's subjective likehood that the use of a certain application will increase his or her performance within an organisational context". Perceived ease of use is defined as the degree to which the prospective user expects the potential system to be free of effort (Davis *et al.*, 1989).

Although the TAM has been tested (e.g. Matheson, 1991; Davis and Venkatesh, 1996), and proved to be valid and reliable model explaining information systems acceptance and use, many extensions to the original TAM have been proposed (e.g. Igbaria *et al.*, 1994; Venkatesh and Davis, 2000; Moon and Kim, 2001; Venkatesh *et al.*, 2002; Wang *et al.* 2003a; Eriksson *et al.*, 2005).

Accordingly, Davis (1989) has noted that the future technology acceptance research needs to address how other variables affect usefulness and ease of use acceptance. However, factors affecting the acceptance of a new IT are likely to vary with the technology, target users, and context (Moon and Kim, 2001). In the context of the banking industry, many studies have focused on many other factors influencing technology acceptance and IT-based services such as security and privacy, time saving, convenience, a mount and accuracy of information and perceived fun and playfulness.

As noted above, among these dimensions influencing technology acceptance is the security and privacy factor. The importance of security and privacy to the acceptance of online banking has been noted in many banking studies (Sathye, 1999; Daniel, 1999; Polatoglu and Ekin, 2001; Howcroft *et al.*, 2002; Patricio *et al.*, 2003; Rotchanakitumnuai and Speece, 2003; Wang *et al.*, 2003a; Pikkarainen *et al.*, 2004; Eriksson *et al.*, 2005). Sathye (1999) has pointed out that the privacy and security were found to be significant obstacles to adoption of online banking in Australia. Daniel (1999) predicted security to be one of the determinants of customer acceptance of Internet banking. Howcroft *et al.* (2002) argue that although customers' confidence in their bank was strong, their confidence in technology was weak. Wang *et al.* (2003a) have proposed a new construct to the TAM, which is perceived credibility. They

mentioned that the perceived credibility is more related to one's judgment on the privacy and security of issues of the Internet banking systems (i.e. customers' transactions security and the privacy of their personal information) has a significant influence on the intention to use Internet banking. Patricio *et al.* (2003) have pointed out that security concerns are still a major disadvantage of Internet banking. In the same vein, Rotchanakitumnuai and Speece (2003) have stated that in Internet banking, security is one of the most important future challenges, because customers face a higher risk in using the Web for financial interactions. It has been argued that the term security' refers to freedom from danger, risk or doubt during the service process (Santos, 2003; Lagrosen *et al.*, 2004). Santos (2003) noted that customers perceive a risk on the World Wide Web (WWW) concerning secure credit card transactions and the protection of private sensitive information. In their study, Eriksson *et al.* (2005) have included trust factor besides perceived usefulness and ease of use. They noted that the component trust comprised customers' attitudes towards their bank's safety and also their confidence in their bank's store of customer data. The customers' trust in their bank is dependent of their confidence in their bank's reliability and integrity.

The convenience factor also has been discussed by many researchers. Thornton and White (2001) believe that customers who are convenience-oriented would want to use channels that provide fast and easy access, such as ATMs and EFTPoS, whereas human tellers, who are limited in terms of hours and are geographically constrained, would be less attractive to customers and, therefore, would not be used to the same extent. Similar conclusions have been reached by Ahmad and Buttle (2002) in relation to IT banking, which provided convenience and control to customers and lower costs to banks. Customers are able to do banking 24 hours a day and seven days a week, at places convenient and private to them such as their homes (Kim and Davidson, 2004).

The accuracy and amount of information customers have about online banking has also been identified as a major factor impacting on its adoption. As mentioned earlier, the quality of information rests on three pillars: accuracy, timeliness, and relevance (Jimba, 1999). According to Sathye (1999) while the use of online banking services is fairly new experience to many people low awareness of online banking is a major factor in causing people not to adopt online banking. Customers can sometimes be overwhelmed

by the amount of information available on the Internet. The possibility of quickly finding exactly what they want on a website is, therefore, very important. Parasuraman *et al.* (1988) and McDougall and Levesque (1994) indicate that accurately performed services and providing information could help improve service reliability and service outcomes. Fortune (2000) shows that more than 95% of website visitors who are potential customers leave a website without buying anything due to not being able to find exactly what they want on the site. Mols (1999, 2000) and Lloyd-Walker and Cheung (1998) stressed that IT can help banks to improve their service quality by reducing error rates.

Other studies in the banking sector also have focused on perceived fun and perceived playfulness of Internet banking (Igbaria *et al.*, 1994; Moon and Kim, 2001). According to Igbaria *et al.* (1994) perceived fun refers to the performance of an activity for no apparent reinforcement other than the process of performance the activity per se. They found that system usage and the perceived fun were positively correlated with each other. Moon and Kim (2001) on the other hand, define perceived playfulness as consisting of three parts, concentration, curiosity and enjoyment. They discovered that the perceived playfulness had a significant impact on the intention to use the Internet banking.

To conclude, Zhu *et al.* (2004) have stated that the overall impact of technology on the banking sector is positive. Since the customers are the end-users of IT banking, banks must understand which attributes those customers look for when consuming services, and which factors affect customers' intentions to use IT banking services. In this context, McKechnie (1992) cited convenience and ease of transaction as two of the major factors influencing bank selection, concluding that consumers were most interested in 'how the service is delivered'. Dabholkar (1996) has pointed out that the complexity of the IT banking services may affect customers' willingness to use such options. In the same vein, Mols (2000) stressed that IT can help bank to improve their service quality by reducing error rates. While Meuter *et al.* (2000) found that usefulness; ease of use; availability and convenience play a significant role in customer satisfaction with self-service technologies.

Accordingly, and from the above discussion, the key variables selected to describe IT-based services include, ease of use, conservation of time, convenience, privacy and accuracy (Buttery and Tamaschke, 1996; Lloyd-Walker and Cheung, 1998; Colgate, 1998; Joseph *et al.*, 1999; Mols, 2000; Thornton and White, 2001; Zhu *et al.*, 2002; Ahmad and Buttle, 2002; Wang *et al.*, 2003a; Zhu *et al.*, 2004; Pikkarainen *et al.*, 2004; Eriksson *et al*, 2005; Curran and Meuter,2005). At the same time, this study excluded the perceived fun and perceived playfulness, since this research is focusing on IT banking services as a whole, and not on a specific type of service that banks provide, such as internet banking. The type of IT-based banking services includes ATMs, Internet banking, phone banking, credit cards, and PC banking.

2.7 Summary

The main purpose of this chapter was to provide a background to the use of IT in the banking industry, and show how IT has been used to advantage in reshaping this industry. However, this chapter has reviewed the information systems and information technology in businesses in general, and in the banking sector in particular. It has been reported that financial services and especially banking depend on IT in most of their operations. There is a greater opportunity for the banks to use IT-based services to provide their customers with service via more suitable up-to-date methods, as can be seen more clearly in the types of channels that banks use to distribute their services. In this context, more attention has been paid to the structure of distribution channels in the banking sector in the last section. The types of channels that banks can use to provide and improve their quality of service to the customers are *branch channel; electronic channels and multiple channels*. This chapter ended with TAM and a discussion of the factors that influence customers' motivation for adopting of the electronic distribution channels.

CHAPTER 3

CUSTOMER SERVICE

CHAPTER 3 : CUSTOMER SERVICE

3.1 Introduction

As seen in the previous chapter, the development of new technologies has profoundly changed the way in which customers interact with service providers. This chapter has been broken down into five main sections. Section 3.2 considers the basic issues of quality and service, quality gap model, and service quality dimensions with reference to the SERVQUAL scale. The second main issue in customer service, which is customer satisfaction, is discussed in section 3.3. This section is followed by a consideration of customer loyalty (section 3.4). Section 3.5 provides a summary of this chapter.

3.2 Service Quality

Service quality is increasingly being recognised as of key strategic value by organisations in both the manufacturing and service sectors (Christopher *et al.*, 1991; Lewis *et al.*, 1994). The following sub-sections consider service quality in more detail.

3.2.1 Quality

The term quality has become very important in a variety of fields such as industry, academia and government over recent decades, having taken on different meanings through the years. At the beginning of the 20th century, quality meant inspection. Dodge and Roming, both of Bell Telephone Laboratories, developed the area of acceptance sampling as a substitute for 100% inspection. In the early 1950s, Deming linked statistical methods to the measurement of quality. By the middle of 1980, the definition of quality was extended, leading to the birth of Total Quality Management (TQM). In the 1990s ISO 9000 became the worldwide model for quality systems, and later on ISO 1400 was improved as the worldwide model for environmental management systems (Besterfield *et al.*, 1999).

When the term quality is used, it is usually in terms of the excellence of products or services that fulfil or exceed customer expectations. A firm will survive only if it creates

and retains satisfied customers and this will only be achieved if it offers for sale products and services, which respond effectively to customer needs and expectations (Hoyle, 1998). Christopher *et al.* (1991) have argued that in the marketplace companies rely on quality and that without it they will not survive. According to Christopher *et al.* (1991:68) "quality is the means by which the firm sustains its position among competing offers over time. Quality is how the offer gains uniqueness and value in the eyes of the customer".

Lagrosen *et al.* (2004) mentioned that the term 'quality' is one of the many concepts in the social sciences that is extremely difficult to define. So, what is the essence of quality and what is meant by quality? To gain a clear picture about quality, one must become familiar with the 'Quality Gurus', such as Deming, Grosby, Juran, Feignbaum, Ishikawa, Taguchi, and others who developed certain propositions in the area of quality management and provided a good understanding of quality management principles.

Deming (1986) defined quality as satisfying the customer, not only meeting his expectations, but also exceeding them; so his philosophy starts and finishes with the customer.

According to Juran and Gryna (1993) quality can be defined as 'fitness to use' and 'fitness for purpose', which can be assessed by the end user. The term can also be understood as features of the product that meet customer needs and thereby provide customer satisfaction. This definition is similar to the previous one, as both focus on the customer and consider her / him as the key element in quality.

Feignbaum (1991) takes quality as the total composite product and service characteristics of marketing, engineering, manufacture and maintenance through which the product and service in use will meet the expectations of the customer. The basic concept is that people in an organisation try to meet their customers' expectations.

Ishikawa (1985) sees quality as the development, design, production and service of a product that is most economical, most useful, and always satisfactory to the customer. Carlson (1987) has introduced the concept of 'moment of truth' and suggested that customer satisfaction be based on the quality of each interaction with either the physical

or human resources of the company. This interaction can generate a lasting impact on the customers' perception of the company.

Although each definition has his own emphasis, there is a consensus that the customer is the most important target on whom the company must focus. On the other hand, Townsend (1986) defines quality in two perspectives: quality in 'fact' and quality in 'perception'. Quality in fact is usually the supplier's point of view, while quality in perception is the customer's view. Table 3:1 below shows Townsend's quality view:

Table 3:1: Townsend's quality view

Quality in fact	Quality in perception
Doing the right thing	Delivering the right product / service
Doing it the right way	Satisfying customer's needs
Doing it right the first time	Meeting the customer's expectations
Doing it on time	Treating every customer with integrity, courtesy, and respect

Source: Townsend (1986)

To sum up, quality can be defined as meeting customer's requirements, needs fulfilment and expectations. The final arbiter on quality is the customer, quality *is judged by the customer*. The customer is the only one who can decide that the quality of products and services the firm supplies are satisfactory. All products and services that contribute value to the customer, and lead to customer satisfaction, preference, and retention, must be the focus of an organisation's management system (Hoyle, 1998; Besterfield *et al.*, 1999).

3.2.2 Service

A service is 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 and Bitner (2000:2) have defined the services as "deeds, processes, and

performances", while Kotler *et al.* (2001:535) 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. The intangibility of services makes the analysis of the subject of service quality different from that of the analysis of manufacturing quality (Gummesson, 1991). In attempting to define services, it is not enough to say simply that they are intangible acts as opposed to tangible products, as some goods may be a combination of both. For instance, when we buy a TV (a tangible product) we also receive services like maintenance, repair and a guarantee. At the same time, health care services are actions (e.g. surgery, diagnosis, treatment) performed by the provider toward the patient. These services cannot be seen or touched by the patient, but he can see and touch tangible components such as, beds, medicine and other equipment. Services cover large areas of our daily life. Schools, universities, hotels, hospitals, banks, and other institutions, render many of the services we encounter routinely. To provide a satisfactory definition of services we have to be conversant with the characteristics of the service. Various researchers (e.g. Kasper *et al.*, 1999; Zeithaml and Bitner, 2000; Baron and Harris, 2003) characterise services using the following important features:

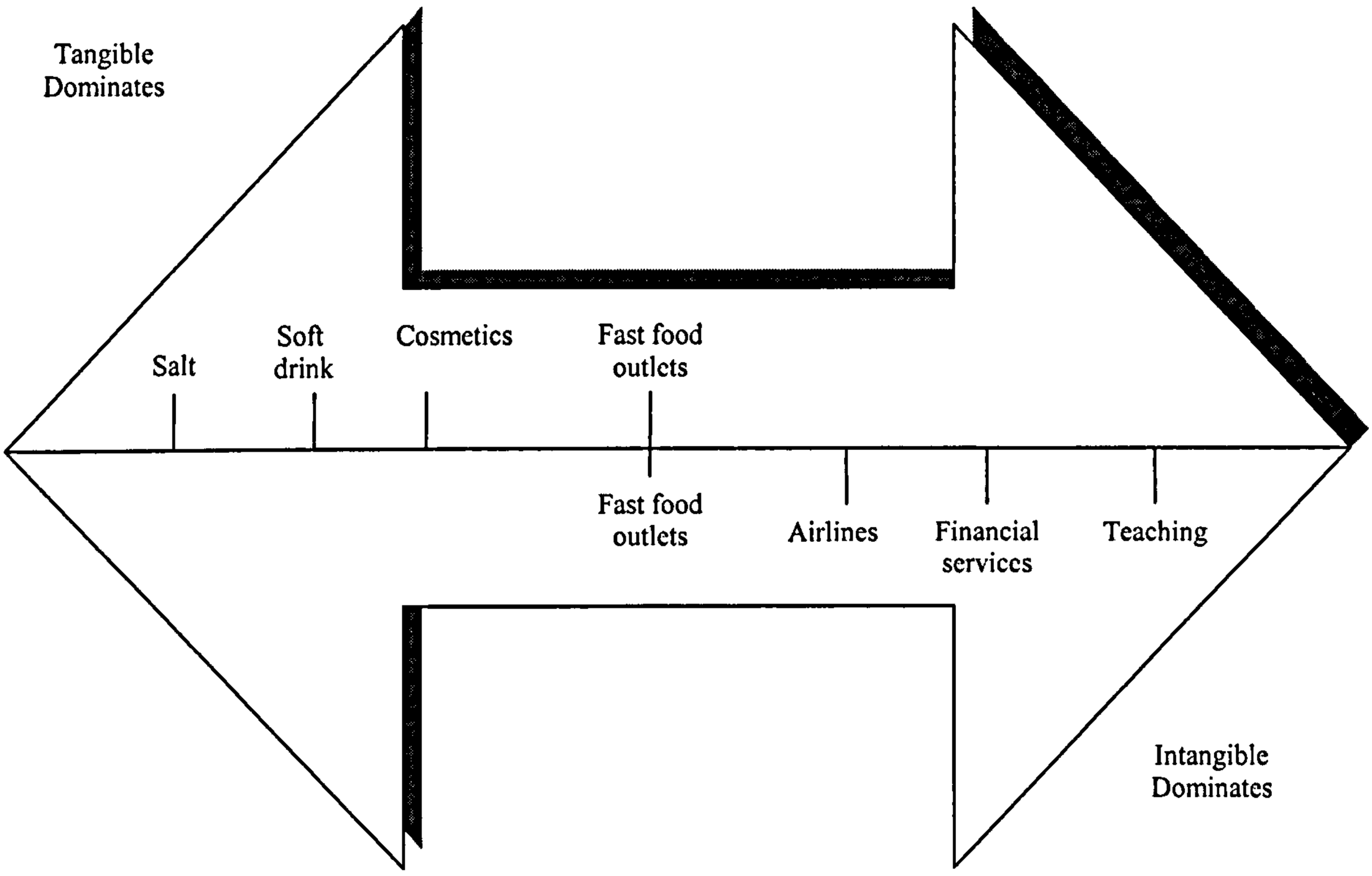
3.2.2.1 Intangibility

Services cannot generally be seen, tasted, felt, heard, touched or smelled before they are bought. They cannot be returned and repaired. Intangibility is the main distinguishing feature, since services are processes or experiences rather than physical objects and therefore cannot be possessed (Bowen and Schneider, 1988). In other words, services tend to be more intangible than manufactured products, and manufactured products are more tangible than services. Baron and Harris (2003:19) pointed out that the intangibility feature of services often increases risk for the customer, and some of them are perceived to be riskier than others depending on whether they are high in: firstly, search factors (i.e. some customers can get some (prior) information as to what they will receive from the provider, which affects customer perception). Secondly, experience factors (i.e. customers must try out, experience, the service before they can decide whether or not it is a good deal). Thirdly, credence factors (i.e. services, sometimes, are

difficult to evaluate even after experiencing it, these kind of services are often provided by professionals or experts such as doctors).

The tangibility spectrum is shown in Figure 3:1 below; it can be seen that there is rarely such a thing as a pure service or pure good.

Figure 3:1: The tangible - intangible continuum for goods and services



Source: Kotler *et al.* (2001:536)

3.2.2.2 Inseparability

Services are produced and consumed simultaneously and cannot be separated (Baron and Harris, 2003). Where the majority of goods are produced, and then consumed, most services are sold and then produced and consumed at the same time. It should be noted here, that there are some implications of simultaneous production and consumption (Zeithaml and Bitner, 2000). The first implication is that the customer is present while the service is being produced and thus, views and may even take part in, the production process. This may lead to 'customer experiences' because customers frequently interact

with each other during the service production process and may affect each other's experience. The second implication is that services cannot be separated from their providers (people or machines) so if a service employee provides the service, then the employee is a part of that service (Kotler *et al.*, 2001).

3.2.2.3 Variability (heterogeneity)

Variability means that the quality of the same service may vary depending on who provides it, as well as when and how it is provided (Kotler *et al.*, 2001). Because services are often a performance, frequently produced by humans, no two services will be identical. The employees delivering the service often *are* the service in the customer's eyes, and people may differ in their performance from day to day or even hour to hour (service delivery depends on customer satisfaction and employee action). Kotler *et al.* (2001) emphasised that the ability to satisfy customers depends on the behaviour of front-line service employees. Hence, a number of service companies invest a great amount of money in training their staff to give good service. At the same time, no two customers are the same; each will have unique demands, or experience the service in differing ways. The variability here depends on customers' needs and personalities (Zeithaml and Bitner, 2000).

3.2.2.4 Perishability

Services cannot be stored, saved, resold or returned if the customer is dissatisfied or unhappy. In contrast, physical goods can be stored or resold another day, or even returned or resold to another customer. Baron and Harris (2003:21) stated that the problem of this feature is "frequently compounded by the fact that the demand for many services is characterised by distinct peaks and troughs". In this case, however, service providers should pay attention to the production scheduling and demand forecasting.

According to McKechnie (1992), there are two more features that are present in financial services, namely 'fiduciary responsibility' and 'two-way information' flows between customer and provider. The first feature refers to the implicit responsibility of banks or any other financial institutions for the management of their customers' funds

and the nature of the financial advice supplied to their customers, while the second feature concerns the set of promises between the customer and the service provider.

Delivery of service is performed according to the needs of customers that are to be met, and sometimes these are highly diversified. Service delivery can be a highly intricate process depending on a variety of factors. Technology, people, and the delivery processes affect the customers' perception of services. A major difference between services and goods is at the point of entry of the customer (Gummesson, 1991). In manufacturing a tangible product, the customer receives it after it has been produced and checked for problems. The point of entry, therefore, is after production. In the service delivery process, the customer enters during the production of the service. Hence, in order to gain and understand the nature of this relationship between the customer and the provider in the service sector, it is useful to highlight the 'services marketing triangle' (Zeithaml and Bitner, 2000).

3.2.3 The Services Marketing Triangle

Kotler *et al.* (2001) have noted that successful service companies focus their attention on both their employees and customers. They understand the service-profit chain, which links service company's profits with employees and customer satisfaction.

The services marketing triangle has three parts that work together to develop, promote, and deliver the services. These parts are the company, the providers (i.e. employees, machines), and the customer. Between these points of the triangle, there are three types of marketing that must be successfully carried out for a service to succeed, these being external, internal, and interactive marketing (Zeithaml and Bitner, 2000).

3.2.3.1 External marketing

Through this type of marketing a company makes promises to its customers regarding what they expect and how it will be delivered. In service industries, there are many marketing activities that a company can use to communicate and help to set customer expectations. These activities include not only traditional methods such as advertising,

sales, special promotions, etc., but also the service employees and the design and decoration of the facility (Zeithaml and Bitner, 2000).

3.2.3.2 Interactive marketing

The second type of marketing activities is interactive marketing or keeping promises. This type occurs at the 'moment of truth' when the customer interacts with the service marketer and the service is produced and consumed (i.e. inseparability). Here, promises are kept or broken by the employees or by the third-party providers or even by technology. It is important here to note that the services are tested every moment when the customer interacts with the company (Zeithaml and Bitner, 2000).

3.2.3.3 Internal Marketing

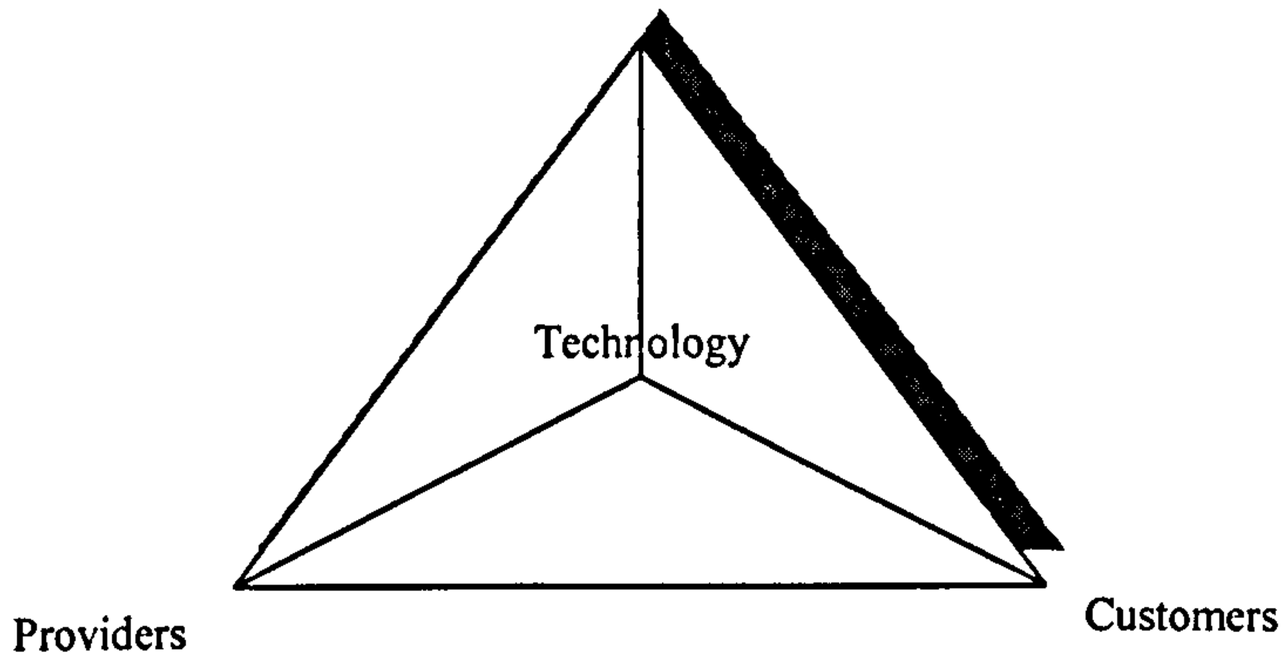
The third type of marketing is internal marketing, which takes place via the enabling of promises. In this type, providers need skills, ability, tools, motivation and even maintenance (in case the provider is technological) in order to deliver the promises made, otherwise it cannot be done. For services, all these types of marketing activities are essential for building and maintaining relationships with the customers. At the same time the sides of the triangle are critical to success, without each one of them the triangle cannot be optimally supported. In other words, they work together to reach the company's aims (Zeithaml and Bitner, 2000).

3.2.3.4 Technology and the Services Marketing Triangle

Technology has a significant impact on all dimensions of service and service delivery. Zeithaml and Bitner (2000) have developed and expanded the services triangle to include technology. They emphasised that service delivery can be seen in three ways: the first one is that interactive marketing can be the result of customer, providers, and technology interacting in real time to produce the service. The second one is that the company has the responsibility to make easy not merely the delivery of services through the human providers, but also the delivery via technology. The last one is that because

the customers will interact only with technology they will need the skills, abilities, and motivation to receive the service successfully. Figure 3:2 shows the triangle.

Figure 3:2: Technology and the services marketing triangle



Source: Zeithaml and Bitner (2000:17)

3.2.4 Service Quality and Gaps Model

Over the past few years the financial services industry has rapidly changed in the sense of recognising more explicitly the importance of satisfying customer needs. An organisation should revolve around its customers, since they are the key to any business and therefore, all customers should be treated as friends. Responses to customer complaints should be immediate and should be more than the customer expected to receive. Customers may forgive errors and positively promote the company if they are treated with respect. This fact must be understood by employees. Henry Ford has mentioned that it is not the employer who pays the wages - he only handles the money. It is the customer who pays the wages. Employees must please customers, not bosses, management committees, or headquarters. Employees should not follow mind-numbing roles that provide no benefit to the customer (Besterfield *et al.*, 1999).

In the services sector, quality depends on the customer's experience with delivery because unlike products, services are experienced as they are produced. In this context, Baron and Harris (2003:86) have defined customer experience as "a memorable episode based on a consumer's direct personal participation or observation". According to

Kotler *et al.* (2001) the most important way that a service company can differentiate itself is by delivering consistently 'higher quality' than its competitors. Studies from services literature emphasise the importance of quality perceptions and the relationship between service, satisfaction and quality. There is evidence to suggest that service quality leads to customer satisfaction and helps to keep existing customers and attract new ones (Metawa and Almossawi, 1998). Service quality has been defined as a consumer attitude reflecting the perceived overall superiority and excellence in the process and outcome of a service provider (Parasuraman *et al.*, 1988). Gronroos (1984) pointed out that perceived service quality is a global judgment or attitude relating to service and results from comparisons by consumers of expectations of service with their perceptions of actual service performance. Therefore if there is a shortfall, a service quality gap exists, which a provider will wish to close. With the concept of service quality, further distinctions are relevant. Gronroos (1984) has discussed two dimensions of service quality: the technical quality of service encounters concerning the outcome of a service (i.e. *what* is offered and received by customer); and the functional quality of the service-delivery process, which concerns the way in which the service is delivered (i.e. *how* is it offered and received). A similar distinction is proposed by Lehtinen and Lehtinen (1991), who suggest that a third dimension might be appropriate, namely 'corporate quality', which involves the image or profile of the company. The service firm's image determines service quality and therefore whether a customer keeps the relationship with the service provider or not. If the image is negative, there is little chance that new customers will actually be attracted.

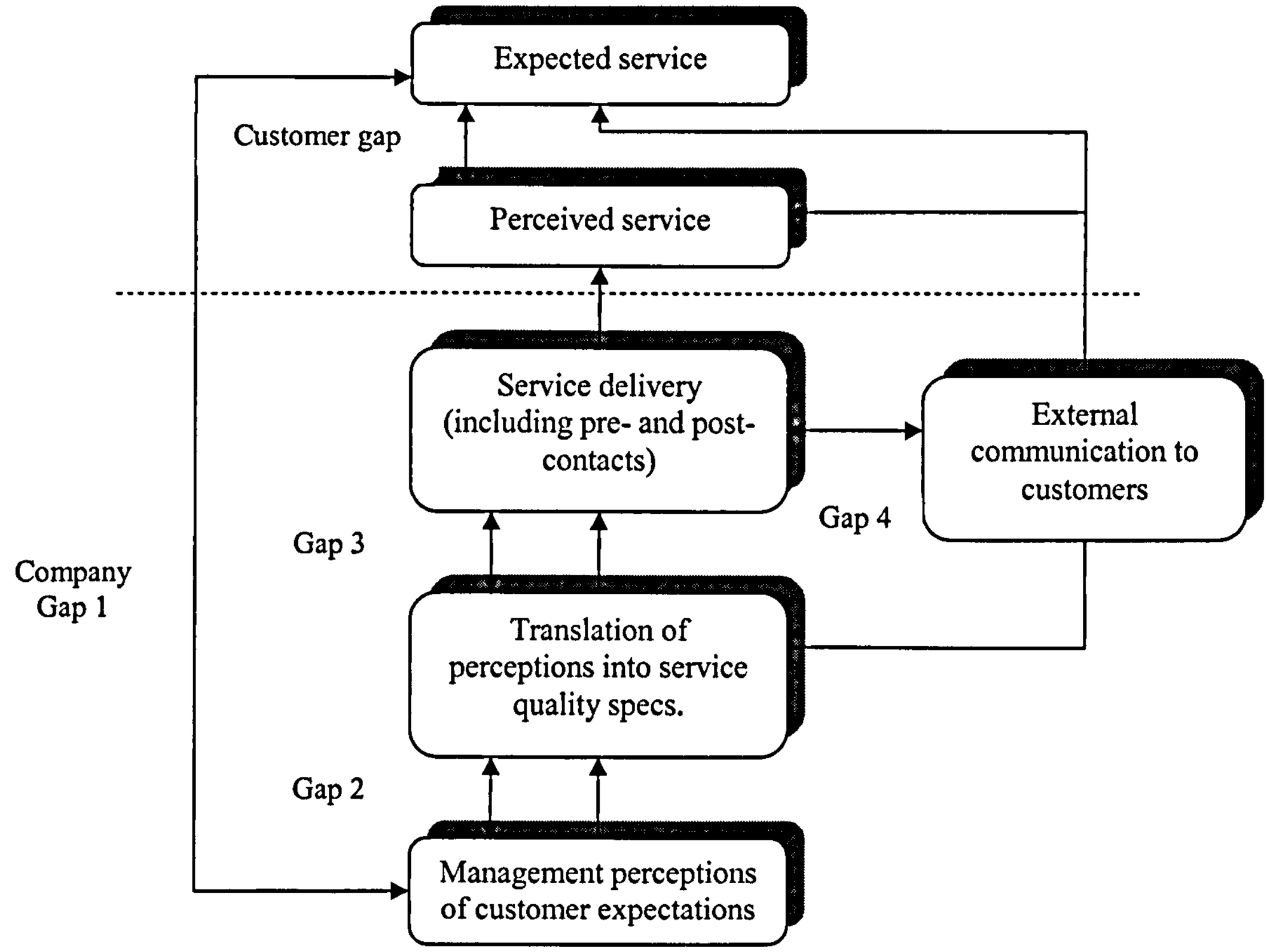
Christopher *et al.* (1991:70) have stated that the "basic concept of quality is simply the match between what customers expect and what they experience". This is perceived quality. These researchers added that any mismatch between these two is a quality gap. Customer perception of quality was found to be influenced by various gaps. Since the quality perceived in a service is a function of the gap between customers' desires / expectations and their perceptions of the service that is actually received, understanding customer expectations and perceptions is the first step in delivering 'high service quality' (Zeithaml and Bitner, 2000).

The concept of expectations has been widely used in many studies about customer behaviour (Parasuraman *et al.*, 1985, 1988; Christopher *et al.*, 1991; Kasper *et al.*, 1999; Zeithaml and Bitner, 2000; Baron and Harris, 2003). Usually customer expectations are based on their own norms, values, needs, wishes, etc. Moreover, these expectations are not stable, and may change over time due to changes in aspiration levels at a particular moment in time. Thus, customers will switch service providers if they are not happy or feel dissatisfaction with the service provided (Lewis and Bingham, 1991). At the same time, expectations are determined not only by individuals themselves, but also by reference groups, external situations, time, norms, and the like (Kasper *et al.*, 1999). While perception reflects the service as actually received, it also depends on the nature of discrepancy between the expected service and perceived service (Parasuraman *et al.*, 1985). Many researchers have discussed the concept of perception. According to Bolton and Drew (1991) perceptions are influenced by attributes of the service-delivery process, and Schiffman and Kanuk (1987) have defined perceptions as the process by which an individual selects, organises and interprets stimuli into a meaningful and coherent picture of the world.

3.2.4.1 Service Quality Gaps

Parasuraman *et al.* (1985) conducted a study that led to the development of a service quality 'gaps model'. They defined service quality to be 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. In other words, this allows employees to know that is expected of them, and the customers will have an idea of the level of service they can expect to find (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 3:3 shows this:

Figure 3:3: Gaps model of service quality



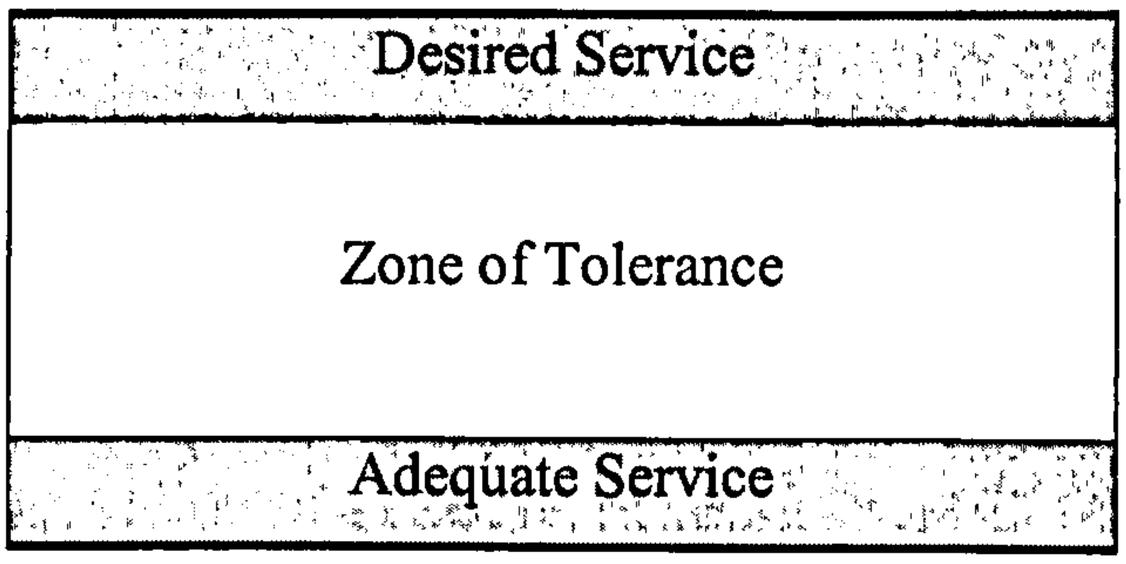
Source: Zeithaml and Bitner (2000:26)

Zeithaml and Bitner (2000) broke down the gaps model of service quality into two main gaps: the customer gap and the provider gap within which are included four gaps as shown in Figure 3:3.

The customer gap is the difference between customer expectations and perceptions of the service delivered. Zeithaml and Bitner (2000) stressed that customers' service expectations exist at two different levels, namely: 'desired service' and 'adequate service'. The desired level of service expectations is what the customer hopes to receive, - the 'wished for'- which is a function of past experience. The wished for level, is the higher one, while the adequate level (i.e. lower expectation) is what is acceptable based on an assessment of what the service 'will be'. The extent to which customers recognise and are willing to accept this variation, is called the zone of tolerance i.e. the difference between the desired service level and the adequate service level (Zeithaml and Bitner,

2000). As a result, if service drops below adequate service the customer will be disappointed and dissatisfied, while, if service performance is outside the zone of tolerance at the top, the customer will be very pleased, satisfied and surprised as well (Zeithaml and Bitner, 2000). Figure 3:4 shows this.

Figure 3:4: Customer expectation level and the zone of tolerance



Source: Zeithaml and Bitner (2000:50-51)

Parasuraman *et al.* (1985) pointed out that expectations are influenced by a number of factors namely: personal needs and preferences (for example a regular customer expects standard services (e.g. loans) from her / his bank whilst a business client expects commercial service), word-of-mouth communications (the opinion of other customers is very important, the 'high quality' of the service sometimes is based on recommendations of the friends, colleagues, etc.) and the third factor is past experience (when the customer has a long relationship with a firm she / he normally has greater professional knowledge about the firm, than the customer with no experience). On the other hand, from the gap model it can be seen that the external communications of the service provider play an important role with regard to what and how expectations are formed.

The model assumes that any difference between the service desired by the customer and the service finally delivered by the service provider may be caused by the following four gaps (provider gaps).

3.2.4.1.1 Provider Gap 1: not knowing what the customer expects

This gap is the discrepancy between customer expectations of service and the company's understanding of those expectations (Christopher *et al.*, 1991). This gap happens for a variety of reasons. For example, when the service marketers do not understand their customers' expectations of a service and do not invest in marketing research, this may lead to incorrect or incomplete manager perceptions, especially where customer expectations are changing rapidly (Kasper *et al.*, 1999), if they do not interact directly with customers, have an unwillingness to ask about their expectations, and / or are unprepared to address their customers. Managers in this case are spending too little time in gaining first-hand knowledge of their customers. The third reason that may cause this gap is insufficient communication between contact employees and managers. The greater number of layers (levels) of management (i.e. organisational hierarchy) between management and contact personnel, the less objective the information that finally reaches management will be, and therefore the information could be interpreted differently between these levels (Parasuraman *et al.*, 1985; Christopher *et al.*,1991; Kasper *et al.*, 1999). To close this gap, the service provider must recognise that not all customers are the same. Market segmentation is a grouping of customers sharing similar requirements, expectations, and demographic or psychographic profiles. At the same time, companies should manage the customer mix, an issue more critical in services marketing, where customers often interact with each other while receiving the service. Here, the role of IT can be very important and affords companies the ability to acquire and integrate vast quantities of data about customers that can be used to build relationships (Zeithaml and Bitner, 2000).

3.2.4.1.2 Provider Gap 2: not selecting the right service standards (service quality specifications)

This gap is the difference between the company understanding of customer expectations and service quality specifications. In other words, the service providers correctly perceive customer expectations, but they are often unwilling or unable to translate this information into clear specifications, or simply do not care enough to put resources into

solving the problem (Christopher *et al.*, 1991; Baron and Harris, 2003). Lewis (1993) stressed that the customer's needs may not be translated into appropriate service specifications / standards and systems, even if they are known. This dilemma (gap) occurs because sometimes service marketers believe that customer expectations are unreasonable or unrealistic. This happens when the company knows that customers have certain expectations, but employees have the impression that meeting these expectations is not feasible, because of a lack of organisational capabilities, skills or resources. Furthermore, it may be that the organisation feels that the demand for service is too hard to predict, or that the way the company and its personnel operate cannot be changed. Another factor that may account for this gap is management commitment to service quality. Management may focus more on cost reduction and short-term profit than on quality. Another thing relating to the absence of management commitment to service quality is a lack of resources allocated to service quality; no internal quality programmes exist, etc. Hence, managers are hardly committed to quality and do not recognise its importance (Parasuraman *et al.*, 1985; Christopher *et al.*, 1991; Kasper *et al.*, 1999; Zeithaml and Bitner, 2000; Baron and Harris, 2003). In order to avoid this gap it is important to clearly design service without oversimplification, incompleteness, subjectivity, and bias. To do this, tools are needed to ensure that new and existing services are developed and improved in as careful a manner as possible (Zeithaml and Bitner, 2000). It should be noted here that the service provider must effectively match customer expectations to new-service innovations and actual service process designs.

3.2.4.1.3 Provider Gap 3: not delivering to service quality specifications

This gap is the distinction between service quality specifications and actual service delivery (Parasuraman *et al.*, 1985). Standards must be backed by appropriate resource (people, system, and technology) and also must be supported to be effective, that is, employees must be trained, motivated, and compensated on the basis of performance along those standards. This gap occurs when the employees do not clearly understand or are uncertain about what management expects from them in regard to their job and the roles they are to play in the company (role ambiguity), and may not have been given adequate training (Baron and Harris, 2003).

This happens, for instance, when employees are expected to cross-sell services to the customer when the time to serve the customer is limited. It also occurs when the tools or technology are inadequate for employees to perform their service roles. And when there is a lack of employee-technology job fit and inadequate or no team work, and when employees do not respect colleagues or managers, and do not feel personally involved or committed to the service role (Kasper *et al.*, 1999; Zeithaml and Bitner, 2000). There is real evidence that satisfied employees make for satisfied customers. Bowen and Schneider (1988) have shown that both a climate for service and a climate for employee well-being are highly correlated with overall customer perceptions of service quality. Even in the case of an automated service such as ATMs, employees are critical for making sure that all of the systems are working properly. On the other hand, the role of customers can be as important as that of employees in service delivery. In a study conducted in the banking sector, bank customers were asked to rate themselves on a scale from 'strongly agree' to 'strongly disagree' on the questions relating their contributions to service delivery, in terms of: what they did (i.e. technical quality of customer inputs) and how they did it (i.e. functional quality of customer inputs). The results of the study were that the customers' perceptions of both what they did and how they did it significantly related to customers' satisfaction with the service they received from the bank (Kasper *et al.*, 1999). It should not be forgotten that the influence of internal marketing (i.e. employees), also has a big impact on service quality and plays a big role in satisfying customers (Christopher *et al.*, 1991; Baron and Harris, 2003). This can be achieved by motivating and satisfying employees through training, incentives, appreciation, and participation.

3.2.4.1.4 Provider Gap 4: not matching performance to promises

This gap shows the difference between service delivery and the service provider's external communications (Christopher *et al.*, 1991). Media, such as advertising by an organisation, can affect customer expectations (Parasuraman *et al.*, 1985). Promises made by a service company may potentially raise customer expectations that serve as the standard against which customers assess service quality. Broken promises can occur for many reasons: ineffective marketing communications, over-promising in advertising

or personal selling, inadequate co-ordination between operations and marketing, etc. Service marketers must manage all communications to customers and be certain not to promise more in communications than can be delivered in reality (Parasuraman *et al.*, 1985), so that inflated promises do not lead to higher expectations. As mentioned in the services marketing triangle, it can be seen that the receiver of service is the target of two types of marketing communications. Firstly, there are external marketing communications from the company to the customer, which include sales promotion, public relations, advertising, and so on. Secondly, there are interactive marketing communications, which involve the messages that employees give to the customers through such channels as personal selling, customer service interactions, and service encounter interactions. Hence, employees should have a clear understanding of the promises made in advertising campaigns in order to deliver the service that matches the image presented. Easingwood and Storey (1991) stressed that technology provides a real 'competitive advantage' around which to build an effective communication strategy. This can be done through gaining more data about customers and their needs / expectations and clear communication between a company and its employees.

To sum up, the service quality manager's object is to narrow the quality gaps. Therefore, the integrated gaps model of service quality provision is a framework for understanding and improving service delivery.

3.2.5 Service Quality Dimensions

As seen earlier, researchers and practitioners have found that customers consider many dimensions in their assessments of service quality (Gronroos, 1984; Parasuraman *et al.* 1985, 1988; Lehtinen and Lehtinen, 1991; Lassar *et al.*, 2000; Baron and Harris, 2003). To improve quality, service providers have to identify the key determinants of service quality. Parasuraman *et al.* (1985) highlight ten key determinants of perceived service quality, namely: tangibles, reliability, responsiveness, communication, credibility, security, competence, courtesy, understanding / knowing the customer, and access. 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. Figure 3:5 shows how the ten dimensions of service quality are related to the five dimensions of SERVQUAL.

Figure 3:5: Service quality dimensions

Ten dimensions	Five dimensions
▪ Reliability	▪ Reliability
▪ Responsiveness	▪ Responsiveness
▪ Competence ▪ Courtesy ▪ Credibility ▪ Security	▪ Assurance
▪ Access ▪ Communication ▪ Understanding the customer	▪ Empathy
▪ Tangibles	▪ Tangibles

Source: Kasper *et al.* (1999:214)

3.2.5.1 Reliability

Reliability, the ability to perform the promised service dependably and accurately, means that the company delivers on its promises regarding delivery, service provision, and problem resolution (i.e. a firm performs the service right the first time and honours its promises over a period of time) (Lassar *et al.*, 2000). Customers want to do business with companies that keep their promises, particularly their promises about the core service attributes.

3.2.5.2 Responsiveness

Responsiveness, being willing to help, is defined as willingness or readiness of employees to help customers and to provide prompt service (Lassar *et al.*, 2000). This dimension emphasises attentiveness and promptness in dealing with customer requests, questions, complaints, and problems. A company must be certain to view the process of

service delivery and handling of requests from the customer's point of view rather than from the company's point of view (Zeithaml and Bitner, 2000).

3.2.5.3 Assurance

Assurance, inspiring trust and confidence, is defined as the employees' knowledge and courtesy and the ability of the firm and its employees to inspire trust and confidence (Christopher *et al.*, 1991; Zeithaml and Bitner, 2000; Baron and Harris, 2003). A firm seeks to build trust and loyalty between key people and individual customers. This dimension is likely to be particularly important for services and customers' ability to evaluate outcomes, such as banking or insurance. In the early stages of the relationship, the customer may use tangible evidence to assess the assurance dimension. Visible evidence of degrees, honours and awards and special certifications may give a new customer confidence in a professional service provider (Zeithaml and Bitner, 2000).

3.2.5.4 Empathy

Empathy, treating customers as individuals, is defined as caring, individualised attention that the firm provides to its customers (Christopher *et al.*, 1991; Zeithaml and Bitner, 2000; Lassar *et al.*, 2000; Baron and Harris, 2003). The customers need to feel understood by, and important to, firms that provide service for them.

3.2.5.5 Tangibles

Tangibles, representing the service physically, are defined as the appearance of physical facilities, equipment, staff appearance, and communication materials that are used to provide the service (Christopher *et al.*, 1991; Zeithaml and Bitner, 2000; Lassar *et al.*, 2000; Baron and Harris, 2003). Often companies use tangibles to enhance their image, provide continuity, and signal quality to customer. In contrast, companies that do not pay attention to the tangible dimension of the service strategy can confuse and even destroy an otherwise good strategy (Zeithaml and Bitner, 2000).

These dimensions represent how customers organise information about service quality in their minds.

3.2.5.6 Measuring Service Quality

As a critical measure of organisational performance, service quality remains at the forefront of both the marketing literature generally, and the service literature in particular (Jensen and Markland, 1996). The review of literature has highlighted two models and approaches most commonly used by researchers in the service sector to assess their performance namely: SERVQUAL and SERVPERF.

3.2.5.6.1 SERVQUAL

Research in defining and measuring service quality has been greatly influenced by the work of Parasuraman *et al.* (1985, 1988). The original SERVQUAL model included two sections, each of which had 22 items intended 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 and appliance repair and maintenance (Parasuraman *et al.*, 1988). Their scale is based on the gap theory (already discussed), and suggest that a customer's perception of service quality is a function of the difference between her / his *expectations* about 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 concluded that customers normally use ten dimensions when evaluating perceived service quality. Parasuraman *et al.* (1988) have reduced these dimensions into five as mentioned above:

- *Tangibles:* physical facilities, equipment and appearance of personnel.
- *Reliability*: ability to perform the promised service dependably and accurately.
- *Responsiveness*: willingness of the organisation to help customers and provide a prompt service.

- *Assurance:* knowledge and courtesy of employees and their ability to inspire trust and confidence.

- *Empathy:* caring, individualised attention aspect given to the customers.

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 *et al.*, 2002; Caruana, 2002; Caruana, 2002; Cui *et al.*, 2003; Jabnoun and Al-Tamimi, 2003; Wang *et al.*, 2003b; Kilbourne *et al.*,2004; Yavas *et al.*, 2004; Arasli *et al.*, 2005; Bennett and Barkensjo, 2005).

Although there have been many studies using the SERVQUAL model as a framework in measuring service quality, there have also been criticisms directed toward this model in the service marketing literature. A major criticism has been over the use of gap scores to measure service quality (i.e. expectations and perceptions) (Cronin and Taylor, 1992). Babakus and Boller (1992) have found that service quality, as measured in the SERVQUAL scale, relies more significantly on the perceptions score than on the expectations, while Kasper *et al.* (1999) see the disadvantage of the SERVQUAL scale as that the questionnaire is too lengthy.

Nevertheless, despite these criticisms; SERVQUAL has been widely used in various context throughout others studies. Service quality is an abstract concept and thus hard to measure. There is no standard scale to measure perceived quality particularly in the banking sector (Wang *et al.*, 2003b). The SERVQUAL instrument has been widely used

because SERVQUAL provides a basic skeleton which can be adapted or supplemented to fit the characteristics or specific research needs of a particular organisation Parasuraman *et al.* (1988). Buttle (1996) has mentioned that the SERVQUAL is still a useful tool for the measurement of service quality and still the mostly widely used and probably the best available. Recently, Kilbourne *et al.* (2004:529) have argued that "the SERVQUAL has potential as a reliable measurement instrument and the perception sub scale as a robust measure of service quality". In the same vein, Bennett and Barkensjo (2005:102) stated that "the SERVQUAL instrument, albeit without an expectations dimension generated reasonably robust outcomes".

3.2.5.6.2 SERVPERF

Cronin and Taylor (1992) have examined a performance-based measure of service quality, called SERVPERF in four industries (banking, pest control, dry cleaning and fast food). SERVPERF is composed of the 22 perception items in the SERVQUAL scale, and therefore excludes any consideration of expectations. They found that this measure explained more of the variance in an overall measure of service quality than did SERVQUAL. This model is based on the hypothesis that service quality is an antecedent of customer satisfaction (i.e. satisfaction is an outcome of service quality); whilst customer satisfaction has a significant impact on purchase intentions. Managers must discover whether customers are buying from firms that have a 'high level of service quality' or those with which they are most satisfied.

Cronin and Taylor (1992) suggest that the performance-based scale SERVPERF is more efficient than the SERVQUAL scale, since it reduces the number of items that must be measured from 44 to 22. Perceived service quality is said to be a reflection of the firm's performance. On using the firm's service, customers are said to form an attitude towards service quality performance. This satisfaction level with regard to the products / services indicates how the firm performs. The SERVPERF model claims that to find the performance of a firm (i.e. its service quality) all that is required is to collect data by directly asking the customer through a simple survey and a questionnaire.

To sum up, measuring service quality seems to pose difficulties for service providers because of the unique features of service (Bateson, 1995). Unlike SERVQUAL, SERVPERF does not differentiate service quality from customer satisfaction, SERVQUAL measures performance based on the gap between expectation and perception while SERVPERF measures actual performance based on customer satisfaction.

Generally speaking, SERVQUAL is still the main instrument used to measure service quality, and remains the point of departure for many researchers (Davies *et al.*, 1999). Therefore, and for the following reasons SERVQUAL scale has been used in this study:

1. It is well documented in many studies (e.g. Al Khatib and Gharaibeh, 1998; Davies *et al.*, 1999; Angur *et al.,* 1999; Polatoglu and Ekin, 2001; Zhu *et al.*, 2002; Caruana, 2002; Caruana, 2002; Cui *et al.*, 2003; Jabnoun and Al-Tamimi, 2003; Wang *et al.*, 2003b; Kilbourne *et al.*, 2004; Yavas *et al.*, 2004; Arasli *et al.*, 2005; Bennett and Barkensjo, 2005);

2. It has been updated and revised in 1996, and it currently contains 21 expectations items and 21 perception items (Zeithaml *et al.,* 1996; Zeithaml and Bitner, 2000);

3. It has been used and tested in the banking sector (Parasuraman *et al.*, 1985; Avkiran, 1994; Caruana, 2002; Zhu *et al.*, 2002; Caruana, 2002; Yavas *et al.*, 2004);

4. It has been used in developing countries such as India (Angur *et al.,* 1999) and Turkey (Polatoglu and Ekin, 2001), and also in Jordan (Al Khatib and Gharaibeh, 1998).

It is important to note that in this research, consideration has only been made into the '*perception of quality'*. This is due to following reasons:

1. The SERVQUAL scale in general has been updated and the perception section now contains 21 items. Meanwhile, the SERVPERF which is based on the SERVQUAL has not been updated;

2. It has been found that perception scores, by themselves, had a stronger correlation with independent measures, such as quality, than do the SERVQUAL measures (expectations minus perceptions) (Babakus and Boller, 1992). Kilbourne *et al. (*2004) have mentioned that the perception-only measures of service quality appear to have higher convergent and predictive validity; while Bennett and Barkensjo (2005) have stated that the out-comes of perception scale are robust;

3. The perception section of SERVQUAL has been used widely in the banking sector (e.g. Jabnoun and Al-Tamimi, 2003) and also in the other sectors, such as 'fast food chains' (e.g. Davies *et al.*, 1999) 'health-care' (e.g. Kilbourne *et al.*, 2004), and 'charitable organisations'(e.g. Bennett and Barkensjo, 2005);

4. It has been found that there are conceptual and psychometric problems linked with using differences between perceptions and expectations (Cronin and Taylor, 1992). It has desired 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. It is particularly unrealistic to ask customers to complete the 21 item questionnaires twice (before and after a service encounter) as was suggested by the SERVQUAL approach (Kasper *et al.*, 1999).

Regardless the appreciation and importance of service quality in strategic planning for corporate success, there are no clear-cut definitions regarding the quality of dimensions for establishing quality standards and subsequently measuring the quality delivered and received. Customer service is the set of activities an organisation uses to win and retain satisfied customers. Banks have to adopt a service quality strategy to distinguish

themselves from their competitors and to concentrate on customer service for the simple reason that the nature of banks and other financial institutions is similar; they offer the same services and products at similar prices (Cook, 1997). However, some banks even go beyond service quality, suggesting what they call 'service excellence' (which represents a field through which firms can satisfy their customers and exceed their expectations). This involves innovation and making customers and employees part of the action (Kotler *et al.*, 2001). Whatever happens in the marketplace, one thing must always remain constant, that customers and their interests must be at the top of the list in order to get their satisfaction and their loyalty.

3.3 Customer Satisfaction

Over the past few years companies have placed increasing emphasis on customer service as a tool for gaining 'competitive advantage'. One of the most important aspects of this tool is satisfying the customer. Kotler *et al.* (2001) have mentioned that any business looking for success in today's marketplace must be customer-centred. It must deliver superior value to its target customer. They also added that companies must become adept in building customer relationships, not just building products and services. Hence, it can be seen that to satisfy the customer must be at the top of managers' agendas, if they want their companies to survive.

3.3.1 The Concept of Customer Satisfaction

Practitioners and scholars tend to use the term satisfaction and quality interchangeably, and there is often some confusion regarding the similarities and differences between them (Baron and Harris, 2003). However, customer satisfaction is defined as "the customer's fulfilment response, it is a judgment that a product or service feature, or the product or service itself, provides a pleasurable level of consumption-related fulfilment" (Oliver, 1997:13). According to Johnston and Clarks (2001) customer satisfaction is a result of customers' assessment of a service based on comparison of the perception of service delivery with their prior expectations. In the same vein, Jonsson and Zineldin (2003:225) have stated that satisfaction is "an emotional response to the difference between what customers expect and what they ultimately receive". The customer is the foundation of the business and keeps it in existence. A satisfied customer will repeat the purchase of the product / service and convey positive messages about it to another (Dispensa, 1997). In contrast, a dissatisfied customer is more likely to switch to an alternative product / service that is provided by another company. A dissatisfied customer may well be negative by word-of-mouth and this could have a serious and damaging effect on the business. Baron and Harris (2003) have pointed out that satisfaction or dissatisfaction will result if the company performance confirms or disconfirms the customer expectations. From the above discussions, it can be said that the essential and major role of any business is to meet its customer's needs and

expectations. Failure to meet needs and expectations is assumed to result in dissatisfaction with the product or service. The core function of every service is to satisfy the customer who consumes it. According to Zeithaml and Bitner (2000), customer satisfaction can be influenced by each of the following variables:

- *Product and service features*: customer satisfaction with a product or service is influenced significantly by the customer's evaluation of product or service features (Oliver, 1997). For a service such as a bank, important features might include parking and the helpfulness and courtesy of staff. In their study conducted in the Jordanian banking market, Al Khatib and Gharaibeh (1998) found that the location of banks and their parking facilities are the most important factors that influence customer satisfaction;

- *Customer emotions:* the state of dissatisfaction or satisfaction is always connected with specific service experience (Baron and Harris, 2003). If the customer is at a very happy stage in her / his life (e.g. Christmas, holiday, vacation, etc.) or in a good mood, this may well enhance her or his satisfaction, and vice versa. In other words, positive emotions such as happiness, pleasure, elation, and a sense of warm-heartedness enhanced customers' satisfaction, in turn, negative emotions such as sadness, sorrow, regret, and anger led to diminished customer satisfaction (Stauss and Neuhaus, 1997; Kotler *et al.*, 2001);

- *Attributions for service success or failure:* satisfaction / dissatisfaction is correlated with cognitive processes. A customer might experience various degrees of satisfaction. According to past experience expectations are formed regarding future performance by the capabilities of the supplier. If the service / product performance falls short of expectations, the customer is dissatisfied and vice versa (Kotler *et al.*, 2001). Simultaneously, Stauss and Neuhaus (1997) pointed out that customers sometimes tend to choose the provider again, because competitors do not seem to offer a superior performance;

- *Perceptions of equity or fairness:* customer satisfaction is also influenced by perceptions of equity and fairness. Usually customers compare themselves with

others regarding treatment, quality service, prices, etc. Notions of fairness are central to customers' perceptions of satisfactions with products and services (Zeithaml and Bitner, 2000). A customer should feel that full consideration is given to him, precisely because she / he is a valued customer.

3.3.2 Types of Customer Satisfaction

Stauss and Neuhaus (1997) have developed a qualitative satisfaction model (QSM) to show that certain combinations of emotional, cognitive and intentional components lead to qualitatively different satisfaction types, as follows:

3.3.2.1 Demanding Customer Satisfaction

The relationship between customers and their provider is determined by positive emotions, especially optimism and confidence. Due to their positive past experience they have the expectation that the supplier will be able to satisfy their rising expectations in the future.

3.3.2.2 Stable Customer Satisfaction

The customer in this type has a passive ambition level and demanding behaviour. These positive emotions towards the provider can be characterised by steadiness and trust in the existing relationship. Hence, the positive experience between both of them will help to continue their relationship.

3.3.2.3 Resigned Customer Satisfaction

This type of satisfaction is not induced by the fulfilment of expectations but is based on the impression that it is unrealistic to expect more.

In the QSM model, Stauss and Neuhaus (1997) found that the *dissatisfaction* could be one of two different types namely:

3.3.2.4 Stable Customer Dissatisfaction

In this type, the relationship between customers and their providers is determined by negative emotions and assumptions that their expectations will not be fulfilled in the future.

3.3.2.5 Demanding Customer Dissatisfaction

Customers in this type can be represented by an active ambition level and demanding behaviour. Their dissatisfaction will result in protest and opposition, and they became active in requiring improvements. Customers in this case feel there is no point in continuing a relationship with their providers and due to their negative experience they would not choose the same provider again.

However, Stauss and Neuhaus (1997) suggested that customers have different emotions towards the business and formulate specific expectations in the form of different aspiration levels. At the same time, they found that the different customer satisfaction types imply different levels of loyalty towards the provider. In the same vein, McDougall and Levesque (1994:21) have stated that satisfaction can be viewed as a continuum which can be broadly described as having three customer states depending on the perceived quality as follows:

- Inadequate quality leading to dissatisfaction
- Adequate quality leading to satisfaction (within a zone of tolerance)
- Exceptional quality leading to high satisfaction and 'customer delight'

3.3.3 The Relationship Between Service Quality and Satisfaction

The distinction and association between service quality and customer satisfaction remains at the forefront of many research endeavours (Brown and Swartz, 1989; Cronin and Taylor, 1992; Bloemer *et al.*, 1998; Lassar *et al.*, 2000; Caruana, 2002; Baron and Harris, 2003; Beerli *et al.*, 2004; Yavas *et al.*, 2004; Ting, 2004; Zhou, 2004). This distinction is very important to managers and researchers alike, since as Cronin and Taylor (1992) stated, service providers need to know whether their objective should be to have customers who are satisfied with their performance, or to deliver 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). Based on this evidence from the service literature, service quality and satisfaction will be viewed as two different constructs that are unique but related (Ting, 2004). A study carried out by Bitner (1990) on 145 tourists in an international airport suggested satisfaction as the antecedent to service quality. On the other hand, there are many other researchers who have exactly the opposite point of view. In other words, service quality is considered an antecedent of customer satisfaction (Cronin and Taylor, 1992; Goode *et al.*, 1996; Spreng and Mackoy 1996; Bloemer *et al.*, 1998; Caruana, 2002; Jamal and Naser, 2002; Baron and Harris, 2003; Beerli *et al.*, 2004; Yavas *et al.*, 2004; Ting, 2004; Zhou, 2004).

Cronin and Taylor (1992) carried out an empirical test of reciprocity between service quality and customer satisfaction across several industries (i.e. banking, pest control, dry cleaning, and fast food). They noted that marketing researchers are not in agreement in terms of the causal order of these constructs, and they suggested that empirical justification is necessary to determine the true nature of this relationship. At the same time, the main finding in their study was that service quality leads to customer satisfaction. In another study that has focused on the relationship between service quality and customer satisfaction, Spreng and Mackoy (1996) found that customer satisfaction is the result of service quality. Goode *et al.* (1996) have stated that satisfaction is an important goal to be achieved by bank marketers and if the banks want to increase satisfaction, they can do it through service quality. Similarly, a recent study conducted among customers of a major bank (Nationwide) in the Netherlands, Bloemer

et al. (1998) pointed out that service quality is an antecedent of customer satisfaction, and simultaneously customer satisfaction is one of the most important factors influencing customer loyalty. In a similar vein, Jamal and Naser (2002) contend that dimensions of service quality are causal antecedents of customer satisfaction. This view is also supported by Caruana (2002) who argued that customer satisfaction is indicated as acting as a mediator in the link between service quality and service loyalty. Yavas *et al.* (2004) have stated that service quality is at the root of customers' satisfaction and is linked to such behavioural outcomes as word-of-mouth, complaint and loyalty. A study conducted by Ting (2004) in the banking sector, emphasised that service quality 'should' be the antecedent to satisfaction. The service quality precedes satisfaction and the relationship between the two is positive. Zhou (2004) further asserted that customer satisfaction is viewed as an intervening variable that mediates the relationship between service quality judgments and behavioural outcomes.

In contrast, Bitner (1990) has demonstrated empirically, a significant causal path between satisfaction and service quality in a structural equation analysis, whilst, Bolton and Drew (1991) used the common assumption that service quality is similar to an attitude as a basis to suggest that customer satisfaction is an antecedent of service quality.

According to Parasuraman *et al.* (1985, 1988) controversy derives from the type of evaluation conducted in terms of quality and satisfaction, and it is possible to distinguish between a transaction-specific evaluation and an overall evaluation as a result of cumulative experience. However, from the above discussions it can be seen that the exact relationship between satisfaction and service quality has remained a matter of debate.

Financial institutions in general, and banking in particular, form an area in which customer satisfaction has attracted the attention of many researchers (e.g. Cronin and Taylor, 1992; Goode and Moutinho, 1995; Hopland, 1997; Metawa and Almossawi, 1998; Lassar *et al.*, 2000; Jamal and Naser, 2002; Yavas *et al.*, 2004). One of the main reasons for this is a fiercer level of competition that is becoming the most influential factor in determining the competitiveness of banks (Bartell, 1993). Customer

satisfaction is known to be a vital element of successful operations for banking services, and this together with customer retention, has been a major concern of many banks. For instance, Lloyds Bank (UK) conducted research to identify the process leading from customer satisfaction to account closure and to explore the determinant factors of dissatisfaction (Waterhouse and Morgan, 1994).

Customer satisfaction is a goal and an essential factor in company success. Companies that achieve 'high customer satisfaction' realise that highly satisfied customers produce several benefits for them. Customers will be less price sensitive and remain customers for a longer period, buy additional products / services over time, and they talk favourably to others about the company and its services / products (Kotler *et al.*, 2001). In addition, Bearden and Teel (1983), and Goode and Moutinho (1995) see customer satisfaction as playing a vital role in marketing management, and it is assessed to determine repeat sales, increased profits, positive word-of-mouth recommendations and most importantly, customer loyalty. This is echoed by Hartline and Jones (1996), who emphasised that loyal and satisfied customers serve as an important source of free advertising through referrals and recommendations, whereas dissatisfied customers are more likely to defect and to convey negative experience to other potential customers. These findings highlight the important relationship between customer satisfaction and organisational success. Similarly, Zairi (2000) has stated that customer satisfaction has been found to greatly impact on corporate image and gaining new customers through direct recommendations. This is an important result, especially when considering the findings of Chakravarty *et al.* (1996), who stated that attracting a new customer could cost 'five to six times' the cost of keeping an existing one. Zeithaml *et al.* (1996:32-33) argued that "when customers are lost, new ones must be attracted to replace them, and replacement comes at a high cost. Capturing new customers is expensive for it involves advertising, promotion, and sales costs, as well as start-up operating expenses. New customers are often unprofitable for a period of time after acquisition". They also added that customers who remain with a firm for some time because they are pleased with the service, are more likely than short-term customers to buy additional services and recommend the company. Furthermore, Allred and Addams (2000) pointed out that service providers would make greater efforts to retain customers, if they knew how

much it actually costs to lose one. Hence, it can be seen that from satisfied customers, the companies can indirectly attract new customers without any cost.

The introduction of new financial services such as ATM, Internet and PC banking has greatly decreased the interface of the bank with its customers. These services will not build customer franchises, but will lower the bank's direct involvement with the customer and may, in turn, affect patterns of customer loyalty (Howcroft and Lavis, 1986). In their study, Moutinho and Brownlie (1989) found that the high levels of bank customers' satisfaction were directly related to the location and accessibility of ATMs. Lang and Colgate (2003) pointed out that if customers do not perceive their service provider's distribution channels to be compatible with their desired level of interaction, then satisfaction with their service provider is likely to suffer.

To sum up, satisfaction can be considered as the customer's evaluation of the product or service received. The importance of these customer evaluations comes from the impact that satisfaction is posited to have on customer behaviour such as loyalty. This issue needs to be taken into account in order to produce a full picture of these relationships and help banks to create suitable ways to understand their customers' expectations and gain their loyalty. In this context, Yavas *et al.* (2004) state that service quality demonstrates positive relationships with a number of behavioural intentions either directly or though the mediating effect of satisfaction. Consequently, and confirming what is already mentioned, Jonsson and Zineldin (2003) have stated that the ability of banks to develop and enhance long-term customer relationship and satisfy existing customers should be central to a relationship management strategy. They also added that there is a positive impact from customer satisfaction, on customer loyalty and retention.

3.4 Customer Loyalty

If service quality is an antecedent of satisfaction or vice versa, the literature has emphasised that either can become the most important factor influencing customer loyalty (Lamb *et al.*, 2002). Curry and Penman (2004) have stated that by ensuring long term customer loyalty through positive perceptions, the service provider can acquire commercial advantage. It costs less to retain customers than to acquire new ones, and satisfied customers may well spend more with their chosen supplier. At the same time, a service provider can lose market share as a result of negative perceptions.

Zairi (2000) has pointed out that focusing on the customers is the right thing to do; he also added that this strategy most important for a bright future, growth, and profitability, since organisations need to fulfil all of their customers needs to their satisfaction. It has been demonstrated that loyalty is a direct result of customer satisfaction (Heskett *et al.*, 1997). In other words, without loyal customers, growth and profitability will be hard to achieve. Therefore, loyalty seems to be the ultimate goal of any business (Pedersen and Nysveen, 2001). In spite of this, however, few studies explored customer loyalty in the service sector (Oliver, 1997).

McIlroy and Barnett (2000) stated that loyalty occurs when the customer strongly believes that her / his current supplier can best meet her / his relevant needs and wants. Furthermore, many researchers have argued that the relationship between customers and their providers can be described by 'trust and loyalty' (Mayer *et al.*, 1995; Pedersen and Nysveen, 2001). Reichheld and Schefter (2000) have stated that in order to gain the loyalty of the customers, their trust must first be gained, a view echoed by Rowley and Dawes (2000) who describe 'real' loyalty as not just a repeat sale but an emotional bond created by trust, dialogue, frequency, ease of use and a sense of value and added satisfaction. Loyalty is, therefore, viewed as a reflection of a customer's subconscious emotional and psychological need to find a constant source of value, satisfaction and identity.

As noted earlier, to keep existing customers is cheaper than attracting new ones (Chakravarty *et al.*, 1996; Zeithaml *et al.*, 1996), and loyal customers are also assumed

to be less price-sensitive, and to give a company / business valuable time to respond to actions taken by competitors. Furthermore, loyal customers may also reduce marketing costs and raise the barriers of entry to the market (Krishnawurthi and Raj, 1991; Sharp and Sharp, 1997).

From the above discussion, the importance of loyalty for the company and how loyal customers can be a 'competitive tool', which can help a company to achieve its goals in the marketplace, can be seen. It is important to know exactly what is meant by loyalty and how it can be measured, and this will be discussed in the following sections.

3.4.1 Definition of Loyalty

Loyalty has been defined as repeat purchasing frequency or relative volume of same-brand purchasing (Beerli *et al.*, 2004). It is the point to which a customer will choose a particular provider (company) again among other companies (Gorst, 2000). In the banking context, Bloemer *et al.* (1998:277) have defined bank loyalty as "the biased (i.e. non-random) behavioural response (i.e. revisit), expressed over time, by some decision-making unit with respect to one bank out of a set of banks, which is a function of psychological (decision-making and evaluation) processes resulting in brand commitment". Commitment in this case, was defined by Dwyer *et al.* (1987:19) as "an implicit or explicit pledge of relational continuity between exchange partners". Caruana (2002) reviewed many studies and reached a specific result regarding loyalty, stating that brand loyalty is (1) biased (i.e. non random), (2) a behavioural response (i.e. purchase), (3) expressed over time, (4) by some decision unit, (5) with respect to one or more brands out of a set of such brands, and is a function of psychological processes. Griffin (1995) has defined loyalty as non-random purchase expressed over time by some decision-making unit. He saw that the customer has a specific bias about what and from whom to buy, while the term decision-making unit indicates that the decision to purchase may be made by more than one person.

3.4.2 Loyalty Approaches

Dick and Basu (1994) suggest that loyalty could be classified into the two approaches of 'behavioural approach' and 'attitudinal approach'.

3.4.2.1 Behavioural Approach

A review of the literature indicates that much of the initial research emphasised the behavioural dimension of loyalty (Caruana, 2002). With this approach, loyalty is inferred from customers' observed purchase behaviour, primarily repeat purchase. In other words, loyalty is synonymous with repeat patronage (Pedersen and Nysveen, 2001). In the same vein, Drake *et al.* (1998) have stated that behavioural loyalty is the purchase behaviour actually displayed by the customer. However, this approach has been criticised. Customers may return to a particular organisation (repeat purchasing or visiting sequence) for many reasons, ranging from a lack of available alternatives / non-availability, lack of provider preference and convenience to price / location (Bloemer *et al.,* 1998). Furthermore, Dick and Basu (1994) have pointed out that the behavioural approach is insufficient to explain how and why loyalty is developed and maintained. Hence, it is important to know and understand the attitudinal factors underlying repeat purchase. Considering that there are a number of different reasons why a customer may return to an organisation, it would seen that there are differing types of loyalty. Dick and Basu (1994) assert that attitude is a key element of customer loyalty, and they developed an integrated framework to illustrate the different types of loyalty (Figure 3:6) that consumers can demonstrate in relation to the level of attitude that they hold with regard to a product or service.

Figure 3:6: The four types of loyalty

Relative attitude	Repeat Purchase: High	Repeat Purchase: Low
High	Loyalty	Latent Loyalty
Low	Spurious Loyalty	No Loyalty

Source: Dick and Basu (1994)

The framework suggests that the higher the level of attitude a customer possesses regarding a product or service, the higher the chances of a repeat purchase and, therefore, loyalty. However, as the framework indicates, there are several types of loyalty that a customer can demonstrate which can result from many different situations, as follows:

3.4.2.1.1 Latent loyalty

This type occurs when a consumer has a high relative attitude towards the company or brand, but this is not evident in terms of their purchase behaviour. This is probably as a result of situational influences such as inconvenient store locations, out-of-stock situations, and / or the influence of other people. If a customer values a particular brand or product, which is not accessible, this will make the level of repeat purchases low. In this case the customer may not purchase the brand or product still consider it to be good value.

3.4.2.1.2 Spurious loyalty

This type of loyalty is very similar to the concept of inertia. In such cases, repeat purchase may be based on the availability of deals, special offers, convenience or the

influence of other people. Beerli *et al.* (2004:255) have pointed out that inertia means "the customer is buying the same brand, not because of true brand loyalty, but because it is not worth the time and trouble to search for an alternative". A customer displays loyalty to a brand or product due to limited access to alternatives and may not value that particular brand or product highly at all. In other words, non-attitudinal, situational factors are the primary reason for buying (Griffin, 1995). On the other hand, another type is classified in this column; Jenkinson (1996) has stated that true loyalty is not easy and not always attainable, since about 90-95% of loyalty behaviour may be passive loyalty, i.e. unstable and apathetic.

McGoldrick and Andre (1997) determined from the Dick and Basu (1994) framework that loyalty could be the result of several factors such as laziness, habit, convenience and time saving. However, highlighting the importance of identifying the different types of loyalty that customers are displaying, and targeting their reasons for being loyal is very crucial. For example, a customer who is loyal due to convenience may value the offer in terms of having the ability to shop 24 hours in comparison to the consumer who is 'loyal' due to time constraints and values the ability to process her / his dry cleaning while shopping.

3.4.2.2 Attitudinal Approach

In this approach, Pedersen and Nysveen (2001) have stressed that loyalty is 'inferred from the customer's attitude and behavioural intention toward the attitude object'. Drake *et al.* (1998) pointed out that an attitudinal loyalty represents the individual's feeling towards the company, which may or may not be translated into purchase behaviour, depending on factors such as cost, alternatives and convenience. They also added that this approach is an important construct as customers with more favourable attitudes are more likely to stay loyal in the long term. In this context, Oliver (1997) has mentioned that loyalty has cognitive, affective and conative (intentional) elements.

3.4.2.2.1 Cognitive Loyalty

This type is based upon the product / service information available to the customer. For example, if one bank offers higher savings account rates than other banks, cognitive loyal customers may continue to use the bank as long as it offers the highest interest rates (Oliver, 1997). This is not a strong form of loyalty, because another bank offers higher savings account rates, the customers will change bank (Pedersen and Nysveen, 2001).

3.4.2.2.2 Affective Loyalty

This type is based on customers' feelings toward, and commitment to, a product or service. This means that the customers have an attachment to the product / service that is based on more than cognition (Pedersen and Nysveen, 2001). Affective loyalty is a function of the customers' affects based attitudes to a product / service. Oliver (1997) has stated that if customers have positive attitudes to the product / service, they will develop an affective loyalty to it. Affect is more deeply encoded in the customer's mind than cognition, which is more subject to counter-arguments.

3.4.2.2.3 Conative Loyalty

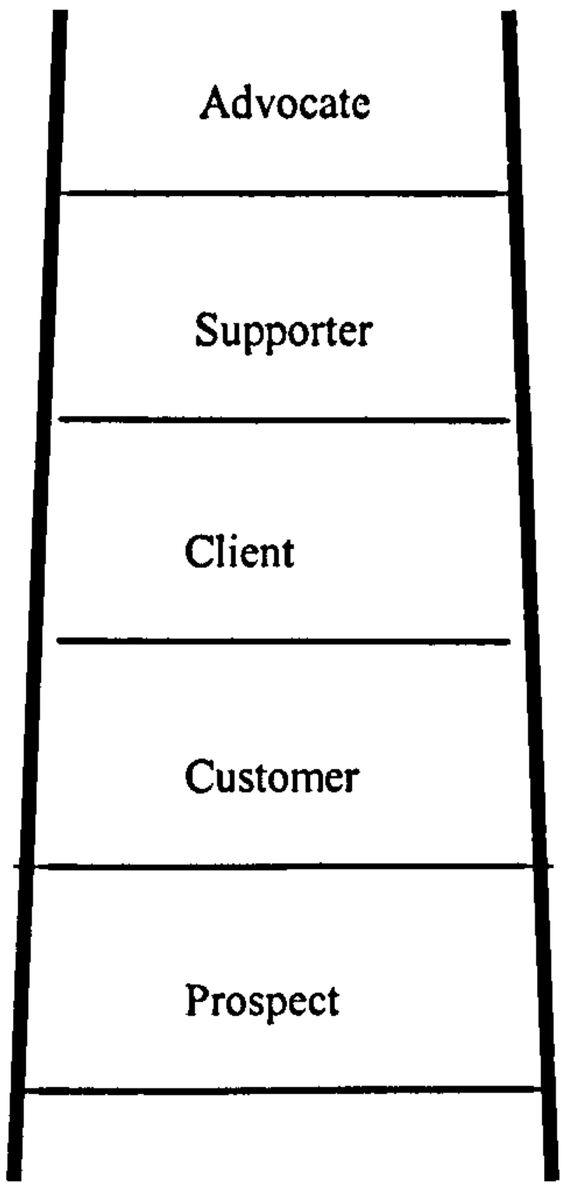
This type of loyalty has been defined as the customer's behavioural intention to keep on using a product / service in the future. Although customers are affectively loyal to a product / service, they may not buy / use the same product / service again (Pedersen and Nysveen, 2001). Generally speaking, Pedersen and Nysveen (2001) have argued that cognitive loyalty is a weak form of loyalty. At the same time, conative loyalty is assumed to be a stronger predictor of behavioural loyalty than both cognitive and affective loyalty.

According to O'Malley (1998), neither attitudinal nor behavioural measures are sufficient to explain or define loyalty. Hence, O'Malley has used customer satisfaction as a measure of loyalty; she justifies this because satisfaction affects buying intention in

a positive way. In other words, satisfied customers will remain loyal, while dissatisfied customers will defect.

Christopher *et al.* (1991) on the other hand, present a different five stage model, which they term 'a ladder of customer loyalty'. They state that the company must improve its relationship with its customers by turning new customers into regularly purchasing clients, and then to progressively move them through being strong supporters of the company and its products and services, to finally being active and vocal advocates for the company. Figure 3:7 shows the ladder of customer loyalty.

Figure 3:7: Ladder of customer loyalty



Source: Christopher *et al.* (1991:22)

Christopher *et al.* (1991) argue that the importance of advocates not only stems from the fact that they are very loyal long-term purchasers, but also because they influence others through positive word-of-mouth. Christopher *et al.*, mention that to achieve the transition from customer to advocate, this augmentation should aim at taking them beyond mere 'customer satisfaction' to 'customer delight' by delivering products or services that exceed expectations. As mentioned earlier, McDougall and Levesque

(1994) have stated that exceptional quality leads to high satisfaction and customer delight. In this context, the term 'customer delight' has been used to describe quality going beyond the expected (Christopher *et al.*, 1991).

However, moving customers up the ladder is not a simple task, which is one reason why loyalty is a difficult concept to define and, therefore, understand. The inability to understand customers and to secure loyalty as a result makes it exceedingly difficult for marketers to develop appropriate loyalty schemes to encourage a larger and arguably more profitable core customer base (i.e. advocates).

Nevertheless, marketers who succeed in gaining knowledge of their consumers' attitudes will hold the key to achieving the elusive loyalty due to having the ability to provide the particular needs of each group of customers. Customer attitudes can be established through the introduction of a loyalty scheme that can provide service providers with vital purchasing information, which they can utilise to produce a more tailored offer for each target customer group. The belief is that loyalty schemes enable the retention of existing customers, which is cheaper and more effective than trying to create new customers or win them from the competition. Loyalty schemes provide service providers with a chance to collect customer data and tailor their offer to suit and thus create a closer relationship with consumers (Byrom, 2001). It has widely been assumed that loyalty is derived from satisfaction; however, research has established that many instances of customers professing satisfaction do not repeat buy (Jenkinson, 1996). Jenkinson (1996) believes that to understand how loyalty affects the decision-making process three inner responses need to be considered, thinking (thoughts, cognition, intellect, sensing); feeling (affects, judgements); and willing (intentions, commitments, behaviour, action), the principle being that actions first generate experiences as feelings, and then the individual thinks about them. Thus, an individual has to experience before feelings regarding the experience can be considered. Therefore, if the customers have positive feelings towards a product / service, the chance of creating loyalty is greater.

Generally speaking, Zeithaml *et al.* (1996) have stated that loyalty contains five favourable intentions items namely: saying positive thing about the company;

recommending the company to someone who seeks advice; encouraging friends and relatives to do business with the company; considering the company the first choice from which to buy services, and doing more business with the company in the next few years. It is worth noting, that these items have been recommended in measuring customer loyalty by many researchers (e.g. Bloemer *et al.*, 1999; Pedersen and Nysveen, 2001; Dean, 2002). According to the above discussion, these items have been applied in this study in order to test customer loyalty towards their banks (See Appendix 1).

To sum up, from the literature there is a clear consensus that the main aim for banks is success in their market (Lassar *et al.*, 2000). In other words, banks have not only to create and build closer relationships with their customers, but also 'durable' relationships loyalty (Yavas *et al.*, 2004). This goal can be achieved through the collection and management of customer databases, developing personal relationships with the customers and tying in customers to the company through long-term commitments or guarantees (Baron and Harris, 2003). Baron and Harris, however, pointed out that banks for instance, can build a personal relationship with their customers, making switching more costly, and increasing long-term commitments through favourable loan packages for several years. Byrom (2001) suggests that simply gaining the information will not create loyal customers. Rather it is the ability to utilise the information gained towards providing a more attractive offer for the target customer, that is important, and the analysis of loyalty data is not easy.

3.5 Summary

The main purpose of this chapter has been to provide a background to customer service in the banking industry. This chapter has been divided into five sections. It began with a discussion on definitions of 'quality' and characteristics of services. Service quality gaps have been reviewed in this chapter (customer gap and four provider gaps). The next stage was to identify the service quality dimensions (empathy, tangibles, assurance, reliability, and responsiveness). More attention has been paid to the SERVQUAL scale in terms of its features in measuring service quality. It has been shown that measuring service quality seems to pose difficulties for service providers because of the unique features of service.

The second major issue discussed in this chapter was customer satisfaction. The definition and the types of customer satisfaction have been debated in more detail, and also the relationship between customer satisfaction and service quality has been considered.

It has been demonstrated that loyalty is a direct result of customer satisfaction and service quality. The definition of loyalty has been reported. Loyalty has been classified into two approaches 'behavioural approach' and 'attitudinal approach'. In this context it has been mentioned that loyalty can be cognitive, affective or conative. Conative loyalty has been described as the strongest behavioural loyalty, while cognitive loyalty is weakest form. The chapter ends with a discussion on the scale that is used to measure customer loyalty. In the next chapter, the researcher will present the general background to the environment in which the empirical work will be conducted, that is Jordan.

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CHAPTER 4

The Hashemite Kingdom of Jordan (Jordan) Profile

CHAPTER 4 : THE HASHEMITE KINGDOM OF JORDAN

4.1 Introduction

This chapter has been divided into two main sections. In section 4.2 the brief background information aims to familiarise the reader with Jordan. This section includes facts relevant to Jordan's history, political system, demographic, and investment climate. The rationale for choosing Jordan for this study emerges. Section 4.3 provides an overview of the structure of the banking system in Jordan, which includes a discussion of the Central Bank of Jordan (CBJ) and nine banks that have been investigated in this study. Finally, this chapter concludes with section 4.4 which gives a summary.

4.2 Jordan Profile

4.2.1 Historical Background

Many civilisations have sought to control the strategic area now known as Jordan, and parts of the country have at one time or another been under the dominion of the Sumerian, Mesopotamian, and a host of other empires, eventually falling under the rule of the Greek, Roman and Persian classical civilisations.

Since the 7th century, Jordan has been ruled by various Arab and Islamic dynasties, the last being the Ottoman Empire (1516-1918). Jordan was established in 1921 and was known as the Emirate of Trans-Jordan. What was in 1920 called Trans-Jordan was placed under British Mandate by the League of Nations. After the Second World War, the British granted the state independence on May 25, 1945 and Amir Abdullah became King of Jordan. The British Mandate expired in 1946, and since that time Trans-Jordan, now called the Hashemite Kingdom of Jordan (HKJ), has been governed as a constitutional monarchy.

4.2.2 The Political System

The Hashemite Kingdom of Jordan has a monarchical political system, ruled since 1952 by His Majesty King Hussein, with ultimate authority vested in the King. In Jordan, executive power is vested in the Council of Ministers which is appointed by the King, and which is accountable to the two house of parliament (Majlis al-Umma). The Upper House, the house of 'Al Ayan' (notables) of 55 members are appointed by the King, and the Lower House, the house of 'Al Nwab' (representatives) of 110 members are elected by popular vote.

With the passing of King Hussein in February of 1999, the King's eldest son, His Majesty King Abdullah, ascended the throne. Constitutional provisions define the rights and duties of Jordanian citizens, while guaranteeing the right of free worship, opinion, press, association and private property.

Since 1989 all elements of the Jordanian political spectrum have demonstrated commitment to increased democracy, liberalisation and consensus building. These reforms, which have been guided by the late King Hussein, have placed Jordan on an irreversible path toward democratisation. The result has been greater empowerment and involvement of everyday citizens in Jordan's civic life, contributing to increased stability and institutionalisation, which will benefit the county far into the future.

The King controls foreign policy and general political direction, and can influence domestic politics through extra-constitutional measures. The remarkably stable political and social climate that Jordan has enjoyed for decades under the Hashemite Dynasty continues to thrive under His Majesty King Abdullah's leadership. The new king has undertaken his father's legacy of reform, committing his country to the goals of privatisation, economic liberalisation, and modernisation of the law.

4.2.3 Geographic, Demographic and Social Features

Jordan has a strategic position at the convergence of Europe, Asia and Africa. Jordan's area is 89.3 thousand square kilometres, situated between latitudes 29 and 33 north and longitude 34 and 39 east. The Jordanian population was estimated at 5.3 million in 2002,

and it increased by an average of 2.8% per year (Department of Statistics, 2003). Islam is the religion of the majority and has an influence on social relations and social organisations. The family plays an important role in the social system and the relationships between the individuals and the tribe. Arabic is the national language, the language of communications, literature and education. Education has expanded substantially during the last few decades in Jordan and so has the literacy rate, which is estimated at approximately 90% for those aged 15 and above, representing one of the highest in Arab countries (Department of Statistics, 2003).

4.2.4 The Investment Climate in Jordan, and Technology

Jordan has dedicated itself to building up its economy over the last two decades. Jordan's economy suffered immensely when the aid it was promised from certain countries did not materialise and it had to repay the debts from the programmes it had already started, and also from the sanctions imposed on Iraq, a major trading partner. Jordan has established itself as a model developing country. Its success has caused the international community to be very responsive (Ministry of Planning and International Co-operation, 2003), and as a result, Jordan has many foreign investors. It has free trade with the EU and with many Arab countries, and its Qualifying Industrial Zones (QIZ) allow free trade into the USA and Far East, thereby creating tremendous opportunities for investment in Jordan. It has taken very important steps towards building its economy and continues to advance. Jordan is very eager to establish good relations with all countries, a policy which was initiated by King Hussein and which King Abdullah plans to continue (CBJ-Annual Report, 2003).

The investment climate in Jordan is very appealing to investors and provides many incentives. In 1995, the Investment Promotion Law (IPL) was passed, opening the economy to business and investment and hence to the creation of wealth. The IPL offers generous and attractive incentives to domestic and international investors. These include freedom from customs and duties, tax income exemptions, and unrestricted transfer of capital and profits. Under this law, both Jordanian and non-Jordanian investors are treated equally.

With regard to Internet infrastructure development, Jordan does not position itself among the leaders in this particular area worldwide. For instance, Jordan scores 1.4, whereas the United States scores 2,925.3, for Internet hosts per 10,000 inhabitants. Regarding telephone lines per 100 inhabitants, Jordan scores 9.3, where Denmark scores 75.3. On personal computer per 100 inhabitants, Jordan scores 1.4, whereas Sweden scores 50.7 (Ministry of Planning and International Co-operation, 2003).

4.2.5 Economic System and Developments

Despite unfavourable regional and international conditions, the Jordanian economy proved to be resilient during 2002, achieving its best growth performance for some years. The currency is the Jordan Dinar (JD), which equals US$ 1.41. The gross domestic product (GDP) in 2002 is estimated at JD 6259 / US$ 8828 million (CBJ-Monthly Statistical Bulletin, 2003). The economy achieved a real growth rate of 3.9%, compared to 3.1% in 2000. The inflation rate was kept below 1% in 2000; the external debt outstanding declined considerably from 90.6% of GDP in 2000 to 81.1% in 2002 (CBJ-Annual Report, 2003). In spite of these indicators, the regional conditions (the Iraq issue and the circumstances in the West Bank) continued to adversely affect economic growth, and the problems of poverty, unemployment and the external debt burden still represent major challenges for the economy (CBJ-Monthly Statistical Bulletin, 2003). Moreover, in the year 2000, Jordan concluded a number of Arab and international agreements as follows: the agreement on Jordan's Accession to the World Trade Organisation (WTO). Jordan was the 136th country allowed into the WTO on April 11, 2000; the Free Trade Agreement with the United States; the Free Trade Area Agreement with the United Arab Emirates (UAE) in May 2000 (CBJ-Annual Report, 2003).

In addition, Jordan has a mixed economy with the private sector at the level of small manufacturing concerns, and the state owning the large industrial and extractive enterprises (Shaheen, 1997). From the above discussion and for the following reasons, Jordan has been chosen to conduct this study:

- Jordan is viewed as one of the major players in the economic and political stability of the Middle East region (CBJ-Annual Report, 2003; Naser, 1998a);

- Jordan has adopted a liberal economic policy attracting Arab / non Arab investors from different countries (CBJ-Annual Report, 2003; Naser *et al.*, 1999);

- Jordan runs one of the more active stock exchanges in the region (Emerging Jordan 2003, 2003; Naser, 1998b); and

- A large number of studies have been conducted in developed countries, and the need to conduct research in the context of developing countries is obvious (Al-Shaikh and Al-Shammari, 1995; Al Khatib and Gharaibeh, 1998).

4.3 Banking Industry

Banking in Jordan has always been a predominantly private sector activity. There are now 21 private banks operating, including nine commercial banks, five investment banks, two Islamic banks and five branches of foreign banks, with a total of 471 branches between them (Emerging Jordan 2003, 2003). The banking system in Jordan plays an important role in the economy, industry and social life. The beginning of the banking industry goes back to 1925, when the first bank to start operating in Trans-Jordan was the Ottoman Bank (Turkish), which opened a branch in Amman, the capital of Jordan (Al Khatib and Gharaibeh, 1998). In 1964 the Central Bank of Jordan was established and started regulating banking activities, including the promulgation of relevant laws (Hendi and Jasser, 1982). The substantial majority of the commercial banks in Jordan were established at the end of 1960s and in 1970s / 1980s following the oil boom in the Arab Gulf States, which had a positive impact on the Jordanian economy. This was reflected in the financial aid from these states and Jordanian migrants' remittances. Furthermore, the civil war (1974 - 1990) in Lebanon led to the transfer of many economic activities including banking from Lebanon to Jordan (Al-Rasheed, 1994). The following section will give a brief background to and discuss the evolution of Jordanian banking system.

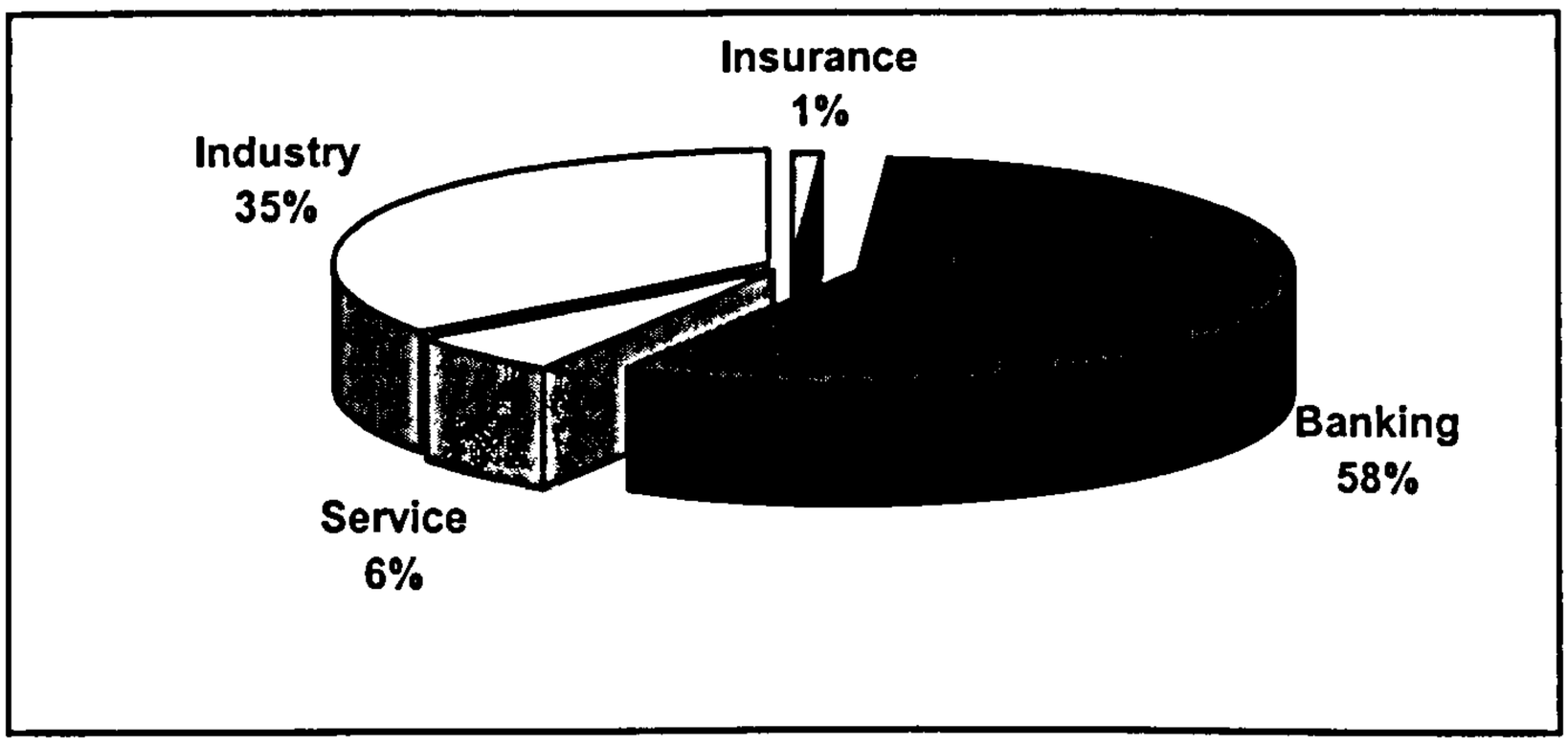
4.3.1 Evolution of the Jordanian Banking and Financial System

As stated above, the establishment of a branch of the Ottomani Bank in 1925 in Amman marked the beginning of banking activity in Jordan. In 1934 the Arab Bank Branch was inaugurated in Amman. In 1948 the Arab Bank moved its main office from Palestine to Amman, thus becoming the nucleus of the local commercial banks in Jordan (CBJ-Annual Report, 2003). In 1949, the London-based British Bank for the Middle East opened a branch in Amman. In 1956 the National Bank of Jordan was established by a group of businessmen. In 1957, Rafidain and Riyadh banks were established, and other non-Jordanian banks, the Arab Estate Bank in 1951, and the Intra Bank of Lebanon in 1958. In 1960, three banks were registered in Jordan, namely, the Bank of Jordan, the Cairo-Amman Bank as two national commercial banks, and the Beirut and Arab

Countries Bank. In October 1964, the Central Bank of Jordan started its activities. In 1989, the Jordanian stock-exchange company was transferred into a commercial bank bearing the name Arab Banking Establishment. In the same year, a new national commercial bank was established under the name Jordan Bank for Finance and Investment. In 1990, a new investment bank was established under the name Amman Bank for Investment and Finance. In the same year the National Islamic Bank was established. In 1991, the National Company for Financial Investment was transferred into a commercial bank by and named the Action Bank; this was then merged with the National Bank. In 1993, two new investment banks were established, namely: the Bank of Philadelphia and the Middle East Bank. In 1996, another commercial bank entitled the Exports and Finance Bank was established. In 1997, the Islamic International Arab Bank was established with 97% of the capital owned by the Arab Bank (CBJ-Annual Report, 2003).

Figure 4:1 shows that banks form the biggest percentage in the Amman Stock Exchange (ASE) in comparison to other sectors. This suggests that the banking sector plays an important role in Jordan's economy, as already mentioned.

Figure 4:1: Distribution of value traded at the ASE by sector 2002



Source: Amman Stock Exchange (2002)

4.3.2 Central Bank of Jordan (CBJ)

Jordan set out preparations to establish the CBJ in the late 1950s. The law enabling its creation was enacted in 1959. Its operational procedures were commenced on the first day of October 1964 (CBJ-Annual Report, 2003). There are many objectives and functions of the CBJ. These are: issuing and regulating bank notes and coins; maintaining and managing the Kingdom's reserves of gold and foreign exchange; acting as a banker and fiscal agent to the government and public institutions; acting as a banker to banks and specialised credit institutions; maintaining the safety of banking system; advising the government on the formulation and implementation of fiscal and economic policies; managing monetary problems and participating in containing local economic problems; regulating credit . In addition to the above-mentioned functions, the CBJ has effectively participated in the establishment of a number of financial institutions and corporations, such as the ASE, Jordan Mortgage Refinance Company, Jordan Loan Guarantee Corporation, Deposit Insurance Corporation, all of which have played an important role in supporting economic development efforts in Jordan (CBJ-Annual Report, 2003).

4.3.3 Banks Under Investigation

4.3.3.1 Arab Bank

As mentioned earlier, the Arab Bank was founded in 1930 in Jerusalem. Following the 1948 Israeli occupation, the Arab Bank moved its main office to Amman. The Arab Bank's focus is more on its increasingly global network, rather than on the local market, and over 80% of its business is outside the country (Emerging Jordan 2003, 2003). Today, the Arab Bank has emerged as one of the largest banks in the Arab World. In spite of the nationalisation of many of its branches in the Arab world, the bank's global network has grown to exceed 400 branches and offices on five continents. It is one of the principal financial institutions in the Arab World and ranks among the leading international banks in terms of equity, earnings and assets (Arab Bank Group - Annual Report, 2003). In 1997 the Arab Bank took over the licence of the failed Amman Bank

for Investment and launched the Arab International Islamic Bank (AIIB). AIIB is still small, but it has benefited from its connection with its parent bank and, in 2001, it extended 2.3% of total credits granted by the commercial banks and was eighth in the profits table, with 2.9% of net profits (Emerging Jordan 2003, 2003).

The Arab Bank is considered a pioneer in the adoption of advanced banking methods through the introduction of modern technology to carry out its operations with speed and accuracy, being among the first Arab banks to introduce IT in its operations. Today, the Bank offers many automated services such as Internet banking, ATMs, phone banking and voice mail, Visa cards and the local National Express card, corporate banking and electronic signature verification system. New branches were connected to the Arab Bank telex and swift networks. All these services were introduced by the Bank to provide a quality service to customers. The Bank has continued to employ the latest IT to improve its services, and Internet users can now connect to Arab Bank's website www.arabbank.com and obtain various kinds of information.

4.3.3.2 The Housing Bank for Trade and Finance (HBTF)

The HBTF was founded in 1974 to provide housing finance. In the first quarter of 1997, a law cancelling the Housing Bank Law No. 4/1974 was issued, under which the Bank is now practising all the banking operations undertaken by the commercial banks according to the Jordanian Bank and Corporate Laws (Banks and Finance Institutions Directory in Jordan, 1998). Since then, HBTF has boosted its capital to JD 100 million, equivalent to US$ 141 million. It is ranked first among Jordanian banks in terms of capital and geographic expansion (number of branches and ATMs). It is also the largest bank in Jordan in terms of assets (HBTF - Annual Report, 2002).

The Bank has realised the importance of modern technology in updating customers' services and providing the necessary flexibility, which would enable it to counter competition through rendering new services at an appropriate time and place. It started using computers in early 1980s, and set up IT base by founding a main computer centre that maintains a central database for all its customers. It also linked its branches, throughout Jordan to this centre through the present developed network of

communications, which enables it to deal with any modern data communication network in Jordan.

By this technological development, HBTF is able to provide many local and developed automated services including phone banking, Internet banking, ATMs and home banking which are rendered daily online around the clock. In terms of ATMs, the HBTF has the largest ATMs network among Jordanian banks (150 machines) (HBTF-Annual Report, 2002).

4.3.3.3 The Jordan National Bank (JNB)

The JNB was one of the earliest national banks to be established in Jordan in 1956. JNB is the first and only bank in Jordan to own and manage a comprehensive card-processing centre, issuing and acquiring MasterCard cards in Jordan. The centre operates 24 hours a day, 7 days a week and processes daily all transactions initiated by more than 15,000 cardholders and 3,000 merchants. Additionally, the centre is equipped to manage the settlement and reconciliation process of all local and overseas transactions. JNB has started implementing an automation project that enables online real time and inter-branch transactions, accompanied with a network of ATMs with phone and mobile banking services to its retail and corporate customers. The bank is the first and only bank in Jordan to provide door delivery 'speed cash remittances' from other countries (e.g. Saudi Arabia) to Jordan. Further, JNB is the main agent of Thomas Cook Travellers Cheques in Jordan (Jordan National Bank, 2002).

4.3.3.4 The Bank of Jordan (BOJ)

The BOJ was founded in Jordan in 1960 under commercial registration No. 13 with an authorised capital of 21 million JD. The BOJ branch network reaches a total of 76 branches and offices covering different areas in Jordan and Palestine. In addition, the ATMs network offers services to the customers throughout Jordan (Bank of Jordan, 2002).

4.3.3.5 The Jordan Kuwait Bank (JKB)

JKB was established in 1976 as a joint investment by Jordanian and Kuwaiti investors. The Bank has emerged as one of the most active players in the banking market and has been amply rewarded with improving operating and net profit levels over the past few years. Its net income was up 45% in 2001, following a 61% rise in 2000 (Emerging Jordan 2003, 2003).

JKB had to invest heavily in modern computer equipment and the latest technology of the time is used such as: online stock trading time inter-branch communications, banking via ATMs, phone, Internet banking and Mobile banking. The Bank's network consists of 30 branches located throughout Jordan.

4.3.3.6 The Cairo Amman Bank

A Jordanian Public Shareholding (limited) company established in Jordan on January 14, 1960, the Cairo Amman Bank offers its services through a network of 26 branches in Jordan, and 37 offices and branches outside Jordan.

4.3.3.7 The Jordan Islamic Bank for Finance and Investment

Jordan has a small but generally profitable Islamic banking sector. The main mission of Islamic banks is the achievement of social and economic development through the delivery of financial services in line with the principles and teaching of Islam (Metawa and Almossawi, 1998). The Jordan Islamic Bank for Finance and Investment was established as a public shareholding company on 28th November 1978, and was licensed to practise financing, banking and investment activities in compliance with the provisions of the Islamic Shari'a in accordance with the special law by which the Bank was established on 3rd March 1979. The Jordan Islamic Bank was one of the first in the Arab World, and since its establishment it has succeeded in maintaining its growth momentum and in establishing itself as one of the leading banks in Jordan by providing all kinds of banking and investment services to its clients in accordance with the provisions of Islamic Shari'a, which applies a concept of economy different from the

conventional one, especially with respect to the role of money. The bank ranks third (after the Arab Bank and the HBTF) in terms of assets and market capitalisation (Naser *et al.*, 1999). However, it is useful to give an idea about the nature of its financial and investment activities. The bank performs all sorts of financing and investment activities organised on non-usurious basis, which include:

- *Modaraba*: Modaraba is partnership in profit. It is an agreement (contract) to form a partnership between two parties; one (i.e. the bank) provides capital and the other (i.e. the customer) provides her / his skills, time and efforts. The party which provides capital is called 'rabulmal or financier' and the second party who manages the partnership is called 'Modareb'. The Modareb is an entrepreneur, who while processing expertise and management skills, brings a capital to the partnership and is in full charge of the day-to-day running of the venture. This agreement is a partnership in profits because capital and properties of the joint venture remain the ownership of the financier. The partners agree beforehand on the profit distribution between them noting that the Modaraba has a claim on profits only and does not share in the losses resulting in the normal course of business, provided no negligence or bad faith is occurred from his side.

- *Musharaka (Participation)*: Musharaka is a partnership between two or more parties provided that the Islamic bank is one of them. This mode of investment as applied by Islamic banks entails that each party i.e. the Islamic bank and the other partner(s) pay a percentage of the Musharaka capital. Profit and loss is shared proportionally according to the contribution of each party to the capital. However, efforts and skills of the managing partner are equated in the distribution of profits as agreed by the partners. The Musharaka work of financing can be permanent and can be redeemable. It may be used to finance trade, industry, real estate development etc.

- *Murabahah*: Murabahah is a mark-up sale, whereby the bank, at the request of its clients, acts as a buyer from a supplier / producer and then sells on instalments to clients that which was bought. The selling price includes the

actual cost of the goods plus a given (predetermined) profit margin. The client pays back to the bank on a future date or on instalments.

- *Direct investment*: the bank carries out direct investment activities such as purchasing real estate, etc. either for the purpose of selling at a profit or for the purpose of leasing.

In addition, the bank carries out, whether for its own account or for the account of others, such traditional or modern banking activities, as it is able to undertake within the limits of its commitment, including:

- Accepting deposits and opening of current and other accounts of various types as mentioned earlier, payment and clearance of cheques; collection of bills of exchange; transfer of funds; opening of documentary credits; issuing of bank guarantees and all other banking services in compliance with the principles of Islamic Shari'a;

- Dealing in the purchase and sale of foreign currencies on the basis of spot rates only. It is permissible in this regard to undertake mutual lending in various currencies without interest as may be required; and

- Giving interest-free loans (Al-Qirdh Al Hassan) for social purposes, as a service.

4.3.3.8 The Egyptian Arab Land Bank

The Arab Land Bank was established in1947 by virtue of a unanimous decision of the Arab League for practising business in Palestine with a view to assisting the people of Palestine and maintaining their land in the face of a 'Zionistic scheme' aimed at taking this over. On 1/9/1947, the bank was registered as an Egyptian shareholding company with its main office in Cairo. This was directly followed by the registration of the company in Palestine, but the disturbances and 1948 War made the continuation of the Bank's activities impossible. Once the situation was stable, the company was re-registered in accordance with the Jordanian laws in force at the time. It commenced its

business in two branches in the Hashemite Kingdom of Jordan. At present the bank has 20 branches throughout Jordanian territories.

4.3.3.9 The Standard Chartered Grindlays Bank

The Bank was established in the Jordan in 1925 as the Ottoman Bank, and was the first bank to open a branch in Jordan. In 1969 the Ottoman Bank was merged with the National and Grindlays Bank and its name was changed to Grindlays Bank. In 1984 the Bank became part of the Australia New Zealand Banking Group under the name of ANZ Grindlays bank. It has 12 branches throughout Jordan. ANZ Grindlays bank is a leading international bank operating in Jordan (Banks and Finance Institutions Directory in Jordan, 1998).

Generally speaking, Jordan has signed many trade agreements and it has joined the WTO. This has resulted in turning Jordan into a desired area for other banks to enter into competition with the Jordanian banks. Jawad (1985) has stated that the Jordanian banking system is generally healthy, adjusting smoothly to new market conditions. Hence, there are many reasons behind choosing the banking sector among others in Jordan, which can be summarised as follow:

- The importance of service industries in the Jordanian economy. The Jordanian economy is known as a service-oriented economy (Semadi, 1986, cited in Al Rasheed, 1994);

- Banking is one of the economy's most active and sophisticated sectors. Also, it is the most important developed and updated sector, which plays a significant role in the Jordanian economy;

- Banking sector offers an opportunity to more easily reach customers because banking services are widely used and most people have used bank services at some points;

- Jordan has a small economic base but high bank competition. Reasons for this include a healthy open economy with deregulation, an increased banking

education level among ordinary people, and a high level of cash in the economy (Shaheen, 1997);

- Banks are considered as the main source of credit in the Jordanian market due to the absence of competition from other institutions or lenders (Akel, 2000);
- Many other economic activities depend in their performance on the banking sector interims of loans, credit facilities, and local and foreign financing; and
- Many studies have indicated that the banking sector is a leader in using IT (e.g. Porter and Millar, 1985).

4.3.4 Banks and Technology

A new electronic transactions law of December 2001 was the first effort to facilitate electronic dealings. This made electronic contracts, record keeping and digital signatures legally binding, protected the privacy of electronic messages, made data messages admissible in court and criminalised the misuse of the electronic network (Emerging Jordan 2003, 2003). Jordanians are taking to plastic in growing numbers and virtually all banks are involved. Jordan has a comprehensive network of over 550 ATMs and by the end of June 2002, Visa, which has 85 – 90% of the market, reported 41500 charge cards and 514,100 Visa Electron debit cards in circulation. Activity at JD 25.25 million within Jordan and JD 14.75 million abroad, was modest but PoS and ATM networks are both growing steadily and the banks are now marketing cards energetically (Ministry of Planning and International Co-operation, 2003).

The same energy has not been shown with other electronic services. While Jordan's banks have been quite efficient in computerising their own activities only a few pioneers have moved into Internet and other IT-related services for customers. The Arab Bank was the first to introduce ATMs in Jordan and also offers automated corporate services, phone banking and a fully automated and unmanned branch, while the HBTF was the first to offer Internet banking (Emerging Jordan 2003, 2003).

4.4 Summary

The main purpose of this chapter was to provide the general information about Jordan, in terms of its history, political system, investment climate and banking sector. Many reasons have been given for choosing Jordan as a country and banking sector to study, among others.

Reviewing the banking industry in Jordan, it has been noted that a substantial majority of the commercial banks in Jordan were established during the 1970s following the oil boom in the Arab Gulf States, which had a positive impact on the Jordanian economy. Jordanian, as well as foreign banks operating in Jordan are relatively small even on a regional level with two exceptions: the Arab Bank and Housing Bank for Trade and Commerce. The Islamic Bank is characterised by a special activities, namely compliance with the Islamic Shari'a.

Finally, from this chapter it can be seen that this study concentrates on nine banks which include six Jordanian conventional banks (Arab Bank, Jordan National Bank, Bank of Jordan, Cairo Amman Bank, Housing Bank for Trade and Finance, Jordan Kuwait Bank), one Islamic bank (Jordanian Islamic Bank for Finance and Investment), and two foreign banks, divided into one Arab bank (Egyptian Arab Land Bank), and a Western bank (Standard Chartered Grindlays Bank). These banks represent the major part of the Jordanian banking sector in terms of the number of branches in Jordan (359 branches - 76% of the total number of branches).

The next chapter will be dedicated to a discussion of the research methodology that has been applied in this study.

CHAPTER 5

RESEARCH METHODOLOGY

CHAPTER 5 : RESEARCH METHODOLOGY

5.1 Introduction

Research methodology refers to the procedures of collecting, organising and integrating data in order to solve a problem or answer a question. It is sometimes 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.*, 1998:27). Although research methodology design is considered a very complicated task, it gives the researcher the ability to understand his or her research area, communication skills, and the ability 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 *et al.* (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, strategy, time restrictions and the data collection methods. The following section (5.2) discusses the first stage, which is the philosophy of the research. It is followed by section 5.3, which provides a detailed discussion of the research strategy. Section 5.4 deals with the research instruments and data collection methods. Section 5.5 provides a detailed description of the techniques of statistical analyses and hypotheses testing. This section is followed by section 5.6, discussing the issues of validity and reliability of the research. Finally, the summary and conclusions are contained in section 5.7.

5.2 Research Philosophy

In general there are two main traditional research paradigms or philosophies, *positivism* and *phenomenology* (Collis and Hussey, 2003; Easterby-Smith *et al.*, 2002; Remenyi *et al.*, 1998). The choice of a research philosophy is critical because it has important implications in the choice of methodology and hence, methods of data collection (Collis and Hussey, 2003).

According to Easterby-Smith *et al.* (2002) the philosophy of research is very useful and very important for researchers. They have stated that there are at least three reasons for this. *Firstly*, it can help to clarify research designs. In other words, what kind of data is wanted and how to gather and interpret it, in order to reach the best answers or solutions to the research question / problem. *Secondly,* it helps the researcher to know which designs will or will not work, so aiding in an appropriate choice of methodology. *Thirdly*, it may help the researcher recognise and even generate designs, which could be outside his or her past experience.

The Positivist philosophy traditionally assumes that the researcher undertakes the role of an objective analyst, making detached interpretations about the data that has been collected. Remenyi *et al.*, (1998:33) have stated that the researcher in the positivist paradigm "is independent and neither affects, nor is affected by, the subject of the research". In the same spirit, Easterby-Smith *et al.*, (2002:28) 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 uses large samples and it employs controls to allow the testing of hypotheses and the determination of relations between variables, and it establishes the reliability and generalisability of data. The benefits of positivistic approach are cost effectiveness and speed in data collection and the ease of analysis (Remenyi *et al.*, 1998;

Easterby-Smith *et al.*, 2002; Collis and Hussey, 2003; Sekaran, 2003; Saunders *et al.*, 2003).

On the other hand, the phenomenological paradigm has emerged as a result of dissatisfaction with the application of a positivistic approach in social science. Easterby-Smith *et al.* (2002:29) argued that this philosophy "stems from the view that 'reality' is not objective and exterior, but is socially constructed and given meaning by people". In other words, 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, which means what people are thinking and feeling. It utilises qualitative data and uses small samples. In this context, Easterby-Smith *et al.* (2002:42) have stated that qualitative studies often feel very untidy because "it is harder to control their pace, progress, and end points. And there is also the problem that many people, especially policymakers, may give low credibility to studies based on apparently 'subjective' opinions".

This philosophy tries 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 not independent of what is being researched but is a part of it. At the same time, 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 (Remenyi *et al.*, 1998; Easterby-Smith *et al.*, 2002; Collis and Hussey, 2003; Saunders *et al.* 2003; Hair *et al.*, 2003). Generally speaking, there are advantages and disadvantages for each of the research philosophies. Table 5:1 shows the strengths and weaknesses of the positivist and phenomological philosophies.

Table 5:1: The strengths and weaknesses of positivist and phenomenological philosophies

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

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

There are two research *approaches* to be considered, deductive and inductive. The deductive approach is a process by which one arrives at a reasonable conclusion by consideration of known facts (Sekaran, 2003). In other words, this approach is referred to as moving from the general to the particular (Collis and Hussey, 2003). A deductive approach involves developing a theory and hypothesis (or hypotheses) and designing a research strategy to test the hypothesis (Saunders *et al.*, 2003). In inductive research,

one observes certain phenomena and on the basis of the observations one reaches certain conclusions (Sekaran, 2003). This approach involves moving from individual observation to statements of general patterns or laws; this is referred to as moving from the specific to the general (Collis and Hussey, 2003). According to Gill and Johnson (2002:43-44) "it is possible to construct a continuum of research methods that allows us to differentiate between different methods in terms of the various logics they bring to bear in conducting research. That is, we can discriminate between different methods in terms of their relative emphasis upon deduction or induction, their degree of structure, the kinds of data they generate and the forms of explanation they create".

Generally speaking, it has been argued that the 'pure' versions of the positivist and phenomenological paradigms may be quite incompatible (Easterby-Smith *et al.*, 2002). Easterby-Smith *et al.* (2002:34-35) have noted that "when one comes down to the actual research methods and techniques used by researchers the differences are by no means so clear and distinct. Moreover, some management researchers deliberately use methods which originate in different paradigms, and there is something of debate as to whether this is an acceptable strategy". In other words, there is a move amongst these researchers to develop methods and approaches which provide a middle ground and some bridging between the two extreme viewpoints (Easterby-Smith *et al.*, 2002). In the same vein, Gill and Johnson (2002) argued that any research method will adopt a position on the continuum between these two approaches according to its relative emphasis upon the characteristics of positivist and phenomenological philosophies. Although a mainly positivist approach is adopted, the study also accommodates some phenomenological perspectives. In this context, it has been taken into account the managers' perceptions regarding the dimensions of service quality, and their perceptions with regard to IT-based services.

However, as noted above this research is leaning towards the *positivist philosophy* due to the following reasons:

- The need to satisfy the research topic and objectives. This study seeks to explain causal relationships between variables (i.e. IT, service quality, customer satisfaction and customer loyalty);

- Hypotheses testing, there is a number of hypotheses were proposed and need to be tested, hence many statistical tests have been used that utilise quantitative data;

- Generalisation, the sample size of this study is quite large (See Section 5.4.4.1). In this context, Saunders *et al.* (2003:87) have stated that "in order to be able to generalise about regularities in human social behaviour it is necessary to select samples of sufficient numerical size". In the same vein, Malhotra and Birks (2003) mention that the fundamental element of positivist research is the desire to generalise findings to a target population. Most targeted populations are so large that measurements of them can only be managed through representative sample surveys;

- Resource limitation, the positivistic approach has been described as cost effective, speed in data collection (time saving) and ease of analysis; and

- Previous studies in a similar area have utilised the same quantitative methods as an appropriate way to achieve the required objectives (e.g. Al Khatib and Gharaibeh, 1998; Joseph *et al.*, 1999; Sathye, 1999; McDougall and Levesque, 2000; Abdelaziz, 2001; Jamal and Naser, 2002; Jabnoun and Al-Tamimi, 2003; Yavas *et al.*, 2004).

Collis and Hussey (2003) have classified the different types of research into the following sections. Firstly, the purpose of the research (the reason for conducting the research). Secondly, the process of the research (the way in which data will be collected and analysed). Thirdly, the logic of the research (whether the researcher is moving from the general to the specific or vice versa). Fourthly, the outcome of the research (whether the researcher is trying to solve a particular problem or make a general contribution to knowledge). Table 5:2 illustrates the classification of the main types of research according to the above criteria:

Table 5:2: Classification of main types of research

Basic of classification	Type of research
•Purpose of the research	•Exploratory, descriptive, analytical
	•Explanatory or predictive research
•Process of the research	•Quantitative or qualitative research
•Logic of the research	•Deductive or inductive research
•Outcome of the research	•Applied or basic research

Source: Collis and Hussey (2003:10)

As established in the literature and mentioned above, there are two main methods that can be utilised, these being qualitative and quantitative. While the qualitative approach tends to be associated with the phenomenologist paradigm, quantitative research tends to be linked with the positivist paradigm.

A quantitative research method generally involves numerical data, which can be quantified to help answer research questions, and normally takes the form of a questionnaire (Saunders *et al.*, 2003). Quantitative research is commonly large-scale research based on substantial samples. The data obtained from a quantitative method is usually descriptive, providing data which illustrates frequencies (Collis and Hussey, 2003).

A qualitative research method is based on methods of data generation, which are flexible and sensitive to the social context in which data are produced (Collis and

Hussey, 2003). The nature of reality is defined by the interaction of the researcher with the phenomenon under study. Qualitative research usually emphasises words rather than quantification in the collection and analysis data. Collis and Hussey (2003) summarised the main features of the two approaches in table 5:3.

Table 5:3: The main features of the quantitative and qualitative approaches

Qualitative	Quantitative
•Concerned with generating theories	•Concerned with hypothesis testing
•Uses small sample	•Uses large sample
•Data is rich and subjective	•Data is highly specific
•Reliability is low	•Reliability is high
•Validity is high	•Validity is low
•Generalises from one setting to another	•Generalise from sample to population

Source: Collis and Hussey (2003:55)

From chapter one of this thesis it can be seen that through its objectives and research question, this study tries to explain the impact of IT on customer service, which means it seeks to explain and predict by searching for laws and regularities the causal relationship between an independent variable (i.e. IT) and dependent variables (i.e. service quality, customer satisfaction and customer loyalty). This study also tries to test a number of hypotheses, in other words, it emphasises the need to formulate hypotheses for subsequent verification. The Statistical Package for the Social Sciences (SPSS) will play a major part in analysing data. Considering the above reasons and characteristics of each philosophy leads to the conclusion that this thesis tends towards the positivist framework.

5.3 Research Strategy

In researching the field of social science there are many strategies which a researcher may adopt. Remenyi *et al.* (1998:44) pointed 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 of the research interest. A number of issues have been considered in determining the optimum research strategy to satisfy the study aim and objectives as follows (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 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 collect and analyse empirical data, and therefore each one has its own advantages and disadvantages. Most of these strategies are seen as 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 is often different from the real world (Collis and Hussey, 2003). On the other hand, and because of the limitation of the researcher's time, an ethnographic approach seems 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, and will focus on a contemporary phenomenon within a real-life context. In business studies, a common case 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; it is difficult to understand the events in 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 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, 2000:222).

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 way since a large amount of data can be collected from a large number of people (big population). 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 certain amount of data from a sizable population. (See Table 5:4);
- The data collected from the survey is from a standardised questionnaire, and it is easy to make comparisons and statistical analysis; and
- It is easy for most people to understand.

The choice of a 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). Accordingly, from the above discussion, it can be seen that the survey strategy is a suitable one to satisfy the nature of this study and its aim and objectives. Using this method, a sample from a large population is chosen for the survey. As long as the sample is representative of the whole population, the findings from the survey can be generalised in order to understand more about the population.

5.4 Research Design

This section outlines the research design, describing the methods of data collection and data sources, used to compile this thesis. A number of research methods were used for undertaking the research as the following sub-sections illustrate.

5.4.1 Literature Review

A wide literature survey and a comprehensive review of the published and unpublished work from secondary sources to date (e.g. books, journals, doctoral dissertations, magazines, government publications, marketing reports, etc.) in the field of marketing in general and in service quality and banking in particular, has been carried out. This work has been completed due to the following reasons (Remenyi *et al.*, 1998; Sekaran, 2003):

- It enables the researcher to have some idea of the research methods or approaches that have been traditionally used in this area (i.e. marketing and service quality). In other words, it is very useful to any researcher to look at the previous work and experiences of other work both from the academic and practitioner literature;
- It provides the foundation for developing a comprehensive theoretical framework from which hypotheses can be developed for testing;
- It provides the researcher with a greater understanding of the research area under consideration; and
- It demonstrates the need for the research by identifying gaps in knowledge which are in the public domain.

5.4.2 Document Analysis

Miles and Huberman (1984) state that document analysis is an important technique for collecting data. This technique could be applied to written documents (e.g. Central Bank

of Jordan Annual Reports, Amman Stock Exchange Annual and Monthly reports and banks' annual reports, etc.), and also non-written documents (pictures, figures, charts, etc.).

5.4.3 Pilot Study

Oppenheim (1992) argues that every aspect of the research survey should be piloted in order to make sure that it works as intended. A pilot study was conducted in June 2003, by interviewing ten managers / staff within the banks that are the subject of this research. This number was chosen in order to cover the entire sample (ten banks). The aims of the interviews were to ensure what was relevant and appropriate regarding the topic; and to investigate which banks would co-operate in helping the researcher to hold the main interviews, and also to identify key respondents and distribute the questionnaires.

At the same time, 20 questionnaires were distributed randomly to customers of the banks under investigation. The questionnaire was conducted to provide comments on the final questionnaire. The piloting also tested whether the questions were intelligible, easy to answer, whether they contained inapplicable or confusing statements, and in addition the researcher obtained good feedback as to where and when, the questionnaire should be distributed.

The main purpose of a pilot study was to identify problems with the questions before they were used. It also gave the researcher valuable experience in the relevant administrative procedures, contacting the respondents, explaining the purpose of the survey and timing each operation (Oppenheim, 1992). Accordingly the main results of this work can be summarised as follows:

- Making some alterations and adaptations that seemed necessary for the final questionnaire;

- The study excluded the HSBC bank because its company policy did not permit the giving of any information to researchers. Hence, the total number of the banks who agreed to co-operate in this study was fixed at nine banks (i.e. Jordan Islamic Bank for Finance and Investment; Arab Bank; Housing Bank for Trade

and Finance; Jordan National Bank; Cairo Amman Bank; Bank of Jordan; Jordan Kuwait Bank; Egyptian Arab Land Bank and Standard Chartered Grindlays Bank);

- The study also excluded bank employees from this study, concentrating on branch managers and bank customers (See Section 5.4.4.1 below); and
- It was decided that the survey should cover the branches spread over Amman city, because of time and other constraints. The suitable time to conduct the survey was from October 2003 to January 2004. Hence, the final work took place three months after conducting the pilot study. During these months (July, August and September) the researcher revised the results of this work with his supervisors and colleagues, and reviewed recent literature, relating to the topic of the study and its objectives.

5.4.4 Questionnaire

Sekaran (2003:236) has defined a questionnaire as "a preformulated written set of questions to which respondents record their answers". Similarly, Hair *et al.*, (2003:130) defined it as the "predetermined set of questions designed to capture data from the respondents". The questionnaire is a convenient data collection mechanism and it is most commonly used in a survey strategy (Oppenheim, 1992; Sekaran, 2003; Saunders *et al.*, 2003). As noted earlier, the survey strategy has been adapted to satisfy the objectives of the study and the need for a large sample to carry out the data analysis. A questionnaire survey is generally broad in nature, focusing on scope rather than depth. As such, it is well suited to collecting a large amount of data. This explains why questionnaires have been used extensively in quantitative studies aiming to measure service quality, customer satisfaction and customer loyalty. In other words, survey questionnaires have a history of use in this specific area of marketing and management studies (See Table 5:4).

5.4.4.1 Population and Sample Research

Collis and Hussey (2003) have defined a research population as any exactly defined set of people, or collection of items under investigation. Similarly, Sekaran (2003) has defined a research population as the entire group of people, events, or things of interest that the researcher wishes to investigate. In the light of these definitions, the targeted population includes customers and branch managers of nine major local and foreign banks in Amman, the capital city of Jordan. An important point to be mentioned is that the population of this study is limited to Amman due to the following reasons:

- Amman hosts more than 38% of the Jordanian population (Department of Statistics, 2003). With a large and diverse population, Amman is extensively used by marketers as a test market more often than any other city in Jordan;

- Amman is the capital city, where the headquarters and main branches of every bank in the study are based;

- Amman is the main urban area in Jordan, where a huge number of business firms and companies, of different sizes, work in diverse economic activities; and

- To extend the geographic area of data collection to include other governorates, besides Amman, would be prohibitively expensive in terms of time, effort and costs. Hence, using a sample that is limited to Amman will still be considered representative of bank customers in Jordan as a whole.

The financial services industry has been seen as an appropriate business sector to conduct this research, particularly in the light of such issues as the development of information technology and the emergence of globalisation that have changed the banking market. However, and as mentioned in the previous chapter, there are many reasons behind choosing the banking sector among other sectors in Jordan as follows:

- Banking is one of the economy's most active and sophisticated sectors;

- It is the most important developed and updated sector, which plays a significant role in the Jordanian economy;

- Jordanian banks are providing the same varieties of products and services offered by any commercial bank in developed countries;

- Jordan has a small economic base but high competition between banks. There is a healthy open economy with deregulation, and an increase in banking education level among ordinary people (Shaheen, 1997); and

- Commercial banks are considered as the main source of credit in the Jordanian market due to the absence of competition from other institutions or lenders (Akel, 2000).

As noted in the introductory chapter and chapter 4, this study concentrates on nine banks that represent the major part of the Jordanian banking sector in terms of the number of branches across Jordan (359 branches – 76% of total number of branches). However, the number of these branches in Amman city was 188. Two independent samples (customers and branch managers) were targeted. Five hundred and fifty (550) questionnaires (See Section 5.4.4.3) were distributed to the study sample (customers) and 301 questionnaires were returned. Of the 301 returned questionnaires, 26 had to be eliminated because they were incomplete. The total number of usable and acceptable questionnaires was 275, which was a 50% response rate.

A total of 67 questionnaires (implemented in the format of structured interviews) were distributed to branch managers of the banks under study, which was 36% of the total number of branch managers in Amman city. Received questionnaires totalled 100%. To further supplement information gained from the questionnaire, the researcher met with branch managers to obtain more detailed information regarding the policies applied and the information technology used in these banks as well as the perception of quality of services rendered to customers.

Collis and Hussey (2003:56) 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. They also added that the researcher can determine the sample size by referring to some reasons such as time available; budget and previous similar studies. In the same vein,

Malhotra and Birks (2003) pointed out that sample size in marketing research projects is influenced and determined by many factors, which can be summarised as follows:

- 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);
- The nature of the analysis, (if sophisticated analysis of the data using multivariate techniques is required, the sample size should be larger); and
- Resource constraints, since any marketing research project, money and time are limited. However, Table 5:4 shows the sample sizes in similar previous studies; with details of response rates and usable responses received.

Table 5:4: Sample sizes of previous studies

Author(s)	Year	Type of service and country of study or observation	Main data collocation method(s)	Sample size	Response rate and useable responses received
Cronin and Taylor	1992	Banking; pest control; dry cleaning and fast food / USA	Interview / questionnaire	660	100% (660)
Goode and Moutinho	1995	Banking / UK	Survey / questionnaire	451	84.2% (380)
Zineldin	1996	Banking / Sweden	Survey / questionnaire	400	54% (216)
Levesque and McDougall	1996	Retail banking / Canada	Survey / questionnaire	400	81% (325)
Edris and Almahmeed	1997	Banking / Kuwait	Survey / questionnaire	500	61% (304)
Al Khatib and Gharaibeh	1998	Banking / Jordan	Survey / questionnaire	650	78.5% (510)
Daniel	1999	Banking and building societies / UK and	Survey / questionnaire	44	57% (25)

		Republic of Ireland			
Chin	1999	Banking / Taiwan	Survey / questionnaire	375	36.8% (138)
Joseph *et al*	1999	Banking / Australia	Survey / questionnaire	440	68% (300)
Sathye	1999	Banking / Australia	Survey / questionnaire	1000	59% (589)
McDougall and Levesque	2000	Auto-service; Restaurant; Haircut and Dentist / Canada	Survey / questionnaire	587	76.3% (448)
Lassar *et al*	2000	Banking / USA and South America	Survey / questionnaire	300	22% (65)
Anandarajan *et al.*	2000	Banking / Nigeria	Survey / questionnaire	125	70% (88)
Bahia and Nantel	2000	Banking / Canada	Survey / questionnaire	360	32% (115)
Polatoglu and Ekin	2001	Banking / Turkey	Survey / questionnaire	724	15.7%(114)
Abdelaziz	2001	Banking / Egypt	Survey / questionnaire	300	82% (247)
Kardaras and Papathanassiou	2001	Banking / Greece	Survey / questionnaire	24	46% (11)
Jamal and Naser	2002	Retail banking / UAE	Survey / questionnaire	200	83.5% (167)
Caruana	2002	Retail banking / Malta	Survey / questionnaire	1000	20.5% (205)
Jabnoun and Al-Tamimi	2003	Commercial banks / UAE	Survey / questionnaire	800	58% (462)
Singh	2004	Banking / South Africa	Survey / questionnaire	3500	11% (369)
Akinci *et al.*	2004	Banking / Turkey	Survey / questionnaire	1228	11% (140)
Yavas *et al*	2004	Banking / Germany	Survey / questionnaire	500	45% (226)

Taking these factors into consideration, Table 5:4 provides an overview of the sample sizes used in previous studies. It can be seen that there is no certain sample size in such studies. Lehmann (1989) mentioned that sample sizes, which have been used by others conducting similar studies in the past is an acceptable approach. For determining sample size, Alreck and Settle (1995:63) 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).

As mentioned above, the sample in this research has been divided into two groups, branch managers and bank customers. However, it is interesting to note that the branch managers were selected due to specific reasons. Firstly, the branch manager plays a large part in shaping the factors which contribute to branch efficiency staffing, branch lay-out, branch facilities and style, automation, and merchandising (Gupta and Torkzadeh, 1988). Secondly, it is the manager's responsibility to ensure that branch employees are professional, well-trained and knowledgeable about the range of services and products provided by the bank. Thirdly, the role of the branch manager is crucial. With increased use of electronic delivery channels, the average customer's contacts with bank staff will be fewer (Moutinho *et al.*, 1997; Colgate, 1998; Sathye, 1999; Daniel, 1999). It is essential that any-face-to-face contact between the customer and her / his bank is carried out efficiently and courteously to increase and enhance customer service. Accordingly, branch managers have been selected in this study.

5.4.4.2 Structured Interviews

Hair *et al.* (2003:134) have stated that "an interview is where the researcher speaks to the respondent directly, asking questions and recording answers". Cooper and Schindler (1998) argued that an exploratory study or a study that includes an exploratory element should include interviews. Interviews vary in their nature, they can be: structured; semi-

structured and unstructured. In a structured interview, the interviewer administers a questionnaire. Structured interviews refer to those questionnaires where the interviewer physically meets the respondent and asks questions face to face. For each interview, the interviewer is required to use the same interview sequence and to conduct the interview in exactly the same way to avoid biases that may result from inconsistent interviewing practice (Saunders *et al.*, 2003; Hair *et al.*, 2003). In unstructured interviews, at the extreme, the interviewer introduces the topic briefly and then records the replies of the respondent. This may be almost a monologue with some prompts to ensure completion of the statements; clearly the respondent can say what and as much as she / he desires. Semi-structured interviews fill the spectrum between the two extremes. An individual depth semi-structured interview allows respondents to talk at length in their own words and at their own level of understanding.

In consideration of these points of view and in particular to enhance the generalisability of the research finding, structured interviews (questionnaires) have been conducted with 67 branch managers who deal with customers directly.

5.4.4.3 Types of Questionnaire

Once a survey questionnaire has been chosen as the appropriate research strategy, the next task is to determine the method of communication with the respondents. Saunders *et al.* (2003) have noted that the type of a questionnaire differs according to how it is administered and in particular, the amount of contact that the researcher has with the respondents. Accordingly, they have classified the types of questionnaires into two, as follows:

- *Self-administered*, which includes on-line questionnaire; postal questionnaire and delivery and collection questionnaire; and

- *Interviewer administered*, which include telephone questionnaire and structured interview (face-to-face).

The on-line questionnaire and postal questionnaire were difficult to use in this study due to difficulties in obtaining the e-mail / postal addressees of the banks' customers to send

the questionnaires to them. Because of legal restrictions, the banks, the first source of such information, are not allowed to reveal any personal data concerning their customers. In a developing country, it is not usual for most people to have bank accounts. Therefore, the telephone directory, for instance, may include some persons who do not have bank accounts, or may include some data that has not been updated.

Regarding the telephone questionnaire, this is also difficult to use for many reasons. Firstly, the telephone directory, as mentioned above, may not be reliable, particularly for personal customers. Secondly, the traditional difficulties accompanying the use of the telephone in data collection in such a developing country can result in no or little co-operation with the speaker (interviewer). A telephone interviewee may have some suspicions towards the character of the interviewer. Thirdly, it is time-consuming and very costly, since the sample size of this study is quite large (550 customers and 67 branch managers). Fourthly, it has been seen as an inconvenient method for obtaining the desired data, since the interviewer does not have any idea about suitable times to call (when day / night; where, home / office and how, whether to use the land line or mobile phone).

Due to these difficulties, neither a mailed questionnaire (on-line questionnaire and postal questionnaire) nor a telephone questionnaire has been used in this study. On the other hand, structured interviews and delivery and collection questionnaires were seen as suitable methods to obtain data from the respondents. Saunders *et al.* (2003) pointed out that the structured interview has many advantages, as follows:

- It enables the researcher to ensure that the respondent is whom she / he wants. In this study, the researcher tried to ensure that it was the branch manager who answered the questions (See Section 5.4.4.1);
- It usually has a higher response rate than self-administered questionnaires. Neuman (2000) suggests response rates of between 10% and 50% for postal surveys and up to 90% for face-to-face interviews. It is worth noting that the response rates in this study (branch managers, structured interview) was 100%,

whilst the response rate of bank customers (delivery and collection questionnaire) was 50%; and

- The researcher was afforded the opportunity to introduce the research topic and motivate the respondents to offer frank answers, and it also helped the researcher to collect all the complicated responses within a short period of time (Sekaran, 2003).

Regarding the delivery and collection questionnaire, Oppenheim (1992:103) has pointed out that "the self administered questionnaire is presented to the respondents by an interviewer or by someone in an official position. He also added that the purpose of the inquiry is explained, and then the respondent is left alone to complete the questionnaires, which will be picked up later". Sekaran (2003) noted that the main advantages of this method are: it covers a wide geographical area. In this study the researcher had to deliver the *customer questionnaires* to the branch managers, after reviewing them, and collected them after few days. This method also enables the respondents, customers, to complete the questionnaires at their convenience, in their homes, and at their own pace. It is less expensive and less time-consuming than interviews. However, this method has some disadvantages, such as the low response rate and the researcher cannot clarify any doubts about the questions included in the questionnaire. In spite of this, and in comparing the above methods in terms of its advantages and disadvantages, it has been found that the most appropriate approaches for this study are structured interviews (branch managers) and delivery and collection questionnaires (bank customers). At the same time, it is worth noting that the researcher has used the structured interview to obtain data from the customers. The researcher contacted the customers during his visits to the banks under investigation, and asked them to co-operate by completing the questionnaire. After giving them a brief idea about his study, some customers kindly agreed to co-operate and complete the questionnaires. In general, the total number of customers who co-operated in this way was 85.

5.4.4.4 Translating the Questionnaire

Since Arabic is the main language spoken in Jordan, the empirical study was conducted in the Arabic language. An English version of the questionnaire was translated into Arabic using the *parallel blind technique* (Behling and Law, 2000). Basically, this method is based on two stages. Firstly, two translators who are fluent in both languages, independently prepare versions of the draft target language questionnaire. Secondly, they meet to compare their versions and resolve any differences. Once they do so, they jointly present the target language questionnaire (the translated version) to the researcher. Behling and Law (2000) argue that this technique has many advantages. First, speed, the process of this technique is faster than other types of translations (e.g. back translation), because the two translators work in parallel rather than is sequence. Second, checking the two translations against one another provides an element of security and confidence. Furthermore, it is worth noting that the main parts of the questionnaire of this study were the service quality section (SERVQUAL) and bank selection criteria section, which were widely adopted in the Arabic marketing literature (Al Khatib and Gharaibeh, 1998; Abdelaziz, 2001). 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 which are based on their high qualification and experience in the field of translation from the Arabic to English language and vice versa.

5.4.4.5 Design and Pre-testing of the Questionnaire

Sekaran (2003) has mentioned that the language of the questionnaire is one of the most important aspects of the questionnaire design, it is essential to word questions in such a way so that they are understood by the respondents. He also added that the main benefit of questionnaire design relates to how the questions are worded and measured, and how the total questions are organised. However, having identified the questionnaire as the most appropriate research instrument for accessing the sample cohort, careful attention has been made to a number of basic rules and considerations, which are recommended

by many researchers (Oppenheim, 1992; Saunders *et al.*, 2003; Hair *et al.*, 2003; Sekaran, 2003). These considerations are:

- Clear, simple, and precise wording of the questionnaires has been used in order to avoid any ambiguities or misleading questions or statements;
- Clear instructions for the completion of the questionnaire and directions for answering the questions in each section of the questionnaire were given;
- The length of each question was kept as short as possible in a way that did not affect the content and the intended meaning of the question;
- Double-barrelled and double negative questions have been avoided; and
- Simple explanations and definitions were given.

Researchers state that the questionnaires should be free from ambiguities, inappropriate wording or misleading questions (Sekaran 2003; Saunders *et al.*, 2003; Collis and Hussey, 2003). Oppenheim (1992) emphasises that it is essential to ensure this by piloting each question and every question sequence. He argues that even the questions that are taken from other surveys (studies) need to be piloted to ensure that they will work as required with the kind of respondents involved. Thus the questionnaires were pre-tested and piloted. This is particularly necessary in the study instruments which were translated into and delivered in the Arabic language, after initially being prepared in English (See Section 5.4.4.4). The pre-testing stage has been done by adopting and involving the following steps:

- Experts available in the University of Salford including research supervisors, were involved in providing the researcher with the necessary guidelines;
- Research students of the School of Management at the University of Salford, were asked to read the questionnaire and suggest and offer any additional comments or correction;

- PhD researchers of Arab nationality at UK universities, namely Shafiq Alabid Manchester University; Haitham Alnobany, UMIST University; Adel Al Khattab, Huddersfield University. Their role was to give advice regarding the process and results of translation; and

- The last step was conducted in Jordan. Seven experts in the fields of marketing, banking, and English and Arabic languages were involved. Those experts were: Mahdy Alawi (English language, Al Hussein Bin Talal University); Abbas Dikan (English language, Al Hussein Bin Talal University); Yusif Abu Helala (Arabic language, Al Hussein Bin Talal University); As'ad Abu Roman (Marketing, University of Applied Science); Tariq Sharif (Management, University of Applied Science) Hany Aledmor (Marketing, The Jordan University) and Suha Ahmad (Arab Bank). By this means the validity of the Arabic version was tested by expert moderators (See Section 5.4.4.4 above). It was confirmed that the content of the questionnaires was accurate from the language point of view and suitable for the Jordanian cultural background. Generally speaking, the suitability of the questions, in terms of whether the same questions could be asked of both males and females; clarity of the language; and the ability to obtain some comments and correction, were the main advantages of the pre-testing stage.

5.4.4.6 The Final Structure (Layout) of the Questionnaire(s)

As already indicated, there are two independent samples (customers and branch managers). Accordingly, two questionnaires were distributed separately to bank customers and branch managers. The customers' questionnaire includes five sections as follows: demographic section, customer transaction section, IT banking / computer experience; service quality dimensions and customer satisfaction / loyalty (See Appendix 1). The branch managers' questionnaires include three sections which are; demographic section; IT banking service and service quality dimensions (See Appendix 2). These questionnaires (customer questionnaires and manager questionnaires) will be discussed in more detail in the following paragraphs. Generally speaking, the final

questionnaires used in this study were highly structured where most of the questions were fixed response alternative questions that required the respondents to select from responses which were located by using a five point Likert scale. The rationale for using multiple-item scales (Likert scale) for each variable was that they are more reliable than using single opinion items and can capture the whole domain of the construct (Oppenheim, 1992; Sekaran, 2003). Oppenheim (1992) has stated that the layout of the questionnaire should be convenient for the respondents and for the researchers who will have to enter the data on their computers. The majority of the questionnaire questions were on a five point Likert scale. Saunders *et al.* (2003) have stated that the Likert scale is the most common approach that researchers use to ask respondents how strongly they agree or disagree with a statement or series of statements. It includes both positive and negative statements so as to ensure that the respondent reads each one of them carefully and thinks about which box to select.

However, the main sources used to formulate the questions were previous empirical studies. The final structure of the questionnaires contained five sections split between four instruments that each measured respectively IT-based services (Joseph *et al.*, 1999; Mols, 2000; Thornton and White, 2001; Zhu *et al.*, 2002; Ahmad and Buttle, 2002; Wang *et al.*, 2003a); service quality 'SERVQUAL' (Parasuraman *et al.*, 1985, 1988,1994); customer loyalty / satisfaction (Gremler and Brown, 1996; Zeithaml *et al.*,1996), and bank selection criteria (Zineldin, 1996; Metawa and Almossawi, 1998; Angur *et al.*, 1999; Chen, 1999; Kaynak and Whiteley, 1999; Naser *et al.*, 1999; Allred and Addams, 2000; Almossawi, 2001; Zineldin, 2002). These instruments have been discussed in more detail in chapters 2, 3 and 7. The reasons for using these instruments are as follows:

Concerning 'SERVQUAL', the researcher has used this tool to measure service quality because:

- It is well documented in many studies;
- Its strengths and weaknesses have been extensively discussed in chapter 3;

- It has been used and tested in the banking sector (Parasuraman *et al.*, 1985; Caruana, 2002);

- The focus of the present study is to investigate the impact of IT on customer service quality rather than on individual dimensions of service quality; and

- It has been used in developing countries such as India (Angur *et al.*, 1999) and Turkey (Polatoglu and Ekin, 2001), and also in Jordan (Al Khatib and Gharaibeh, 1998).

Most of the above reasons are equally applicable to the other sections (bank selection criteria; IT-based services; customer satisfaction / loyalty). It is important to note that when conducting a study in a different country or market environment to those of pervious studies, it is often important to ensure that a new study replicates one previously conducted so as to capture the relationships between variables within the new population under investigation (Swinyard and Ghee, 1985).

As already noted, enormous efforts were invested (e.g., pilot study, pre-testing, translating of the questionnaires) in designing the layout and the appearance of the questionnaires to encourage completion. The first page (covering letter) contained: the university name and a brief introduction about the purpose of the study and research title, coupled with a statement regarding the confidentiality of information and a statement indicating the importance of participation by the respondent to the success of the study. The covering letter ended with information about the researcher's address (phone number and mobile phone number; postal address), and thanked the respondents for their co-operation. In general, the customers' questionnaire (five pages, A4 size in length) was split into five sections as follows: (See Appendix 1).

Section one: (customer profile) this contains five questions (Q1-Q5). This section was designed to obtain data about age, gender, marital status, educational level and monthly income of the respondents.

Section two: (customer transactions) this section has been divided into two sub-sections. The first sub-section contains four questions (Q6-Q9), which were developed in order to

get information about: the customer's main bank, and any other banks that she / he may have an account with, the name of the other banks and the type of account held, and the length of the relationship between the customer and the bank(s). Meanwhile the second sub-section contains items aimed at obtaining information about the importance of 15 factors (Q10-1 to Q10-15) in influencing the choice of main bank (bank selection criteria).

Section three: (IT banking / computer experience) this section has also been spilt into two sub-sections. The first sub-section contains five questions (Q11-Q15), regarding the respondents' use of computers, Internet access and the type of IT banking services (Internet banking; PC banking; phone banking; ATMs, and credit card). The second sub-section contains five questions (Q16-1 to Q16-5) aimed at obtaining information about the factors that motivate or inhibit respondents in terms of using IT banking services.

Section four: (service quality dimensions 'SERVQUAL') this section contains 21 questions (Q17-1 to Q17-21), aimed at obtaining the perceptions of bank customers toward service quality dimensions.

Section five: (customer satisfaction / loyalty) this section contains six questions (Q18-1 to Q18-6), developed in order to obtain data relating to satisfaction / loyalty of customers towards their banks. It is worth noting that this questionnaire has an open-ended question namely question number 19 which was used to let the respondents give their comments or any suggestions about the study in general and about the questionnaire in particular. However, no major issue or comments were suggested.

The branch managers' questionnaire (three pages, A4 size) was split into three sections as follows: (See Appendix 2).

Section one: (manager profile) this section contains seven questions (Q1-Q7). It was designed to obtain data about age, gender, marital status, educational level; the length of service (i.e. experience) and the bank's name.

Section two: (IT banking services) this section contains five questions (Q8-1 to Q8-5) aimed at obtaining managers' perceptions of the factors that motivate or inhibit customers in terms of using IT banking services.

Section three: (service quality dimension 'SERVQUAL') this section contains 21 questions (Q9-1 to Q9-21), aimed at obtaining the perceptions of the bank managers toward service quality rendered to their customers.

5.5 Hypotheses Testing and Statistical Analysis Techniques

As noted earlier in this research, this study tends towards a positivist philosophy. Accordingly, the nature of positivist research is hypothetical-deductive. Hypothesis testing is concerned with testing an existing theory (Saunders *et al.*, 2003; Collis and Hussey, 2003). Hinton (1995) argued that-testing a hypothesis follows a logical sequence of stages from proposing the hypothesis to deciding whether to accept or reject it. Hypothesis testing is chosen for this study for four main reasons. Firstly, it aims to investigate the general patterns of relationships between sets of phenomena. Secondly, it is in line with the research methodology in general and with its philosophy in particular. In other words, hypothesis testing is an appropriate approach for research such as this where the theoretical and empirical studies in the field of bank marketing and service quality measurements already exist. Thirdly, hypothesis testing is a common theme and widely known in the marketing literature. Fourthly, formulating a hypothesis can add clarity to the statement of a problem, and can make it easier to understand the issues to be resolved. A well formulated hypothesis can lead to stage of clear gaol achievement.

Generally speaking, nine main null hypotheses have been generated for this study. These hypotheses are concerned with IT banking service; service quality; bank selection criteria and customer satisfaction / loyalty as follows:

Hypothesis 1

Service quality within the financial service industry is continuously gaining in importance. Customers are becoming more aware of the alternatives, and are consequently demanding and expecting more and more from their banks. Bankers would need to know and understand the link of service quality to demographic characteristics to assess the size and efficiency of the market and their strategies (McDougall and Levesque, 1994). Siu and Cheung (2001) found that gender was significantly related to the service quality expectations. In the context of banking services, Spathis *et al.* (2004) found that effectiveness and reliability are the most important quality dimensions for men, while the price and access are the most important

quality dimensions from woman's perceptive. In terms of the length of relationship between customers and their banks, Abdelaziz (2001) has argued that there are conflicting views about the change in relative importance of service quality dimensions during the course of relationship between customer and service provider. As high uncertainty and risk are perceived in the beginning of a relationship, the customer needs support and reassurance from interaction with her / his bank. Lewis and Spyrakopoulos (2001) have stated that customers with longer relationships with their bank and higher deposits appear to be more demanding as far as service recovery is concerned. Meanwhile many researchers (e.g. Mols, 1999; Polatoglu and Ekin, 2001; Zhu *et al.*, 2002; Kim and Davidson; 2004; Zhu *et al.*, 2004) found that the type of IT banking services has a direct significant effect on the construct of the overall service quality dimensions. Kim and Davidson (2004) have noted that type of IT banking services are essential tools for developing new financial services and to provide effective and convenient services to the bank customers (See Section 3.2.4). Accordingly, the following hypothesis can be proposed:

H1: Customers' evaluations regarding quality of services rendered to them are not different according to the name of the bank, length of relationship, type of technology used, age, gender or marital status.

This hypothesis has been divided into six sub-hypotheses 1A - 1F (See Section 6.3). Hypotheses 1A, 1B, 1C, 1D and 1F have been tested by the Kruskal-Wallis test. It allows the researcher to compare the scores on some continuous variable for three or more groups (i.e. more than just two groups, in this study - name of bank; length of relationship; etc.). Scores are converted to ranks and the mean rank for each group is compared. Meanwhile, hypothesis 1E has been tested by Mann- Whitney test. This test is used to test for differences between two independent groups on a continuous measure. For instance, do males and females (i.e. gender) differ in terms of their self-esteem? It converts the scores on the continuous variable to ranks, across the two groups. It then evaluates whether the ranks for the two groups differ significantly.

Hypothesis 2

The nature of banking is changing and this will be reflected in customers' preference for banks. This preference is based on their actual and perceived requirements (Kaynak and whiteley, 1999). Metawa and Almossawi (1998) have found that several attributes play a crucial role in the process of bank selection. Those attributes include: relatives' advice and recommendations; convenient location; availability of ATMs; adequate bank opening hours; bank name; etc. The relative importance of the selection criteria is influenced by the variation in some socio-demographic factors such as age; level of education; and gender. Age is often believed to have an impact on customers' expectations and satisfaction with banking services. Mols (1999) reported that young customers showed more interest in IT-banking and self-service, while older customers overwhelmingly indicated a preference for traditional branch banking services. In the banking industry, the length of relationship between bank and customer is an important feature (Beerli *et al.*, 2004). Naser *et al.* (1999) have found that the gender variable and length of relationship between customers and their banks are the most significant variables on the degree of satisfaction and customers' motives for dealing with their banks. Kaynak and Whiteley, (1999) found that customers seem to rely on reputation (name of the bank) and overall image rather than advertising and media promotion uses. Lastly, it has been found that married people are more likely to deal with banks, since they are keen to maintain and enhance their savings to meet their family responsibilities (Abdelaziz, 2001) (See Sections 2.6.4 and 3.4.2). Accordingly, the following hypothesis can be formulated:

H2: Customers' motives for dealing with the banks are not different with regard to age, gender, marital status, name of the bank, length of relationship and type of technology.

This hypothesis also has been divided into six sub-hypotheses 2A -2F. Hypotheses 2A, 2C, 2D, 2E and 2F which are relating to age; marital status; name of the bank; length of relationship and type of technology have been tested by the Kruskal-Wallis test, while hypothesis 2B which relating to gender has been tested by the Mann-Whitney test, as discussed above.

Hypothesis 3

Previous research into service quality acknowledges a strong positive correlation between service quality and satisfaction (e.g. Lloyd-Walker and Cheung, 1998; McDougall and Levesque, 2000; Jonsson and Zineldin, 2003; Yavas *et al.*, 2004; Ting, 2004). It has been indicated that service quality and satisfaction are distinct constructs, and there is a causal relationship between the two, and that perceptions of service quality affect feelings of satisfaction which, in turn, influence future purchase behaviour (McDougall and Levesque, 2000). Lloyd-Walker and Cheung (1998) pointed out that by improving service quality banks ensure greater customer satisfaction. Yavas *et al.* (2004) found that delivery of high service quality is a must for attaining customer satisfaction and a number of other desirable behavioural outcomes. Moreover, a high level of perceived quality may not implicate a high level of satisfaction if the quality does not meet customer needs (Beerli *et al.*, 2004). Service quality is commonly noted as a critical prerequisite for establishing and sustaining satisfying relationships with valued customers. In this way, the association between service quality and customer satisfaction has emerged as a topic of significant, strategic concern (Parasuraman *et al.*, 1988; Cronin and Taylor, 1992; McDougall and Levesque, 2000; Lassar *et al.*, 2000; Beerli *et al.*, 2004; Spathis *et al.*, 2004). According to above discussions and to the literature in section 3.3.3, the following hypothesis has been formulated:

> **H3: There is no reciprocal effect relationship between customer evaluations regarding quality of services and customer satisfaction.**

To test this hypothesis the Spearman Correlation Coefficient has been used to indicate both the strength and the direction of the relationship between customers' evaluations regarding service quality and customers' satisfaction. The Spearman Correlation Coefficient can range from -1 to +1, indicating whether there is a positive correlation (as one variable increases, so too does the other) or a negative correlation (as one variable increases, the other decreases). At the same time, correlation provides an indication that there is a relationship between two variables; it does not however

indicate that one variable *causes* the other. The correlation between two variables (A and B) could be due to the fact that A causes B, that B causes A, or that an additional variable C causes both A and B (Pallant, 2003).

Hypothesis 4

Prior studies suggest that the use of IT in banking has a significant and positive impact on service quality and customer satisfaction (e.g. Joseph *et al.*, 1999; Lang and Colgate, 2003; Ryssel *et al.*, 2004). IT utilization helps banks to better serve their customers by delivering a variety of financial services as quickly as possible at the nearest location, if not anytime and anywhere. In this sense, Kim and Davidson (2004) suggest that the use of IT such as on-line banking systems has a positive impact on customer satisfaction and market share, since it gives customers easy access to banking services and more timely and accurate information. In the same vein, Ryssel *et al.* (2004) see that utilizing the advantages of these ITs enables banks to provide their customers with high-quality products and services, and ensures timely delivery, which, in turn, results in higher customer satisfaction. On the other hand, Lang and Colgate (2003) have pointed out that IT may not always have a positive impact on the relationship between a service provider and its customers. Two further relationship scenarios seem plausible: IT may also have a negligible impact on firms' relationships with their customers or, more importantly, IT may have a negative impact on such relationships (See section 2.6.2). This leads to H4:

> **H4: There is no reciprocal effect relationship between customer evaluations regarding IT used in banks, and customer satisfaction.**

To test this hypothesis the Spearman Correlation Coefficient has been used to indicate both the strength and the direction of the relationship (i.e. whether positive or negative) between customers' evaluations regarding IT used in banks and customers' satisfaction (see above).

Hypothesis 5

In deciding on the appropriate distribution strategy, the view of the customer is paramount (Ramasy and Smith, 1999). Often, banks use several different distribution channels. They offer their services and products through branch networks and electronic channels. Also channels such as car dealers, mobile branches (buses), and retailers are used for distributing bank services (Mols *et al.*, 1999). Yavas *et al.* (2004) have stated that delivery of 'high service quality' is a must to retain customer satisfaction and loyalty. The growth of technology in the delivery of services has had a dramatic effect on the nature of the core offering (Joseph *et al.*, 1999). Lang and Colgate (2003) have stated that the customers are typically exposed to more than one particular medium (i.e. IT, human interaction) when interacting with their suppliers, ranging from face-to-face interaction to more advanced channels such as Internet banking. Mols (1998) stated that the main factor influencing the adoption the type of IT banking service is time saving and convenience. Zhu *et al.* (2002) emphasised that once customers have accessed the service delivery point, they do not like to wait to receive the service. IT-based service options may help to improve customer service quality by providing customers with more prompt and efficient service (See Section 2.6.2). This leads to hypothesis 5:

> **H5: Customer evaluations regarding IT used in banks are not different with regard to type of IT banking services.**

This hypothesis has been tested by the Kruskal-Wallis test. This test was used to measure any significant difference in responses, since there were different groups involved in this study.

Hypothesis 6

When customers evaluate the quality of the service they receive from a banking institution they use different criteria which are likely to differ in their importance, usually some being more important than others (Joseph *et al.*, 1999). Curry and Penman (2004) state that customer service is being influenced and revitalized by IT, and regardless of how one visualizes customer service, either from a logistics or marketing perspective. It is a powerful tool or enabler in the arena of customer service. Lloyd-Walker and Cheung (1998) claim that IT can assist the delivery of superior quality customer service by ensuring a fast, accurate and reliable service. A system that ensures the fastest possible responses to customer requests will provide banks with a 'competitive advantage'. Ryssel *et al.* (2004) pointed out that IT enables banks to provide their customers with 'high quality' products and services, and ensures timely delivery (See Sections 2.6.3 and 2.6.4). According to the above discussion the following hypothesis can be formulated:

H6: There is no reciprocal effect relationship between customer evaluations regarding IT used in banks and the level of quality of services rendered (level of reliability, responsiveness, assurance, empathy and tangibles).

The Spearman Correlation Coefficient has been used to indicate both the strength and the direction of the relationship between customers' evaluations regarding IT used in banks and the level of quality of services rendered (see above).

Hypothesis 7

It has become increasingly important that banks identify the factors that determine the basis upon which customers choose between providers of financial services. Exploring such information well help banks to identify the appropriate marketing strategies needed to attract new customers and retain existing ones (Almossawi, 2001). Zineldin (2002) found the most important quality criteria used by customers in selecting a bank was

related to delivery system and service quality. This would reflect the importance of reliability and responsiveness of the banking services for the customers. On the other hand, for Patricio *et al.* (2003) security concerns and the negative issues associated with new technologies, in general, seemed to be the main reasons for non-technology customers. At the same time they argued that the bank branch had a negative side in terms of lake of convenience, lack of accessibility, and time loss. Given these disadvantages, customers tended to use the bank branch only when the need for personal interaction outweighed the inefficiency of this type of interaction (See Sections 2.6.4 and 3.4.2). This leads to H7:

H7: Customer motives for dealing with the banks are negative.

This hypothesis has been tested by the one sample *t*-test. This test was used to compare the mean scores for the same group of people on two different occasions (i.e. changes in scores for subjects tested at time 1, and then at time 2, often after the intervention or event, the samples are related because they are the same people tested each time).

Hypothesis 8

Parasuraman *et al.* (1985, 1988) pointed out that customers expect service providers to do what they are supposed to do (which includes the fundamentals), not indulging in fanciness, performance, and not making empty promises. Therefore, it is argued, that service quality is an important element in determining the success of a service provider. Satisfaction is dependent on the ability of the supplier to meet the customer's norms and expectations (McDougall and Levesque, 2000; Yavas *et al.*, 2004). According to Kotler *et al.* (2001) satisfaction is the post-purchase evaluation of products or services given the expectations before purchase. Commitment to customer satisfaction is an on-going process. This is because no matter how good the service is, customer will continually expect better services. Oliver (1993), on the other hand, identified that the service quality judgments are made based on ideals and excellence in relation to service delivery, while satisfaction judgments are based on predictions/norms for service delivery (See Section 3.3.3). Accordingly the following hypothesis has been proposed:

H8: Customer evaluations regarding the quality for services rendered are negative.

The *T*-test has been used to test this hypothesis (see above).

Hypothesis 9

Bank Managers need to understand their own service so as to gain involvement and commitment from front-line personnel and salespeople. An understanding of external customers' needs through adequate assessment is essential to preventing a financial loss (Oldenboom and Abratt, 2000). Zhu *et al.* (2004) pointed out that the new technologies such as the Internet and ATMs are becoming significant strategic areas for financial institutions, to meet customers' needs and to keep up with competitors. Ryssel *et al.* (2004) argued that IT enables the supplier to provide customers with 'high quality' products and services, and ensures timely delivery, which, in turn, results in higher customer satisfaction. Zhu *et al.* (2004) found that some banks are segmenting their markets by developing lower cost delivery systems in order to provide services. By utilizing delivery systems, such as Internet banking, phone banking, etc., these banks are operating at a lower cost than traditional branch networks (See Section 2.6). From the above discussion the following hypothesis can be formulated:

H9: There is no reciprocal effect relationship between managers' evaluation of IT used in banks and the quality of services rendered to the customers.

To test this hypothesis the Spearman Correlation Coefficient has been used to indicate both the strength and the direction of the relationship between managers' evaluations of IT used in banks and the quality of services rendered to the customers (see above).

Concerning the statistical analysis techniques, Pallant (2003) has stated that there are two different types of statistical techniques: *parametric tests*, and *non-parametric tests*. According to Pallant (2003) the word parametric comes from parameter, or characteristic of a population. The use of *parametric tests* is based on the assumption that the population of the study is normally distributed and data are collected on an

interval or ratio scale. Meanwhile *non-parametric tests*, make no explicit assumption regarding the normality of distribution in the population and the type of data collected on a nominal or ordinal scale (Siegel and Castellan, 1988; Hinton, 1995; Sekaran, 2003; Field, 2003; Pallant, 2003; Malhotra and Birks, 2003). Based on the above discussion, non-parametric tests have been used in this study for the following reasons:

- Some of the research variables are not normally distributed and so they require distribution-free tests, since such tests do not require many assumptions like their counterparts of parametric tests;

- The data were measured using an ordinal scale; and

- Non-parametric tests have some advantages over parametric tests, since they employ relatively simple formula for the analyses; easy to understand and relatively straightforward and quick to apply. On the other hand, the main disadvantage of non-parametric tests is that it is claimed that they are not as 'robust' as their parametric tests (Siegel and Castellan, 1988; Pallant, 2003).

Consequently, the following statistical tests for analysing data have been employed in this study:

The Mann-Whitney U Test: this is a non-parametric test 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), 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. $p \leq 0.05$), the result is significant and so there is a statistically significant differences between the two groups on the basis of the measured variable.

Kruskal-Wallis Test: is a non-parametric test which is an alternative to a one-way between groups analysis of variance (ANOVA). It allows the researcher to compare the scores on some continuous variable for three or more groups. The test first converts the

scores on the continuous variable to ranks and the mean rank for each group is compared. If the probability (p) of chi-square value is significant (i.e. $p \leq 0.05$), the result is significant and so there is a statistically significant difference across the groups on the basis of the measured variable (Siegel and Castellan, 1988; Pallant, 2003).

Spearman's Correlation Coefficient: is a non-parametric test which is an alternative to Pearson's correlation. It is used to calculate the strength and the direction of the relationship between two continuous variables. Spearman's test works by first ranking the scores (data), and then applying Pearson's equation (Siegel and Castellan, 1988; Field, 2003). If the probability (p) of correlation coefficient value is significant (i.e. $p \leq 0.05$), the result indicates that there is a statistically significant relationship between the two variables.

T-Test: *t*-tests are used when the researcher has two groups (e.g. males and females) or two sets of data (e.g. before and after) and when the researcher wishes to compare the mean score on some continuous variable (Pallant, 2003). However, in spite of this the *t*-test assumes that the variable is normally distributed and the mean is known (or assumed to be known), Malhotra and Birks (2003:469) indicate that "although normality is assumed, the *t-test* is quite robust to departures from normality", and *t*-test is also robust even when the sample is not random. In the same vein, Hinton (1995:81) has stated that "the basic assumptions of *t-test* are the same whichever *t-test* we are undertaking. We require the sampling distribution to be normally distributed so we usually assume that our samples come from normally distributed populations. Fortunately, the *t*-test is robust so that even if the distributions are only vaguely normal: humped in the middle and tailing off to the sides then the *t-test* is still likely to be valid. This is especially true for large samples (greater than 30)".

Besides these statistical tests, it is important to note that frequency distributions were used in this study. They were obtained for all the personal data or classification variables. They have been used to summarise the responses of each question and to produce descriptive information on the data collected such as means, standard deviations and frequencies of the responses. The mean (μ or M) is the sum ($\sum$) of the scores (X) divided by the total number (N) of the scores. Standard deviation (SD), on

the other hand, is used to find out the extent to which the values for a variable differ from the mean. Thus, *SD* is a measure of how well the mean represents the data. Field (2003) has pointed out that the small *SD* indicates that data points are close to the mean, while, a large *SD* indicates that the data points are distance from the mean (i.e. the mean is not an accurate representation of the data). These statistical summaries, displayed in table format, will be useful to achieve two objectives. The first is to show the general descriptive analysis of respondents. The second is to show the respondents' perceptions of several individual items of IT banking services, bank selection criteria, service quality and customer satisfaction / loyalty.

5.6 Validity and Reliability of the Instrument

The measurement instrument should have an acceptable level of reliability and validity in measuring its target construct(s). If the research measures are unreliable or invalid, then the data analysis will be ineffective (Field, 2003). Generally speaking, the measurement errors include two types of errors, these being systematic and random errors (Field, 2003; Sekaran, 2003). Systematic errors (bias) are produced whenever the measurement instrument is used, and they are constant between cases and studies (i.e. a general tendency to respond negatively, independently of one's true feeling). Meanwhile, random errors (variable error) are not produced consistently every time a measurement is taken (i.e. the personal mood as a temporary characteristic may be reflected in excessively negative responses; in case of a bad mood, or in overly favourable responses, in case of a good mood).

From the above discussion, validity is concerned with systematic error or bias. This is to say that the instrument is valid to the extent that its measurements are free from systematic error, which occurs consistently each time something is measured. In other words, the measuring instrument is valid when it measures what it is supposed to measure (Hair *et al.*, 2003). Hair *et al.* (2003) acknowledged that content (face) validation, which usually involves expert judgments, is the most common form of validation in business research. In line with this view, content validation, which concerns the representativeness of items included in the questionnaires, has been examined. Three academic members in the Jordanian universities (Prof. Tariq Sharif, University of Applied Science; and Dr. Ass'ad Abu Roman, University of Applied Science) have evaluated the questionnaire for content validity. In addition to the academic review, two managers in the banking industry also checked the questionnaire in terms of the overall research.

Reliability, on the other hand, refers to the extent to which measures are free from random error where a scale does not produce consistent errors if repeated measurements are made (Malhotra and Birks, 2003). Reliability is concerned with the stability of the measure. It represents how stable or consistent the rating generated by a scale is (Hair *et*

al., 2003). The empirical measure is reliable to the extent that it yields the same or nearly identical results in repeated trials. In this context, Amaratunga *et al.* (2002:29) argued "if a later investigator followed exactly the same procedures, the same findings and conclusions would result". The measure is also reliable if such identical or similar results have been obtained by using a different, but equivalent, measurement instrument on the same sample; or by using the same instruments to collect the data from similar samples (Sekaran, 2003; Hair *et al.*, 2003). Generally, the reliability of this study is measured by the internal consistency method. Sekaran (2003:205) states that the internal consistency of measures is indicative of the homogeneity of the items in the measure(s) that formulate the construct(s). In other words, the items should "hang together as a set". The internal consistency method, which usually associates with Cronbach's Alpha (it is also known as coefficient alpha) is the most commonly used reliability estimator in the literature (Oppenheim, 1992; Amaratunga *et al.*, 2002; Sekaran, 2003; Saunders *et al.*, 2003; Hair *et al.*, 2003). It also provides an appropriate way of assessing internal homogeneity, since the coefficient Alpha value measures all the items simultaneously. The internal consistency method was thus adopted to assess the reliability of the measures of the present research. Hair *et al.* (2003:172) have argued that "the researchers generally consider an alpha of 0.7 as a minimum, although a lower coefficient may be acceptable depending on the research objectives". However, Table 5:5 shows the Cronbach's alphas for all measurement scales.

Table 5:5: Reliability analysis

Variable	Number of items	Cronbach's Alpha
Bank selection criteria	15	0.8129
IT banking services	5	0.7832
Service quality dimensions	21	0.9182
Customer satisfaction/loyalty	6	0.9088

From the table, it can be seen that the variable scales have a range of coefficients between 0.7832 and 0.9182, which are considered as reasonable (Hair *et al.*, 2003).

5.7 Summary

Although there is no right or wrong methodology, there is methodology which is more or less useful, which can be employed in research projects to achieve their objectives (Sekaran, 2003; Saunders *et al.,* 2003). This chapter has described the instruments that have been employed in this study, and the rationale and justification behind the use of each instrument. In general, this chapter has focused on the research design and methodology employed to achieve the research objectives. Decision and strategies regarding the population and sample selection were illustrated. Two hundred and seventy five bank customers and 67 branch managers' usable questionnaires were completed which represent a satisfactory response rate of 50% of customers and 100% of branch managers. It has been found that the questionnaire is the most appropriate tool for data collecting. A detailed description of the procedures conducted in the pre-testing stages, a pilot study and translating questionnaires (parallel blind technique), is provided.

Hypotheses testing and statistical analyses techniques have been discussed in more detail, and the rationale for using such techniques has been given. Frequencies descriptions, means and *non-parametric tests* (Mann Whitney, Kruskal Wallis, and Spearman Correlation) have been seen as the most appropriate statistical techniques in analysing the data of this research. At the same time the *t-test* has also been used. Finally, this chapter ended by discussing the issues of validity and reliability. The next two chapters will be dedicated to analysing and interpreting the results obtained from the application of the research methodology detailed in this chapter.

Chapter 6

Empirical Data Analysis and Hypotheses Testing

CHAPTER 6 : EMPIRICAL DATA ANALYSIS AND HYPOTHESES TESTING

6.1 Introduction

This chapter presents and analyses empirical data that is used to test the proposed hypotheses. The discussion of respondents' characteristics will provide a full picture of the customers and branch managers of the banks investigated in this study. There are two main sections in this chapter. The first describes the characteristics of the sample (customers and branch managers), such as age, gender, marital status, etc. Frequency analysis has been used to distribute the respondents according to the many characteristics. The main objective of the second section is to test the hypotheses. The statistical techniques that are employed for testing these hypotheses are Mann-Whitney U test, Kruskal-Wallis test, one sample T-test and Spearman Correlation Coefficient analysis. At the end of this section, a summary table of these hypotheses has been made that outlines which hypotheses have been rejected and which accepted.

6.2 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 and branch managers of the nine banks participating in this study. Five hundred and fifty questionnaires (550) were distributed to the study sample. The total number of usable questionnaires returned was 275 representing a 50% response rate. A total of 67 questionnaires were distributed to branch managers of the banks under study. Received questionnaires totalled 100%. To further supplement information gained from the questionnaire, the researcher met with branch managers to obtain more detailed information regarding the policies applied and the IT used in these banks, as well as the perception of quality of services rendered to customers. Banks covered by this study totalled nine, ranging from Jordanian owned

banks to foreign banks in Jordan. The nine banks represent 76.4% of the banking industry according to the number of branches (including headquarters) inside Jordan.

6.2.1 Customer Sample Description According to Age, Gender, Marital Status and Educational Level

Table 6:1 shows variables with regard to age. The category 25-34 years represented 38.9% and 35-44 represented 24.7%, while the category less than 25 years of age represented 16.7% and 6.9% accounted for those above 55 years of age. In short, the sample was biased towards the middle age (25-34 and 35-44) categories, which represented 63.6% of the total, and had fewer representatives of both young and old respondents. The young customers (aged below 25 years old, 16.7%) were less represented as a considerable portion of this group were unemployed people or students, and consequently did not have a bank account.

Table 6:1: The sample distribution according to age, gender, marital status and educational level

Age	Frequency	%
Below 25	46	16.7
25-34	107	38.9
35-44	68	24.7
45-54	35	12.7
55 and above	19	6.9
Gender	**Frequency**	**%**
Male	172	63.5
Female	99	36.5
Marital Status	**Frequency**	**%**
Married	173	62.9
Single	100	36.4
Other	2	.7
Educational Level	**Frequency**	**%**
High School	37	13.5
Diploma	48	17.5
Graduate	146	53
Post Graduate	44	16

Table 6:1 shows that 63.5% of the customers are male while females accounted for 36.5%. This difference can be due to various reasons. The first is the nature of Jordanian society where males are expected to deal with banks more than females. Secondly, in Jordan usually only the person having an income source has a bank account, unlike in western society where almost every person has a bank account. Married customers represented 62.9%, while the percentage of single respondents was 36.4%. The other category (divorced / widowed) represented the remaining percentage, which is .07%. With regard to respondents' educational level, Table 6:1 shows that the majority of customers are BA holders (53.1%), with 13.5% of High school certificate holders, while post-graduate clients represented 16%.

6.2.2 Customer Sample Description According to Monthly Income; Bank's Name and Period of Dealing

In terms of monthly income, it can be seen from Table 6:2 that monthly income ranged between JD 151-300 represented 47.6% and 17.5% for incomes ranged between JD. 301-450, while incomes below JD 150 comprised 10.5%. Incomes ranging between JD 600 and more represented 16.4%.

Table 6:2: The sample distribution according to monthly income, bank's name and period of dealing

Monthly Income	Frequency	%
Below 150	29	10.5
151-300	131	47.6
301-450	48	17.5
451-600	22	8
601 and above	45	16.4
Bank's Name	**frequency**	**%**
Arab Bank	53	19.3
Housing Bank	72	26.2
Jordan National Bank	14	5.1
Jordan Islamic Bank	41	14.9
Cairo Amman Bank	17	6.2

Bank of Jordan	29	10.5
Jordan Kuwait Bank	25	9.1
Egyptian Arab Bank	8	2.9
Standard Chartered Grindlays	16	5.8
Period of Dealing	**frequency**	**%**
1-5	121	44.5
6-10	82	30.1
11-15	39	14.3
16 and above	30	11

As shown in Table 6:2 the Housing Bank ranks top in terms of number of respondents 26.2%. This is due to it being ranked first in terms of the number of its branches in Jordan (i.e. 100), followed by the Arab bank (19.3%). The Jordanian Islamic Bank ranks third (14.9%). Although the percentage of the Egyptian Arab Land Bank was 2.9%, which is the lowest percentage, it is worth mentioning that this low percentage is due to the low response rate from this bank's customers, which has 19 branches operating in Jordan so far. It can be seen from Table 6:2 that the length of the relationship between customer and bank varies. The fact that 44.5% of respondents indicated 1-5 year relationship is attributed to the fact that young people represent the highest percentage of customers as mentioned earlier. The study also shows that 30.1% were those with a 6-10 year relationship, which demonstrates the loyalty of customers to their banks. Furthermore, 11.1% represented those with a relationship of 16 years or more.

6.2.3 General Descriptive Analysis of Branch Managers

Table 6:3 shows variables with regard to age, gender and marital status of the bank managers. The age category 25-34 represented 6%, the age category 35-44 represented 22.4%, and the age category 45-54 represented almost half of the respondents at 50.7%. While the age category 55 and above represented 20.9%.

Table 6:3: The sample (branch managers) distribution according to the age, Length of service and bank's name

Age	Frequency	%
25-34	4	6.0
35-44	15	22.4
45-54	34	50.7
55 and above	14	20.9
Length of Service	**Frequency**	**%**
1-5	3	4.5
6-10	10	14.9
11-15	12	17.9
16-20	14	20.9
21 and above	28	41.8
Bank's Name	**Frequency**	**%**
Arab Bank	11	16.4
Housing Bank	16	23.9
Jordan National Bank	8	11.9
Jordan Islamic Bank	8	11.9
Cairo Amman Bank	4	6.0
Bank of Jordan	8	11.9
Jordan Kuwait Bank	4	6.0
Egyptian Arab Land Bank	6	9.0
Standard Chartered Grindlays	2	3.0

In terms of gender, it was found that almost 94% of the respondents were males against 6% for females. Moreover, the percentage of married branch managers was 92.5%. With regard to the category of educational level, it has been found that 49.3% of the branch managers are BA holders and those with post-graduate qualifications represented 20.9%. In addition, the branch managers who hold diploma degrees represented 26.9% of the sample. Furthermore, it can be seen from Table 6:3 that the branch managers who have over 21 years experience represented 41.8%, and just three managers had a length of service between 1-5 years (4.5%). It is worth mentioning that the length of service does not refer to a branch manager's current position, but to the length of service in the banking industry as a general.

Lastly, as mentioned previously, banks covered by this study totalled nine, ranging from Jordanian to foreign banks in Jordan. The distribution of respondents according to the bank's name shown in Table 6:3, which indicates that the distribution is similar to customers in that the smallest and largest group are almost the same. The Housing Bank ranks top (23.9%), followed by the Arab Bank (16.4%), while Standard Chartered Grindlays Bank was the smallest group representing 3% of the sample.

The above discussion has shown and described the study sample (customers and branch managers) characteristics. It has been found that the sample was biased towards the middle age (25-44), where the percentage of male respondents (customers and branch managers) was very high (63.5% and 94% respectively). Furthermore, it can be seen from the previous discussion that the study sample are well-educated. Finally, and regarding the length of relationship between customers and their banks, it was indicated that almost 45% of the respondents had been with their banks for 1-5 years, while the percentage of customers who had been dealing with their banks for 16 years and over was 11.1%.

6.3 Testing the Hypotheses

The main objective of this section is to test the hypotheses concerning the determinants of service quality dimensions, customer evaluation regarding quality of services, motives for dealing with banks, and IT used in banks. The statistical techniques employed for testing these hypotheses are the Mann-Whitney U test, Kruskal-Wallis test, Spearman Correlation Coefficient analysis and t-test. Nine main hypotheses have been tested as follows:

1. Customers' evaluations regarding quality of services rendered to them are not different according to the name of the bank, length of relationship, type of technology used, age, gender or marital status.

2. Customers' motives for dealing with the banks are not different with regard to age, gender, marital status, name of the bank, length of relationship and type of technology.

3. There is no reciprocal effect relationship between customer evaluations regarding quality of services and customer satisfaction.

4. There is no reciprocal effect relationship between customer evaluations regarding IT used in banks, and customer satisfaction.

5. Customer evaluations regarding IT used in banks are not different with regard to type of IT banking services.

6. There is no reciprocal effect relationship between customer evaluations regarding IT used in banks and the level of quality of services rendered (level of reliability, responsiveness, assurance, empathy and tangibles).

7. Customer motives for dealing with the banks are negative.

8. Customer evaluations regarding the quality for services rendered are negative.

9. There is no reciprocal effect relationship between managers' evaluation of IT used in banks and the quality of services rendered to the customers.

Hypothesis 1

As seen earlier, researchers and practitioners have found that customers consider many dimensions in their assessments of service quality (Gronroos, 1984; Lehtinen and Lehtinen, 1991). However, as mentioned in chapters 3 and 4 the SERVQUAL scale has been applied. The SERVQUAL scale was first published in 1988 and has undergone numerous improvements and revisions since then, so that it currently contains 21 perception items that are distributed throughout the five service quality dimensions as follows (Berry *et al.*, 1988):

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

Hypothesis: 1. (A): Customers' evaluations regarding quality of services rendered to them are not different according to difference in the name of the bank

To test the validity of this hypothesis, the Kruskal-Wallis test was used to examine the differences of customers' evaluation of the quality of services rendered to them. It can be seen from Table 6:4, that there are no significant statistical differences in customers' evaluation of the quality of services rendered to them on the dimensions of *reliability; responsiveness; assurance and empathy*. This means that all banks render the same perceived service quality from the customers' point of view, in terms of these

dimensions. On the other hand, Table 6:12 also shows some significant difference in customer evaluations regarding the fifth dimension, i.e. tangibles (Chi-Square = 22.960, $p = 0.003$ and $df = 8$), and service quality 'SERVQUAL' with all its dimensions (Chi-Square = 16.694, $p = 0.033$ and $df = 8$).

Table 6:4: Kruskal-Wallis test: Bank's name

	SERVQUAL	Reliability	Responsiveness	Assurance	Empathy	Tangibles
Chi-Square	16.694	12.883	12.026	10.445	13.351	22.960
Df	8	8	8	8	8	8
Asymp. Sig.	.033	.116	.150	.235	.100	.003

Hypothesis 1 (B): Customers' evaluations regarding quality of services rendered to them are not different according to difference in the length of the relationship between them and their banks

It can be seen from Table 6:5, that there is no statistically significant difference in customers' evaluations of the quality of services rendered by the banks on the dimensions of service quality (reliability, responsiveness, assurance, empathy and tangibles) in terms of the difference of years of the relationship. Since the significance level is greater than 0.05, the length of the relationship between customers and their banks has no significance regarding the quality of services rendered.

Table 6:5: Kruskal-Wallis test: length of relationship

	SERVQUAL	Reliability	Responsiveness	Assurance	Empathy	Tangibles
Chi-Square	6.854	7.371	6.558	3.880	6.113	6.204
Df	3	3	3	3	3	3
Asymp. Sig.	.077	.061	.087	.275	.106	.102

Hypothesis 1 (C): Customers' evaluations regarding quality of services rendered to them are not different according to difference in the type of technology used

Table 6:6 shows that there are no statistically significant differences in customers' evaluations regarding quality of services rendered by the banks on the dimensions of service quality, namely: responsiveness; assurance; empathy and tangibles. Meanwhile it has been found that there is a statistically significant difference in the first dimension 'reliability', since the output presented in the Table 6:6 shows that the Chi-Square value is 13.652; the significance level (*p)* is 0.018 and degrees of freedom (*df)* is 5.

Table 6:6: Kruskal-Wallis test: type of IT banking services

	SERVQUAL	Reliability	Responsiveness	Assurance	Empathy	Tangibles
Chi-Square	6.982	13.652	6.872	3.901	4.649	3.443
Df	5	5	5	5	5	5
Asymp. Sig.	.222	.018	.230	.564	.460	.632

Hypothesis 1 (d): Customers' evaluations regarding quality of services rendered to them are not different according to difference in age

Table 6:7 shows that there are no differences in customers' evaluations regarding service quality rendered to them by banks in term of age over four dimensions namely: reliability, responsiveness, assurance and empathy. In other words, these groups among respondents demonstrate no statistically significant difference regarding the quality of services rendered to customers, although there is a statistically significant difference over the dimension of "tangibles" (Chi-Square = 10.291, $p = 0.036$ and $df = 4$).

Table 6:7: Kruskal-Wallis test: age of respondents

	SERVQUAL	Reliability	Responsiveness	Assurance	Empathy	Tangibles
Chi-Square	3.232	2.235	6.843	7.497	2.484	10.291
Df	4	4	4	4	4	4
Asymp. Sig.	.520	.693	.144	.112	.648	.036

Hypothesis 1 (E): Customers' evaluations regarding quality of services rendered to them are not different according to gender

The Mann-Whitney test has been used to test for differences between two independent groups on a continuous measure. It can be seen from Table 6:8 that there is no statistical significant difference with a two–tailed *p* value. The probability value (*p*) is not less than or equal to 0.05, that to say there is no statistically significant difference in the perceived service quality offered by banks between men and women.

Table 6:8: Unrelated Mann-Whitney test comparing service quality in women and men

	SERVQUAL	Reliability	Responsiveness	Assurance	Empathy	Tangibles
Mann-Whitney U	8163.000	8214.000	8207.000	7979.500	7859.500	8454.500
Z	-.565	-.486	-.499	-.867	-1.059	-.096
Asymp. Sig. (2-tailed)	.572	.627	.618	.386	.289	.923

Hypothesis 1 (F): Customers' evaluations regarding quality of services rendered to them are not different according to marital status

As Table 6:9 shows, there is no difference in customers' evaluations regarding quality of services rendered by banks in terms of the difference of marital status (i.e. the marital status has no statistically significant difference regarding the service quality rendered to customers). Since the *p* value is not less than or equal to 0.05 over all dimensions, the result is not significant.

Table 6:9: Kruskal-Wallis test: marital status

	SERVQUAL	Reliability	Responsiveness	Assurance	Empathy	Tangibles
Chi-Square	.314	.658	.477	.263	.056	.389
Df	2	2	2	2	2	2
Asymp. Sig.	.855	.720	.788	.877	.973	.823

Hypothesis 2

Kinnaird *et al.* (1984) state that it is essential to note that if a bank does not understand what criteria are used by customers in the bank choice decision, then valuable marketing resources may be wasted and the marketing efforts will not be effective in achieving the goal of the institution. Fifteen items were measured on a five point Likert scale (See Appendix 1, Section: customer transaction). Respondents were asked to provide opinions with respect to the main factors in influencing their choice of main bank. These motives were identified as: reputation of the bank; fast and efficient services; accuracy of transactions; recommendation of friends; knowing the bank's personnel; friendliness of the bank's personnel; honesty and trustworthiness of staff; higher interest on savings and deposits; lower interest charges on services; a wide range of services provided; the availability of ATMs; convenient location of the bank; attractive rewards

and prizes; internal appearance of the bank and external appearance of the bank. Accordingly, the following sub-hypotheses have been formulated:

Hypothesis 2 (A) Customers' motives for dealing with the banks are not different according to age

Table 6:10 shows that there is no difference in customers' motives for dealing with the banks with regard to age, i.e. there are no special definite motives for particular categories in dealing with the bank. In Table 6:10 the Chi-Square value is 3.168 with a significance level of $p = 0.530$. The probability value (p) is not less than or equal to 0.05, and therefore the result is not significant.

Table 6:10: Kruskal-Wallis test: age of respondents

	Motives of dealing with the banks
Chi-Square	3.168
Df	4
Asymp. Sig.	.530

Hypothesis 2(B): Customers' motives for dealing with the banks are not different according to gender

The Mann-Whitney test for unrelated samples of scores has been used to determine whether the scores are independent of each other, i.e. whether two unrelated samples differ. Table 6:11 shows that there is no significant difference with a two-tailed p value (0.305). In other words, there is no significant difference in the motives for dealing with the banks between males and females.

Table 6:11: Unrelated Mann-Whitney test comparing motives for dealing with the banks in women and men

	Motives for dealing with the banks
Mann-Whitney U	7877.500
Z	-1.025
Asymp. Sig. (2-tailed)	.305

Hypothesis 2(C): Customers' motives for dealing with the banks are not different with regard to marital status

The Kruskal-Wallis test has been used to examine this sub-hypothesis. The output of the test is shown in Table 6:12. This shows that there were no statistically significant differences in customers' motives for dealing with the banks in terms of marital status, since the Chi-Square is 1.492; *df* is 2 and *p* value is 0.474.

Table 6:12: Kruskal-Wallis test: marital status of respondents

	Motives for dealing with the banks
Chi-Square	1.492
Df	2
Asymp. Sig.	.474

Hypothesis 2(D): Customers' motives for dealing with the banks are not different with regard to the name of the bank

It can be seen from Table 6:13 that there are no statistically significant differences in customers' motives for dealing with the banks in terms of the name of the bank. The Chi-Square is 13.408; *df* is 8 and *p* value is 0.099.

Table 6:13: Kruskal-Wallis test: bank's name

	Motives for dealing with the banks
Chi-Square	13.408
Df	8
Asymp. Sig.	.099

Hypothesis 2(E): Customers' motives for dealing with the banks are not different according to length of the relationship between them and their banks

The output of this test can be seen in Table 6:14, which shows that chi-square is 4.609; *df* is 3 and *p* value is 0.203. In other words, there is no statistically significant difference in customers' motives for dealing with the banks with regard to length of dealing.

Table 6:14: Kruskal-Wallis test: length of dealing

	Motives for dealing with the banks
Chi-Square	4.609
Df	3
Asymp. Sig.	.203

Hypothesis 2(F): Customers' motives for dealing with the banks are not different with regard to the type of technology

Table 6:15 shows that there is no difference in customers' motives for dealing with the banks in terms of the difference in the type of technology (Chi- Square is 5.148; *df* is 5 and *p* value is 0.398), i.e. the type of technology has no statistically significant difference regarding the reasons for dealing with the banks.

Table 6:15: Kruskal-Wallis test: motives-type of technology

	Motives for dealing with the banks
Chi-Square	5.148
Df	5
Asymp. Sig.	.398

Hypothesis (3): There is no reciprocal effect relationship between customer evaluations regarding quality of services and customer satisfaction

To test this hypothesis the Spearman Correlation Coefficient has been used to indicate both the strength and the direction of the relationship (i.e. whether positive or negative) between customers' evaluations regarding service quality and customers' satisfaction. Table 6:16 shows that the correlation coefficient between satisfaction and quality of services is 0.597, which refers to a statistical significance, i.e. the more effective the bank quality services are, the more the customer satisfaction will be. That is to say, the relationship between service quality and customer satisfaction is positive.

Table 6:16: Spearman coefficient between service quality and customer satisfaction

			Satisfaction	Service Quality (SERVQUAL)
Spearman's rho.	Satisfaction	Correlation Coefficient	1.000	.597(**)
		Sig. (2-tailed)	.	.000
		N	275	275
	Service Quality	Correlation Coefficient	.597(**)	1.000
		Sig. (2-tailed)	.000	.
		N	275	275

** Correlation is significant at the .01 level (2-tailed).

Hypothesis (4): There is no reciprocal effect relationship between customer evaluations regarding IT used in banks and customers satisfaction

To test this hypothesis the Spearman Correlation Coefficient has been used to indicate both the strength and the direction of the relationship between customers' evaluations regarding IT used in banks and customers' satisfaction. Table 6:17 shows that the correlation coefficient between IT used in banks and customer satisfaction is 0.299. This refers to a high level of statistical significance, i.e. the more IT used in banks, the more the customer satisfaction. In other words, there is a positive and significant relationship between IT and customer satisfaction.

Table 6:17: Spearman coefficient between IT and customer satisfaction

			IT	Satisfaction
Spearman's rho	IT	Correlation Coefficient	1.000	.299(**)
		Sig. (2-tailed)	.	.000
		N	241	241
	Satisfaction	Correlation Coefficient	.299(**)	1.000
		Sig. (2-tailed)	.000	.
		N	241	275
** Correlation is significant at the .01 level (2-tailed).				

Hypothesis (5): Customer evaluations regarding IT used in banks are not different with regard to the type of IT banking services

The output for this test can be seen in Table 6:18 that shows there is no statistically significant difference in customer evaluations with regard to IT used in banks with regard to type of IT banking. In other words, IT used in banks has no statistically significant difference regarding the type of IT banking services (e.g. ATMs, Internet banking, etc.). Since the *p* value is not less than or equal to 0.05, which is 0.789, the result is not significant. Consequently, any type of IT is significantly high from the customers' point of view.

Table 6:18: Kruskal-Wallis test: type of technology

	Type of IT banking service
Chi-Square	2.415
Df	5
Asymp. Sig.	.789

Hypothesis (6): There is no reciprocal effect relationship between customer evaluations regarding IT used in banks and the level of quality of services rendered (level of reliability, responsiveness, assurance, empathy and tangibles)

Table 6:19 shows a positive relationship of statistical significance between IT and service quality dimensions. With respect to these dimensions, the highest correlation coefficient was between IT and tangibles at 0.330. Generally, the correlation factor between IT and service quality is 0.386, i.e. the more IT is used by customers, the more service quality is perceived as being effective. There is a positive and significant relationship between IT and service quality and its dimensions.

Table 6:19: Spearman coefficient between service quality and IT used in banks

			IT	Reliability	Responsiveness	Assurance	Empathy	Tangibles	Service quality
Spearman's rho	IT	Correlation Coefficient	1.000	.308(**)	.309(**)	.299(**)	.292(**)	.330(**)	.386(**)
		Sig. (2-tailed)	.	.000	.000	.000	.000	.000	.000
		N	241	241	241	241	241	241	241
	Reliability	Correlation Coefficient	.308(**)	1.000	.528(**)	.419(**)	.482(**)	.452(**)	.716(**)
		Sig. (2-tailed)	.000	.	.000	.000	.000	.000	.000
		N	241	275	275	275	275	275	275
	Responsiveness	Correlation Coefficient	.309(**)	.528(**)	1.000	.644(**)	.547(**)	.524(**)	.791(**)
		Sig. (2-tailed)	.000	.000	.	.000	.000	.000	.000
		N	241	275	275	275	275	275	275
	Assurance	Correlation Coefficient	.299(**)	.419(**)	.644(**)	1.000	.644(**)	.598(**)	.819(**)
		Sig. (2-tailed)	.000	.000	.000	.	.000	.000	.000

	N	241	275	275	275	275	275	275
Empathy	Correlation Coefficient	.292(**)	.482(**)	.547(**)	.644(**)	1.000	.530(**)	.814(**)
	Sig. (2-tailed)	.000	.000	.000	.000	.	.000	.000
	N	241	275	275	275	275	275	275
Tangibles	Correlation Coefficient	.330(**)	.452(**)	.524(**)	.598(**)	.530(**)	1.000	.782(**)
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.	.000
	N	241	275	275	275	275	275	275
SERVQUAL	Correlation Coefficient	.386(**)	.716(**)	.791(**)	.819(**)	.814(**)	.782(**)	1.000
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.
	N	241	275	275	275	275	275	275

** Correlation is significant at the .01 level (2-tailed).

Hypothesis (7): Customer motives for dealing with the banks are negative

To test this hypothesis a *t-test* has been used. The *t-test* assumes that the variable is normally distributed and the mean is known (or assumed to be known), Malhotra and Birks (2003:469) indicate that "although normality is assumed, the *t-test* is quite robust to departures from normality". Table 6:20 shows that the mean for motives for dealing with the bank is 3.494, which is higher than the test value (2.5), i.e. motives behind dealing with banks are not negative.

Table 6:20: One-sample *t-test*: motives

	N	Mean	Std. Deviation	Std. Error Mean
Motives	275	3.4941	.5942	3.583E-02

	Test Value = 2.5[1]		
	T	Df	Sig. (2-tailed)
Motives	27.743	274	.000

Hypothesis (8): Customer evaluations regarding the quality of services rendered are negative

To test this hypothesis, the researcher has used means, and standard deviations for customers' (one sample *t-test*) responses regarding their evaluation of the quality of service. Table 6:21 shows, the mean of service quality is 3.5974, which is higher than test value 2.5, i.e. the quality of services rendered to the customers from their banks is not negative. Hence, the null hypothesis is rejected.

Table 6:21: One-sample *t-test*: service quality

	N	Mean	Std. Deviation	Std. Error Mean
Service quality	275	3.5974	.5688	3.430E-02

[1] The mean of the scale, since the Likert scale has been used which contains five points; hence test value 2.5 is 5 divided by 2.

	Test Value = 2.5		
	T	df	Sig. (2-tailed)
Service quality	31.993	274	.000

Hypothesis (9): There is no reciprocal effect relationship between managers' evaluation of IT used in banks and the quality of services rendered to the customers

Table 6:22 shows that the value of Spearman Correlation Coefficient between management evaluation of IT used in banks and quality of services rendered to the customer is 0.494 which has a statistical significance. In other words, there is a positive and significant relationship between IT used in banks and service quality rendered to customers, from management's point of view, i.e. the more IT is used the better the quality of services will be.

Table 6:22: Spearman coefficient between service quality and IT used in banks from management's point of view

			IT	SERVQUAL
Spearman's rho	IT	Correlation Coefficient	1.000	.494(**)
		Sig. (2-tailed)	.	.000
		N	67	67
	SERVQUAL	Correlation Coefficient	.494(**)	1.000
		Sig. (2-tailed)	.000	.
		N	67	67
** Correlation is significant at the .01 level (2-tailed				

6.4 Summary

Chapter 6 has been divided into two main sections. Section 6.2 presents a general description of the study sample. The nine banks in this study represent 76.4% of the banking industry in Jordan. The total number in the study sample was 275 customers and 67 branch managers who participated in this study. The main outputs of frequency analysis reveal that the study sample was biased towards the middle age (25-44), where the percentage of males (customers and branch managers) was very high being 63.5% and 94% respectively, and the study sample was well educated. With regard to the length of relationship between customers and their banks, it has been indicated that almost 45% of the respondents had dealt with their banks for between 1-5 years; the percentage of customers who had dealt with their banks for 16 years and over was 11.1%.

Section 6.3 has dealt with nine main hypotheses. These hypotheses were designed to fulfil the objectives of this research, in terms of the relationship between IT, service quality, customer satisfaction and motives for dealing with banks. Non-parametric statistics (Mann-Whitney test, Kruskal-Wallis test and Spearman Rank Order Correlation) and one sample *t-test* were used for examining hypotheses. The results of these hypotheses are shown in Table 6:23.

Table 6:23: Summary of the results of hypotheses testing

Hypotheses	Results
• **H1 (A): Customers' evaluations regarding quality of services rendered to them are not different according to difference in the name of the bank.**	Rejected
• **H1 (B): Customers' evaluations regarding quality of services rendered to them are not different according to the difference in the length of the relationship between them and their banks.**	Accepted
• **H1(C): Customers' evaluations regarding quality of services rendered to them are not different according to difference in the type of technology used.**	Rejected
• **H1 (D): Customers' evaluations regarding quality of services rendered to them are not different according to difference in age**	Rejected
• **H1 (E): Customers' evaluations regarding quality of services rendered to them are not different according to gender.**	Accepted
• **H1 (F): Customers' evaluations regarding quality of services rendered to them are**	Accepted

not different according to marital status.	
• **H12 (A):** Customers' motives for dealing with the banks are not different according to age.	Accepted
• **H12 (B):** Customers' motives for dealing with the banks are not different with regard to gender.	Accepted
• **H12(C):** Customers' motives for dealing with the banks are not different with regard to marital status.	Accepted
• **H12 (D):** Customers' motives for dealing with the banks are not different with regard to the name of the bank.	Accepted
• **H12 (E):** Customers' motives for dealing with the banks are not different according to length of the relationship between them and their banks	Accepted
• **H12 (F):** Customers' motives for dealing with the banks are not different with regard to the type of technology	Accepted
• **H13:** There is no reciprocal effect relationship between customer evaluations regarding quality of services and customer satisfaction	Rejected
• **H14:** There is no reciprocal effect relationship between customer evaluations regarding IT used in banks and customers satisfaction.	Rejected
• **H15:**.Customer evaluations regarding IT used in banks are not different with regard to the type of IT banking services.	Accepted
• **H16:** There is no reciprocal effect relationship between customer evaluations regarding IT used in banks and the level of quality of services rendered (level of reliability, responsiveness, assurance, empathy and tangibles).	Rejected
• **H17:** Customer motives for dealing with the banks are negative	Rejected
• **H18:** Customer evaluations regarding the quality of services rendered are negative.	Rejected
• **H19:** There is no reciprocal effect relationship between managers' evaluation of IT used in banks and the quality of services rendered to the customers.	Rejected

Chapter 7

Analysis of Results

CHAPTER 7 : ANALYSIS OF RESULTS

7.1 Introduction

As described in chapter 6, a general descriptive analysis of the study sample has been made and the nine main hypotheses have been tested. In order to complete the analysis begun in the previous chapter, more in-depth discussion will be conducted in this chapter, which is divided into eight sections. For section 7.2 the researcher used means to indicate what are the most important and unimportant factors in influencing customers' choice of the main bank. The main objective of section 7.3 and section 7.4 is to present customers' and managers' perceptions respectively, regarding the dimensions of service quality using 'SERVQUAL'. These sections followed by customers' point of view with respect to the nature of the factors inhibiting and motivating the adoption of the electronic distribution channels (section 7.5). The managers' perceptions with regard to IT-based services are presented in section 7.6. Section 7.7 deals with customer satisfaction and their loyalty toward the banks that have been investigated. The last section provides a brief summary and the main findings of this chapter.

7.2 Bank Selection Criteria

The increasing sophistication of today's financial services has increased the banker's need to understand how customers select one bank over another. The key issue is the identification of the characteristics of a bank that make a customer more or less likely to have a preference (Al Khatib and Gharaibeh, 1998). Ramsay and Smith (1999) have pointed out that customers themselves are responsible for the changing banking industry. Banks must gain a better insight into their customer behaviour if they are to continue trading successfully into the future. Bank selection criteria have been heavily investigated over the past few years (Zineldin, 1996; Metawa and Almossawi, 1998; Kaynak and Whiteley, 1999; Naser *et al.*, 1999; Angur *et al.*, 1999; Chen, 1999; Allred and Addams, 2000; Almossawi, 2001; Zineldin, 2002; Kolodinsky *et al.*, 2004).

After a detailed review of the literature, fifteen factors influencing bank selection have been chosen, as follows: (1) reputation of the bank, (2) fast and efficient services, (3) accuracy of transaction, (4) recommendation of friends or relatives, (5) knowing the bank's personnel, (6) friendliness of the bank's personnel, (7) honesty and trustworthiness of staff, (8) higher interest on saving and deposits, (9) lower interest charges on services, (10) a wide range of services provided, (11) the availability of ATMs, (12) convenient location of the bank, (13) attractive rewards and prizes, (14) internal appearance of the bank and (15) external appearance of the bank.

The respondents were asked to indicate on a five-point scale the degree to which they had selected their main bank in each of the fifteen areas. The relative importance of each of the investigated attributes in the selection of banks in Jordan is shown in Table 7:1. For each statement, respondents were asked to indicate the extent to which they agreed along a five-point Likert-type scale, ranging from 1 = "not at all important" to 5 = "very important". The respondents, on average, rated the fifteen items in a range between "2.78" to "4.28". It is important to note that there is no significant link between age and motives for dealing with the banks, as seen in the previous chapter. This section is structured by age to investigate how important of these factors (motives) from the point of view of each age group and customers' opinions towards bank selection factors. Age has been taken as a main criterion to conduct this section. This is because that many of the previous similar studies were conducted by using this criterion (e.g. Metawa and Almossawi, 1998; Naser *et al.*, 1999; Allred and Addams, 2000; Almossawi, 2001). However, full discussion is presented below, with respect to each age category.

Table 7:1: Importance of bank selection factors according to age of respondents

Attributes	Age of respondents					
	- 25	25-34	35-44	45-54	55+	Total
	Mean	Mean	Mean	Mean	Mean	Mean
Reputation of the bank	3.43	3.79	3.97	3.83	3.84	3.79
Fast / efficient services	4.02	4.16	4.06	4.23	3.89	4.10
Accuracy of transaction	4.04	4.07	3.90	4.03	3.95	4.01
Recommendation of friends or relatives	2.65	2.88	3.00	2.91	2.84	2.87
Knowing the bank's personnel	2.67	2.94	2.96	3.03	2.84	2.91
Friendliness of the bank's personnel	2.83	2.98	2.94	3.06	3.11	2.96
Honesty and trustworthiness of staff	3.80	3.71	3.79	3.83	4.00	3.78
Higher interest on saving and deposits	2.98	2.56	2.71	3.09	3.21	2.78
Lower interest charges on services	3.41	2.95	2.96	3.17	3.21	3.08
A wide range of services provided	4.07	3.88	3.88	3.71	4.00	3.90
The availability of ATMs	4.46	4.33	4.29	4.17	3.74	4.28
Convenient location of the bank	4.39	4.15	4.01	4.40	4.05	4.18
Attractive rewards and prizes	3.07	2.71	2.74	2.91	3.05	2.83
Internal appearance of the bank	3.67	3.51	3.54	3.71	3.47	3.57
External appearance of the bank	3.48	3.22	3.41	3.57	3.53	3.38

Categories below 25 and 25–34

Table 7:1 shows the first three most important factors influencing the choice of the main bank for respondents aged below 25. These are "The availability of the ATMs" (mean 4.46); "Convenient location of the bank" (mean 4.39) and "A wide range of services provided" (mean 4.07). The means for the most unimportant factors in this category were "Recommendation of friends or relatives" (2.65); "Knowing the bank's personnel" (2.67) and "Friendliness of the bank's personnel" (2.83). As mentioned previously, the category 25-34 years old was the biggest one in terms of respondent numbers, and for this group the most important factors were "the availability of the ATMs" (4.33), "Fast and efficient services" (4.16), and "Convenient location of the bank" (4.15). The means of the three least important items were, "Higher interest charges on saving and deposits"

(2.56), "Attractive rewards and prizes" (2.71) and "Recommendation of friends or relatives" (2.88).

This result indicates that the categories below 25, and 25-34 prefer to have contact with their banks by IT rather than face-to-face contact, since the young age group do not regard as important a relationship with bank staff. It is worth noting that these results have been supported by Almossawi (2001), who surveyed 1,000 students aged 19-24 at the University of Bahrain. He found that young people seem to prefer dealing with their banks through ATMs, and he emphasised that the new generation of customers tend to put more importance on the factors which give them quick and convenient access to bank services, rather than factors related to the hospitality and condition of the bank's premises.

Categories 35-44 and 45-54

For respondents in age category 35-44, it has been found that the items "The availability of the ATMs"; "Fast and efficient services" and "Reputation of the bank" ranked as the first three in terms of choosing the main bank, the means being 4.29, 4.06 and 3.97 respectively. The three most unimportant factors were "Higher interest on saving and deposits" (2.71); "Attractive rewards and prizes" (2.74) and "Friendliness of the bank's personnel" (2.94). Almost the same results can be applied in the category 45-54 years old, where the items "Convenient location of the bank" (4.40); "Fast and efficient services" (4.23) and "The availability of the ATMs" (4.17) have been found as the three most important reasons for dealing with banks. The results show that the items "Recommendation of friends or relatives"; "Attractive rewards and prizes" and "Knowing the bank's personnel" ranked the lowest items in terms of bank selection criteria. The means of these items were 2.91, 2.91 and 3.03 respectively.

The middle age groups (i.e. 35-44 and 45-55) indicated the same main reasons for choosing the main bank, such as the availability of ATMs and fast and efficient services etc. At the same time the respondents of this category indicated the same unimportant factors in selecting their banks (i.e. recommendation of friends or relatives; knowing the bank's personnel etc.). Generally speaking, this result gives another strong indication

that IT is playing an important role in the banking industry. Banks should therefore pay more attention to their IT strategy in order to improve services and meet their customers' desires and wants (Porter and Millar, 1985; Lloyd-Walker and Cheung, 1998; Mols, 2001; Curry and Penman, 2004).

Category 55 and above

With regard to category 55 and above, it has been found that the three most important factors in dealing with banks are "Convenient location of the bank" (4.05); "A wide range of services provided" (4.0); "Honesty and trustworthiness of staff" (4.0) and "Accuracy of transaction" (3.95). In contrast, the three most unimportant factors were "Recommendation of friends or relatives" (2.84); "Knowing the bank's personnel" (2.84) and "Attractive rewards and prizes" (3.05).

It is worth noting that this category has its own reasons for dealing with banks (i.e. convenient location of the bank, a wide range of services, honesty and trustworthiness of staff and accuracy of transaction), but is similar to younger age groups regarding those factors that are not important, for example "Recommendation of friends or relatives"; "Knowing the bank's personnel", etc. Hence, it can be argued that this respondent group prefers personal contact rather than IT banking services, which may be due to various reasons. Firstly, IT banking (i.e. ATMs, Internet banking, phone banking, etc.) is a new strategy that banks in Jordan offer to customers, and since older people are used to dealing with their bank in person, they prefer to keep the status quo rather than switching to IT banking services (especially if their banks are near their home or workplace). Secondly, some older people are illiterate in terms of using IT services such as Internet banking, or they do not have access to the IT services offered to them.

Identifying important selection attributes will help banks to develop an appropriate marketing strategy. As seen in the above discussion, some selection attributes have been found to be crucial in customer selection of banks. Indeed, the factor receiving the highest degree of importance in the bank selection process relates to IT. "The availability of ATMs" was the first most important factor, with a score of 4.28. This

high score indicates that the use of electronic banking services is becoming a strong trend and banks have invested in widely in ATMs as a way of securing their future in the 'electronic age'. The importance of the IT factor has also been confirmed by Coyle (1999), who reported that the 'competitive bank' of the future is the one that can offer speedy, technology-based services (e.g. ATM, Internet) backed by effective staff training. It can be seen from the results reported in Table 7:1 that the second most important factor in the selection of banks is "Convenient location of the bank", with a mean score of 4.18. This result shows that Jordanian customers still consider the location of a bank as a key factor in their choice. This study confirms the importance of location as a bank selection criterion, as has also been reported in some previous studies (Metawa and Almossawi, 1998; Al Khatib and Gharaibeh, 1998; Almossawi, 2001). It is worth noting, that the location of a bank does not mean only the physical building, but also the location of ATMs and, interestingly, the location of automated branches that offer full electronic banking services without face-to-face contact. The results presented in Table 7:1 also indicates that the third most important factor in the selection of banks is "Fast and efficient services". The mean score of 4.10 for this factor indicates a strong role for IT regarding the bank selection decision. Lloyd-Walker and Cheung (1998) have claimed that electronic banking can assist the delivery of superior quality customer service by ensuring a fast, accurate and reliable service. This concept has been supported by Joseph *et al.* (1999), who stated that when a customer freely chooses to use technology, as a form of service delivery, the impact is high in terms of quality attributes. Some of the quality attributes that are highly important to customers are efficiency and speed. Moreover, Mylonakis *et al.* (1998) found the same results in their study conducted in Greece. Their results reveal that Greek customers are seeking good service in a safe, fast and technologically modern environment.

On the other hand, the results reported in Table 7:1 shows that the most unimportant factors influencing customer choice is "Higher interest on saving and deposits", with a mean score of 2.78. This, in turn, can be explained by the majority (if not all respondents) being Muslims, hence religion and cultural background have a vital effect on customer behaviour, since the charging of interest is forbidden by Islamic law. In line with other related studies, there is a study that has been conducted in Jordan by

Naser *et al.* (1999), that reveals the majority of customers banked with the Islamic bank because of religious reasons as the bank observed Islamic Shari'a principles. This result also confirmed the importance of the religious factor in choosing a bank; many international conventional banks have started to open branches, which operate according to Islamic law in some Islamic countries. Metawa and Almossawi (1998) reported that several conventional banks have launched their own Islamic units, for example Citibank-Bahrain is an Islamic investment unit that began its operations in June 1996. This also can be seen in Malaysia where a conventional bank opened what is called an 'Islamic window' to finance Islamic business activities. Abdelaziz (2001) has stated that the conventional commercial banks in Egypt have opened over 60 Islamic branches. In Jordan there are two examples of this. The Arab Bank, the biggest conventional bank in Jordan in terms of assets and market capitalisation opened the 'Islamic International Arab Bank' in 1997 that provides a full range of banking services in accordance with Islamic law rules (Naser *et al.*, 1999). In addition, the Cairo Amman Bank established Islamic branches in the West-Bank and Gaza Strip, to provide comprehensive financial services according to Islamic principles. More interestingly, in non-Islamic countries such as Singapore, a major provider of financial services in South East Asia, encourages its conventional banks to set up Islamic banking operations (Gerrared and Cunningham, 1997).

Table 7:1 also shows that the second most unimportant factor is "Attractive rewards and prizes", with a mean score of 2.82. This result also can be attributed to the religion of Islam and the cultural background, since the customers believe that these rewards and prizes are just another type of interest, which is strictly prohibited by Islamic law. The third most unimportant factor is "Recommendation of friends or relatives". The mean of this factor is 2.87 which indicates that this item did not play a major role in the banking choice of customers. It is worth noting, that a similar result has been found in Turkey by Akinci *et al.* (2004), who found that advertising and suggestions from friends and colleagues are the least important factors, in terms of bank selection criteria. However, this result could be due to many reasons. Firstly, the respondents were well educated (Diploma 17.5%, Graduate 53.1% and Post-Graduate 16%). These customers can evaluate and assess the banks by themselves without needing advice from other people.

Secondly, the promotion strategy that banks implement provides customers with full details, and a clear picture, about their services and activities. Thirdly, usually young customers prefer to act independently rather than relying on the recommendations and experience of others. Hence, banks should realise that approaching young potential customers directly will be more effective than relying on the influence of word-of-mouth (Almossawi, 2001). The last reason is because most banks offer almost the same products and services, and consequently, factors such as recommendations by friends or relatives appear to be less important in selecting a bank (Kaynak and Whiteley, 1999; Zineldin, 1996, 2002).

Broadly speaking, it is worth noting that the above discussion has concentrated on the first three and the last three most important / unimportant factors in terms of bank selection criteria. Other factors lying between those two groups (important and unimportant factors) are taken to be of secondary importance. These factors and their means have been ranked respectively as: Accuracy of transactions (4.01); A wide range of services (3.90); Reputation of the bank (3.79); Honesty and trustworthiness of staff (3.78); Internal appearance of the bank (3.57); External appearance of the bank (3.38); Lower interest charges on services (3.08); Friendliness of the bank's personal (2.96) and Knowing the bank's personnel (2.91).

7.3 Customers' Perceptions of Service Quality Dimensions

Bahia and Nantel (2000) have emphasised that perceived service quality in the banking industry results from the difference between customers' perceptions of the services offered by the bank (received service) and their expectations in comparison with the banks that offer such services (expected service). However, Parasuraman *et al.* (1985) defined service quality as the degree and direction of discrepancy between customers' service perception and expectations. Gronroos (1984) proposed two types of service quality: *technical quality*, which involves what customers actually receive from the service (i.e. the outcome of the service) and *functional quality*, which involves the manner in which customers receive the service (i.e. the process of service delivery). Among such general instruments for measuring service quality are '*SERVPERF*' (Cronin and Taylor, 1992), and '*SERVQUAL*' (Parasuraman *et al.*, 1988).

The last mentioned SERVQUAL, is the most widely used. A well-known scale developed by Parasuraman *et al.* (1988, 1994), it has been widely used in both original and adapted versions by a variety of researchers on banks (Bahia and Nantel, 2000; Lassar *et al.*, 2000; Jabnoun and Al-Tamimi, 2003; Cui *et al.*, 2003). SERVQUAL has been discussed in more detail in chapter 3 in terms of its features and criticisms. The SERVQUAL scale was first published in 1988 and has undergone numerous improvements and revisions since then. It currently contains 21 perception items that are distributed throughout the five service quality dimensions (Zeithaml *et al.*, 1996; Zeithaml and Bitner, 2000).

However, in this study, consideration has only been made into the perception of quality. This is 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, such as quality, than do the SERVQUAL measures (expectations minus perceptions). Thirdly, the perception section of service quality has been used widely in the banking sector (e.g. Al Khatib and Gharaibeh, 1998; Jabnoun and Al-Tamimi, 2003) and also in the other

sectors, such as 'fast food chains' (e.g. Davies *et al.*, 1999). The last reason is 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 *et al.*, 1999).

As mentioned earlier, five dimensions (i.e. tangibles, reliability, responsiveness, assurance and empathy) have been employed to measure service quality and 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 has been used ranging from 1 = strongly disagree to 5 = strongly agree. The descriptive statistics of the items in each category are discussed in the following paragraphs.

Reliability: It can be seen from the results presented in Table 7:2 that the means of respondents range from 3.27 to 3.69 on the various items relating to reliability. In other words, the study sample had similar perceptions towards the statements relating to reliability. A comparison of means revealed that the reliability of banks does not differ among different age groups of customers. However the highest mean was indicated by the category of 45-54 years old regarding the statement "Your bank provides its services at the time it promises to do so", while the lowest mean was indicated by the category of below 25 years old with reference to the statement "When you have a problem, your bank shows a sincere interest in solving it", relating more specifically to service recovery, if and when things go wrong.

Table 7:2: Customer perceptions regarding the reliability dimension

Age of Respondent		**Reliability**				
		When your bank promises to do something by a certain time, it does so	When you have a problem, your bank shows a sincere interest in solving it	Your bank performs the services right the first time	Your bank provides its services at the time it promises to do so	Your bank keeps you informed about when services will be performed
Below 25 N=46	Mean	3.50	2.98	3.67	3.54	3.24
	Std. Deviation	.86	1.00	.94	1.05	1.18
25-34 N=07	Mean	3.48	3.29	3.69	3.73	3.28
	Std. Deviation	.87	.82	.83	.86	1.06
35-44 N=68	Mean	3.62	3.43	3.71	3.71	3.28
	Std. Deviation	.86	.85	.73	.73	1.12
45-54 N=35	Mean	3.69	3.23	3.69	3.77	3.46
	Std. Deviation	.96	.81	.83	.84	1.01
55 + N=19	Mean	3.63	3.37	3.42	3.63	3.37
	Std. Deviation	.90	.90	.96	.83	1.21
Total N=275	Mean	3.55	3.27	3.67	3.69	3.30
	Std. Deviation	.88	.87	.83	.86	1.09

Banks should pay more attention to service recovery (Spreng *et al.*, 1995; Lewis and Spyrakopoulos, 2001; Colgate and Lang, 2001; Lagrosen *et al.*, 2004). In this context, Lagrosen *et al.* (2004) have argued that when something goes wrong, the service provider will take action to find a new, acceptable solution. Gronroos (1988) suggests that service recovery includes all the activities and efforts employed by a service provider to resolve, amend, and restore the loss experienced by the customer following a service failure. Baron and Harris (2003) have found that service recovery performance influenced overall customer satisfaction. In the technology-based services context, it has been reported that the key to service recovery will lie in enabling the customers

themselves to resolve the problems (Baron and Harris, 2003). This can be done via knowing the customers' demands and learning them and showing how to use IT-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. Thus, one of the most important benefits of a service recovery strategy is the prevention of customer defection to other service providers, and that most dissatisfied customers will do business again if their problems are solved satisfactory (Lewis and Spyrakopoulos, 2001). Gaining new customers is more costly than keeping existing ones; in other words, a customer is more profitable when she / he keeps dealing with the bank for a long time (Reicheld and Sasser, 1990; Zeithaml *et al.*, 1996). Chakravarty *et al.* (1996:29) mention that attracting a new customer can cost "five to six times more" than the cost of keeping an existing customer.

Responsiveness: According to Table 7:3, respondents' perceptions regarding the statements relating to the responsiveness dimension range from 3.49 to 3.59. This may reflect the fact that bank employees are well-educated as well as well-trained. This can be explained by the policy of most banks under study in selecting their employees according to their level of education. The banks also provide training courses for every employee. In addition, it also may be that because some customers prefer to use IT banking, and do not deal frequently with employees, more time is actually available for employees to give to customers who prefer personal contact.

Table 7:3: Customer perceptions regarding the responsiveness dimension

Age of Respondent		**Responsiveness**		
		Your bank's employees give you prompt service	Your bank's employees are always willing to help you	Your bank's employees are never too busy to respond to requests
Below 25 N= 46	Mean	3.52	3.48	3.48
	Std. Deviation	.96	1.03	1.05
25-34 N=107	Mean	3.50	3.59	3.50
	Std. Deviation	1.04	.98	.92
35-44 N=68	Mean	3.57	3.57	3.35
	Std. Deviation	.87	.78	.97
45-54 N=35	Mean	3.80	3.89	3.89
	Std. Deviation	.93	.99	.96
55+ N=19	Mean	3.42	3.42	3.32
	Std. Deviation	1.12	.96	.67
Total N=275	Mean	3.56	3.59	3.49
	Std. Deviation	.98	.94	.95

***Assurance*:** Four items are measured relating to this dimension. Table 7:4 shows that customers' perceptions with regard to these four items are rated as relatively high, ranging from 3.56 to 3.89. As noted above, the employees of banks in Jordan usually 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 reply to the repeated and unexpected questions and inquiries from their customers. Furthermore, the behaviour of bank employees instils more confidence, which makes customers feel safe in dealing with banks.

Table 7:4: Customer perceptions regarding the assurance dimension

Age of Respondent		**Assurance**			
		The behaviour of your bank's employees instils confidence in customers	You feel safe in your transactions with your bank	Your bank's employees are consistently courteous	Your bank's employees have the knowledge to answer your questions
Below 25 N=46	Mean	3.67	3.91	3.98	3.50
	Std. Deviation	1.06	1.07	.88	.89
25-34 N=107	Mean	3.72	3.87	3.86	3.59
	Std. Deviation	.94	.79	.81	.92
35-44 N=68	Mean	3.50	3.74	3.75	3.41
	Std. Deviation	.97	.86	.87	.98
45-54 N=35	Mean	3.91	3.97	4.17	3.74
	Std. Deviation	1.09	.95	.89	1.12
55+ N=19	Mean	3.68	3.89	3.89	3.79
	Std. Deviation	.75	1.20	1.05	.85
Total N=275	Mean	3.68	3.86	3.89	3.56
	Std. Deviation	.98	.91	.87	.95

***Empathy*:** It can be seen from the results reported in Table 7:5 that the means of the items relating to empathy range between 2.96 to 3.65. Respondents' perceptions with regard to empathy appear to be less positive than their perceptions of the other previous dimensions (i.e. reliability; responsiveness and assurance). The lowest mean has been indicated in the category of below 25 years old regarding the item "Your bank has your best interests at heart". Meanwhile, the highest mean has been indicated by the category of 55 and above, with regard to the item "Generally, your bank's employees are competent". It is worth noting here, that this item has been rated the highest one for all

age categories. Hence, bankers need to improve their relationships with their 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.

Table 7:5: Customer perceptions regarding the empathy dimension

Age of Respondent		**Empathy**			
		Your bank gives you individual attention	Your bank has your best interests at heart	Your bank's employees understand your specific needs	Generally, your bank's employees are competent
Below 25 N=46	Mean	3.24	2.78	3.07	3.63
	Std. Deviation	1.18	.92	.98	1.02
25-34 N=107	Mean	3.29	3.01	3.15	3.66
	Std. Deviation	.96	.87	.96	.96
35-44 N=68	Mean	3.15	2.88	3.01	3.53
	Std. Deviation	.97	1.09	.98	.91
45-54 N=35	Mean	3.31	3.14	3.26	3.80
	Std. Deviation	1.11	1.14	1.07	.90
55 + N=19	Mean	3.21	3.05	3.47	3.84
	Std. Deviation	.92	.78	.84	.96
Total N=275	Mean	3.24	2.96	3.14	3.65
	Std. Deviation	1.01	.97	.98	.95

Tangibles: It can be seen from the results reported in Table 7:6, that respondents' perception regarding the statements in the 'tangibles' dimension are higher, ranging from 3.74 to 4.11. The lowest mean has been indicated in the category of 25-34 years old, regarding the item "Your bank has convenient operating hours" (3.53), whilst the highest mean has been indicated in the category of 55 and above, with regard to the item "The physical facilities of your bank are visually appealing" (4.32). It is worth noting that the lowest mean was the item "Your bank has convenient operating hours" for three categories (i.e. below 25 (3.80); 25-34 (3.53); 45-54 (3.89)). At the same time, the mean of this item for the category 55 and above was 4.05, which is significantly higher. This can be explained by two reasons: first, bank operating hours are 8.30 am - 3.30 pm and this may be a source of inconvenience to some customers, particularly those who are working. As retired customers are able to use normal opening hours, this score is, as expected, higher than in other age categories. Second, the relatively short daily working hours in which the customers can carry out their transactions may cause crowding 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.

Generally speaking, the results in Table 7:6 show that the physical facilities (e.g., saving books, debit or credit cards and cheque book, ATMs, etc.), have been rated the highest mean for all age categories (4.11). Due to the intangible nature of services, it is often difficult for customers to understand services, and in this case, they make inferences about the 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 IT banking services (i.e. ATMs, debit and credit cards, PC banking, phone banking, etc.) can play a major in customers' preferences and attitudes, since they can use the 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 7:6: Customer perceptions regarding the tangibles dimension

Age of Respondent		**Tangibles**				
		Your bank has modern-looking equipment	The physical facilities of your bank are visually appealing	Your bank's employees are neat in appearance	Materials associated with the service are visually appealing at your bank	Your bank has convenient operating hours
Below 25 N=46	Mean	3.93	4.22	4.09	3.87	3.80
	Std. Deviation	.95	.84	.94	.93	1.02
25-34 N=107	Mean	3.70	4.02	3.94	3.67	3.53
	Std. Deviation	.91	.75	.71	.79	.98
35-44 N=68	Mean	3.79	4.04	3.88	3.72	3.87
	Std. Deviation	.87	.80	.80	.90	.90
45-54 N=35	Mean	3.97	4.29	4.00	4.00	3.89
	Std. Deviation	.82	.75	1.00	.80	1.08
55+ N=19	Mean	4.05	4.32	4.16	3.84	4.05
	Std. Deviation	.71	.58	.83	.76	.85
Total N=275	Mean	3.82	4.11	3.97	3.77	3.74
	Std. Deviation	.89	.77	.82	.84	.98

In summary, the results indicate that the customers in the context of Jordan's banking sector value all five dimensions of service quality but they value the tangibles dimension more. It has been suggested that the tangible 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 the marketing literature in general and service quality in particular, which have reported tangibles as a distinctive factor (Bouman and Van der Wiele, 1992; Cui *et al.*, 2003) and the physical appearance of bank has the greatest impact on the overall service quality (Siu and Cheung, 2001).

7.4 Managers' Perceptions of Service Quality Dimensions

McDougall and Levesque (1994) have clamed that knowing the relative importance of each dimension of service quality can help service providers to prioritise their efforts and resources and deploy them more effectively to improve each dimension of service quality. Furthermore, this knowledge allows managers to concentrate on those dimensions that offer the greatest opportunity to enhance customer satisfaction and their loyalty.

Five dimensions (i.e. reliability, responsiveness, assurance, empathy and tangibles) have been employed to measure service quality and branch managers' perceptions of the service offered to their customers (See Appendix 2). Managers were asked to provide opinions regarding those dimensions. A five point Likert scale has been used ranging from 1 = strongly disagree to 5 = strongly agree. The descriptive statistics of the items in each category are discussed in the following paragraphs.

Reliability: It can be seen from the results reported in Table 7:7 that the means of the items relating to reliability are very high, ranging from 4.12 to 4.36. The highest mean was the item "Your bank keeps customers informed about when services will be performed" (4.36). In general, the managers regard the reliability of the service performed for their customers as high, confirming the results obtained in the previous section (See Table 7:2).

Table 7:7: Managers' perceptions regarding the reliability dimension

Reliability		When you promise your customers to do something by a certain time ,you do so	When your customer has a problem, your bank shows a sincere interest in solving it	Your bank performs the service right the first time	Your bank provides its services at the time it promises to do so	Your bank keeps customers informed about when services will be performed
Total N 67	Mean	4.12	4.33	4.15	4.13	4.36
	Std. Deviation	.66	.59	.47	.60	.64

Responsiveness: Three items are measured relating to this dimension. Table 7:8 shows that managers' perceptions with regard to these three items are rated as relatively high ranging from 4.13 to 4.88. This result also confirmed what already mentioned in Table 7:3, regarding the educational level of employees, training courses and IT factors that help the employees to serve the customers as much as they can.

Table 7:8: Managers' perceptions regarding the responsiveness dimension

Responsiveness		Your bank's employees give your customers prompt services	Your bank's employees are always willing to help your customers	Your bank's employees are never too busy to respond to customer's requests
Total N 67	Mean	4.88	4.48	4.13
	Std. Deviation	4.89	.56	.65

Assurance: Table 7:9 shows that the means of the items relating to the assurance dimension are also very high, ranging from 4.19 to 4.48. Despite the fact that employees usually receive regular training courses and they are well-educated, there is potentially a lack of experience, which affects their knowledge to answer customers' questions, since the lowest mean was indicated by the managers with reference the statement "The bank's employees have the knowledge to answer customer's questions" (4.19).

Table 7:9: Managers' perceptions regarding the assurance dimension

Assurance		The behaviour of your bank's employees instils confidence in customers	Your customer feel safe in his transactions with your bank	The bank's employees are consistently courteous	The bank's employees have the knowledge to answer customer's questions
Total N 67	Mean	4.37	4.27	4.48	4.19
	Std. Deviation	.65	.64	.53	.72

Empathy: According to Table 7:10 below, managers' perceptions regarding the statements relating to the empathy dimension range from 3.66 to 4.22 , and appear to be less positive than their perceptions of the other previous dimensions (i.e. reliability, responsiveness and assurance). Interestingly, this result also confirmed exactly the customers' perception towards this dimension (See Table 7:5). Hence, banks must understand that not all customers are the same, and indicates the potential importance of market segmentation - grouping customers sharing similar requirements, expectations and demographic profiles. Here, the role of IT can be very important and afford banks the ability to acquire and integrate vast quantities of data that can be used to build strong relationships with targeted customers (Zeithaml and Bitner, 2000).

Table 7:10: Managers' perception regarding the empathy dimension

Empathy		Your bank gives a customer individual attention	Your bank has your customer's best interests at heart	Your bank's employees understand your customer's specific needs	Generally, the bank's employees are competent
Total N 67	Mean	3.66	4.00	3.82	4.22
	Std. Deviation	.86	.78	.70	.52

Tangibles: Five items are measured relating to this dimension. Table 7:11 shows that items relating to tangibles are very high, ranging from 4.34 to 4.55. The lowest mean was indicated with regarded to the item "Your bank has convenient operating hours" (4.34), meanwhile the highest mean was relating to the item "The physical facilities of your bank are visually appealing" (4.55). This result is similar to the customers' perceptions toward this dimension in terms of the highest and the lowest means (See Table 7:6).

Table 7:11: Managers' perceptions regarding the tangibles dimension

Tangibles		Your bank has modern-looking equipment	The physical facilities of your bank are visually appealing	Your bank's employees are neat in appearance	Materials associated with the service are visually appealing at your bank	Your bank has convenient operating hours
Total N 67	Mean	4.51	4.55	4.42	4.49	4.34
	Std. Deviation	.53	.58	.63	.53	.79

To sum up, the managers' perceptions with regard to the service quality provided to their customers on the SERVQUAL dimensions are very high, and are similar to that indicated by customers in the previous section. This study confirms that banks should pay attention to all five dimensions of service quality, but give more focus to the dimension of empathy in their pursuit to increase overall service quality. Since the means of this dimension were indicated the lowest from both customers' and managers' perceptions.

7.5 Customers' Perception of IT-Based Services

Banking has always been a highly information intensive activity that relies heavily on IT to acquire, process, and deliver information to all customers (Porter and Millar, 1985; Kim and Davidson, 2004; Zhu *et al.*, 2004). It has been stated that some organisations have moved from a 'bricks and mortar' format to a 'clicks and mortar' format (Singh, 2004; Zhu *et al.*, 2004). In the same vein, Baron and Harris (2003:73) have pointed out that the organisations' strategies, in terms of distribution channels, fall into two camps as follows:

- On-line or on-site, i.e. 'clicks or bricks'
- On-line and on-site, i.e. 'clicks and bricks'.

In the world of banking, the developments in IT have had a vital effect in the development of more flexible payment methods and more user-friendly and convenient banking services. These developments also offer banks alternative or non-traditional delivery channels through which banking products and services can be delivered to customers more conveniently and economically (Akinci *et al.*, 2004). Furthermore, Zhu *et al.* (2002) claim that the importance of IT-based service needs to be understood, in terms of how customers evaluate IT banking and how their evaluations affect their perceptions of the overall service quality of the banks. Since the customers are the end-users of IT banking, banks must understand which attributes those customers look for when consuming services and which factors affect customers' intentions to use IT-based services. However, as noted earlier, this section deals with IT-based services to address the issue of which key variables would affect customers' evaluation of IT banking. The key variables selected to describe IT-based services include, ease of use, conservation of time, convenience, privacy and accuracy (Buttery and Tamaschke, 1996; Lloyd-Walker and Cheung, 1998; Colgate, 1998; Joseph *et al.*, 1999; Mols, 2000; Thornton and White, 2001; Zhu *et al.*, 2002; Ahmad and Buttle, 2002; Wang *et al.*, 2003a; Zhu *et al.*, 2004; Pikkarainen *et al.*, 2004; Eriksson *et al*, 2005; Curran and Meuter,2005). The type of IT-based banking services includes ATMs, Internet banking, phone banking, credit cards, and PC banking.

Results were graded using a five-point Likert scale. Respondents indicated their feeling from "strongly disagree" (1) to "strongly agree" (5), on each of the factors that influenced their adoption of the electronic distribution channels. The respondents, on average, rated the five factors in a range from 3.98 to 4.23. A close look at Table 7:12 reveals that the variables of IT-based services are rated as relatively high. The descriptive statistics of those variables are discussed below, beginning with the variable that most strongly influenced the adoption of IT banking by customers.

Table 7:12: Customers' perceptions with regard to IT-based services

Age of Respondent		**IT-based services**				
		It is easy to use IT banking services	IT banking services save my time	IT banking services make my banking more convenient	IT banking services provide privacy in my banking transaction	IT banking services provide accurate account information
Below 25 N=39	Mean	3.82	4.31	4.33	3.95	3.92
	Std. Deviation	1.02	.86	.84	.76	.81
25-34 N=95	Mean	3.99	4.20	4.13	4.07	4.06
	Std. Deviation	.75	.63	.62	.78	.81
35-44 N=62	Mean	4.00	4.29	4.24	4.13	4.11
	Std. Deviation	.87	.82	.88	.82	.89
45-54 N=30	Mean	4.10	4.13	4.00	3.83	3.90
	Std. Deviation	.66	.82	.69	1.02	.96
55 + N=14	Mean	4.07	4.14	3.86	3.71	3.73
	Std. Deviation	.73	.77	.66	.99	.80
Total N=240	Mean	3.98	4.23	4.16	4.02	4.01
	Std. Deviation	.82	.75	.75	.83	.85

Conservation of time: It can be seen from the results presented in Table 7:12 that the means of respondents relating to conservation of time range from 4.31 to 4.13. In other words, the study sample had similar perceptions towards, "IT banking services save my time". A comparison of means revealed that attitudes towards conservation of time do not differ among different age groups of respondents. However the highest mean was indicated by the category of below 25 years (4.31), while the lowest mean was indicated by the category of 45-54 (4.13). Zhu *et al.* (2002) emphasised that once customers have accessed the service delivery point, they do not like to wait to receive the service. IT-based service options may help to improve customer service quality by providing customers with more prompt and efficient service. Lloyd-Walker and Cheung (1998) claim that IT can assist the delivery of superior quality customer service by ensuring a fast, accurate and reliable service. A system that ensures the fastest possible responses to customer requests will provide banks with a 'competitive advantage'. Ryssel *et al.* (2004) pointed out the IT enables banks to provide their customers with 'high quality' products and services, and ensures timely delivery.

***Convenience*:** It can be seen from the results reported in Table 7:12 that the means relating to convenience range from 3.86 to 4.33. The highest mean towards the statement "IT banking services make my banking transactions more convenient" was indicated by the category of below 25 years old (4.33), while the lowest mean was indicated by the category of 55 and above (3.86). Zhu *et al.* (2002) suggested that banks with an extensive electronic network would have the opportunity to attract new customers and increase customer satisfaction. Thornton and White (2001) believe that customers who are convenience-oriented would want to use channels that provide fast and easy access, such as ATMs and EFTPoS, where human tellers, who are limited in terms of hours and are geographically constrained, would be less attractive to customers and, therefore, would not be used to the same extent. Similar conclusions have been reached by Ahmad and Buttle (2002) in relation to phone banking, which provided convenience and control to customers and lower costs to banks. Devlin (1995) argued that customers have less time to spend on activities such as visiting a bank and, therefore, want a higher degree of convenience and accessibility. Mols (1999) mentioned that banks use the Internet to offer a number of home banking services, such

as bill payment, up-to-date balance information on deposit and loan accounts, transfer funds between accounts and the ability to communicate with the bank by e-mail. Customers are able to do banking 24 hours a day and seven days a week, at places convenient and private to them, such as their homes (Kim and Davidson, 2004).

Privacy: Zhu *et al.* (2002) argued that customers are concerned about privacy when using IT banking. For example, some customers may have the impression that the Internet is not a secure environment for bank transactions, and that somebody else may have access to their financial information. Daniel (1999) also identifies security as a factor influencing customer acceptance and the adoption of new innovation. Patricio *et al.* (2003) have pointed out that security concerns are still a major disadvantage of Internet banking. This ties in with Singh's study (2004) in which it was found that security was a major obstacle to Internet banking. Banks were concerned about unauthorised access to their system, and customers were concerned about the safety of their personal data and the risk of fraudulent transactions. Even in countries where Internet banking has long been established, one of the most important factors slowing progress of this new innovation is consumer concern for security of financial transactions over the Internet (Ramsay and Smith, 1999; Patricio *et al.*, 2003; Rotchanakitumnuai and Speece, 2003; Pikkarainen *et al.*, 2004).

However, it can be seen from the results reported in Table 7:12 that the means relating to privacy range from 3.71 to 4.13. The lowest mean regarding "IT banking services provide privacy in my banking transaction", has been indicated by the category of 55 and above (3.71). Meanwhile, the highest mean has been indicated by the category of 35-44 (4.13). It may be interesting to note that a study by Mattila *et al.* (2003) found the same results. They point out that mature customers (over 65 years of age) in Finland find Internet banking more insecure than bank customers in general. A female 65 year old (quoted in Mattila *et al.*, 2003) stated, "If the hackers can get to the Pentagon, imagine what they would do with my account" (Mattila *et al.*, 2003:522).

In the context of Jordan, it seems that Jordanian customers believe the security and privacy in their IT banking transactions are relatively high and this is can be due to banks under study have only offered Internet banking services in the last few years. For

instance, the Arab Bank was the first bank in Jordan to offer Internet banking to its customers in May, 2000 (Arab Bank Group-Annual Report, 2003). On the other hand, many banks in Jordan do not yet offer Internet banking, and some just offer this service at the basic level, such as the Jordan Islamic Bank, Cairo Amman Bank and Jordan National Bank. Sathye (1999) mentioned that Internet banking involves customers using the Internet to access their bank and account, to undertake banking transactions at the basic level, which means the setting up of a Web page by a bank to give information about its product and services. At an advanced level, it involves the provision of facilities such as accessing accounts, funds transfer, accounts summary as well as transaction history and buying financial products or services on line. Sathye (1999) also claimed that Internet banking will not be adopted unless it is considered safe and secure by the customers. Nevertheless, it should be borne in mind that this research is focusing on IT banking services as a whole, and not on a specific type of service that banks provide, such as Internet banking.

Accuracy: It can be seen from the results presented in Table 7:12 that the means of respondents' perceptions relating to this dimension range from 3.73 to 4.11. This result shows that customers had similar perceptions towards accuracy as they did towards privacy. However, a comparison of means revealed that accuracy does not differ among different age groups of respondents. The highest mean was indicated by the category of 35-44 years (4.11) towards "IT banking services provide accurate account information" and the lowest mean was indicated by the category of 55 and above (3.73). Parasuraman *et al.* (1988) and McDougall and Levesque (1994) indicate that accurately performed services and providing information could help improve service reliability and service outcomes. Parallel to this, Mols (1999, 2000) and Lloyd-Walker and Cheung (1998) stressed that IT can help banks to improve their service quality by reducing error rates.

Ease of use: the results reported in Table7:12 show that the means relating to ease of use range from 3.82 to 4.10. Surprisingly, the lowest mean regarding "It is easy to use IT banking services" has been indicated by the category of below 25 (3.82). Meanwhile, the highest means have been indicated by the categories of 45-45 and 55 and above with 4.10 and 4.07 respectively. However, in spite of this variable being significantly high (3.98) it is considered as the lowest mean among the others. This can be attributed to

various reasons: first, as mentioned earlier, the banks in Jordan, are currently announcing the launch or development of a transactional electronic banking service. Hence, customers may feel it difficult to understand all of these new developments or even to cope with them. Second, some banks do not provide such guidance to their customers in terms of how to use these technologies, especially Internet banking. In other words, the Internet sites are not easy to operate. Dabholkar (1996) has pointed out that the complexity of the IT banking services may affect customers' willingness to use such options. The last reason can be attributed to the customers themselves, because the lack of knowledge and computer illiteracy may cause the customers to view such technologies as being difficult to use.

Daniel (1999) identifies "ease of use" as one of the factors for customer acceptance in her study of electronic banking in the UK and Ireland, and in another study in Australia, the same point has been made by Sathye (1999) who found that difficulty in use was one of the main reasons for non-adoption of Internet banking. Banks need to pay more attention to educating their customers in the use of IT banking services. Kaynak and Whiteley (1999) have pointed out, that although many banks have made substantial investments in technology and physical facilities, very little investment has been made on educating the customers. Hence, training the customers or even showing them how to use Internet banking in practice and other types of technology may improve banks' perceived service quality and gain their customers' satisfaction. In the light of this result, Curry and Penman (2004) have pointed out that there is much need to provide customers with some technological training rather than assuming they will automatically accept technology and make use of it.

7.6 Managers' Perception of IT-Based Services

Nowadays the nature of the banking industry is altered. It is foreseen by many that competition will become tougher in the financial services industry, and especially the banking sector, owing to rapid technological change and globalisation of financial markets (Zhu *et al.*, 2002; Mattila *et al.*, 2003; Akinci *et al.*, 2004, Curry and Penman, 2004). Zineldin (2002) also indicates that leading banks in the relevant marketplace would be more willing to invest in expensive technology and to offer higher technological and IT banking services. Hence, it is important for banks to explore and understand where IT banking will, or will not, enhance customer service. In doing this, the banks may have the opportunity to develop and promote IT-based services for the sake of achieving a higher level of service quality and customer satisfaction.

Results were graded using a five-point Likert scale. Branch managers indicated their feelings from "strongly disagree" (1) to "strongly agree" (5), on each of the factors that they felt influenced their customers to adopt of the electronic distribution channels. Table 7:13 shows that the branch managers, on average, rated the five factors in a range from 4.31 to 4.61.

Table 7:13: Managers' perceptions with regard to IT-based services

IT-based services		It is easy to use your IT banking services	IT banking services save your customer time	IT banking services make your customer banking more convenient	IT banking service provide privacy to your customer transactions	IT banking services provide accurate account information to your customer
Total N 67	Mean	4.31	4.61	4.61	4.33	4.42
	Std. Deviation	.47	.52	.58	.77	.58

A close look at the results reported in table 7:13 reveal that the managers' perceptions towards the importance of the IT banking service offered to their customers are very high. The lowest mean was related to the item "It is easy to use your IT banking services" (4.31), whilst the highest mean has been indicated regarding the items "IT

banking services save your customer time" and "IT banking services make your customer banking more convenient" (4.61). Interestingly, these results are similar to those reported in previous section (See Table 7:12) in terms of the highest and the lowest mean. In other words, managers and customers cited '*conservation of time'* and '*convenience*' are the key issues relating to IT-based services. On the other hand, both also indicated that the lowest issue regarding IT-based services is '*ease of use'* which means that IT banking services in some cases are not easy to use, therefore more attention must be paid to this aspect. As already mentioned, the importance of training and pre-education in the use such technologies is even more emphasised (Ramsay and Smith, 1999; Mattila *et al.*, 2003; Rotchanakitumnuai and Speece, 2003).

To sum up, the results of this section confirmed those indicated in the previous section, in terms of the relationship between IT used in banks and service quality rendered to customers, from management's point of view, i.e. the more IT is used the better the quality of services will be.

7.7 Customer Satisfaction / Loyalty

The relationship between service quality and customer satisfaction remains at the forefront of the marketing literature. Customer satisfaction often depends on the quality of the service offering. Considerable research has focused on service quality dimensions as the primary determinants of customer satisfaction (Parasuraman *et el.*, 1988, Zeithaml *et al.*, 1996; Spreng and Mackoy, 1996; McDougall and Levesque, 2000). On the basis of their research, Levesque and McDougall (1996) reported that customer satisfaction was driven by a number of factors, including, but not limited to, service quality dimensions. Many banks are directing their strategies towards increasing customer satisfaction and loyalty through improved service quality (Levesque and McDougall, 1996). Banking is one of the many service industries where customer satisfaction has been an increasing focus of research (Holliday, 1996).

Satisfaction has been described as an emotional response to the difference between what customers expect and what they ultimately receive from the suppliers (Jonsson and Zineldin, 2003). Furthermore, it has been argued that customer satisfaction is playing a vital role in marketing management and is believed to determine repeat sales, positive word-of-mouth recommendations and most importantly customer loyalty (Goode and Moutinho, 1995; Zeithaml *et al.*, 1996; Jonsson and Zineldin, 2003). Moreover, Levesque and McDougall (1996) have stated that in increasing loyalty, the banks can gain several advantages, for instance, reducing their servicing costs (i.e. accounts do not have to be opened or closed, and credit ratings do not have to be established); having an opportunity to cross-sell existing and new products and services; and the banks can gain knowledge of the financial affairs and needs of its customers, thereby allowing effective and efficient targeting. In other words, without loyal customers, growth and profitability will be hard to achieve.

As noted above, there are many studies that have confirmed that service quality leads to satisfaction (Cronin and Taylor, 1992; Spreng and Mackoy, 1996; Jamal and Naser, 2002). Hence, it is worth knowing the relationship between satisfaction and loyalty. There is evidence that the level of satisfaction experienced by the customer directly

affects the loyalty that the customer will have to the bank. Heskett *et al.* (1997) have stated that loyalty is a direct result of customer satisfaction. Parallel to this, Bloemer *et al.* (1998) propose that quality in bank services would have an indirect effect on loyalty via satisfaction and that satisfaction would have a direct positive effect on loyalty. However, loyalty seems to be the ultimate goal that any business hopes to reach. Zeithaml *et al.* (1996) have emphasised that loyalty may be manifested in several ways; for instance, saying positive things about the company, recommending the company to someone who seeks advice, encouraging friends and relatives to do business with the company, considering the company the first choice from which to buy services, and doing more business with the company in the next few years.

The services marketing literature has concentrated on items measuring service quality (SERVQUAL) to determine customer satisfaction (Levesque and McDougall, 1996; Lassar *et al.*, 2000; Caruana, 2002). Nevertheless, the customer loyalty scale has been developed and refined by Zeithaml *et al.* (1996) and confirmed in subsequent studies (Gremler and Brown, 1996; Bloemer *et al.*, 1999; Pedersen and Nysveen, 2001; Dean, 2002). Five items were used to measure customer loyalty and one item has been added to this scale to indicate overall customer satisfaction (Table 7:14). The Likert five-point scale was used. Each question was scored on a scale from 1 to 5, where a 1 rating indicated strong disagreement and a 5 rating indicated strong agreement.

Table 7:14: Customer satisfaction and future intentions

Age of Respondent		Loyalty					
		Overall, I am very satisfied with my bank	I will say positive things about my bank to other people	I intend to continue doing business with my bank	I will encourage friends and relatives to do business with my bank	I doubt that I will switch	To me my bank is clearly the best with which to do business
Below 25 N=46	Mean	3.93	3.76	3.89	3.43	3.74	3.65
	Std. Deviation	.95	.92	1.08	1.03	1.12	.95
25-34 N=07	Mean	4.00	3.74	3.87	3.52	3.72	3.66
	Std. Deviation	.89	.95	.91	1.07	1.10	1.07
35-44 N=68	Mean	4.06	3.78	3.97	3.62	3.72	3.75
	Std. Deviation	.84	.94	.95	1.04	1.13	1.11
45-54 N=35	Mean	4.03	3.69	4.00	3.49	4.00	3.83
	Std. Deviation	1.07	.96	1.06	.98	1.00	1.12
55 + N=19	Mean	4.11	3.89	4.47	3.58	4.37	3.95
	Std. Deviation	.81	.81	.70	.84	1.01	1.03
Total	Mean	4.01	3.76	3.96	3.53	3.80	3.72
Total N=275	Std. Deviation	.90	.93	.96	1.02	1.10	1.06

It can be seen from the results reported in Table 7:14, that the lowest mean has been indicated by the category of below 25 years old regarding the item "I will encourage friends and relatives to do business with my bank" (3.43), whilst the highest mean has been indicated by the category of 55 and above, with regard to the item "I intend to continue doing business with my bank" (4.47). It is worth noting that the mean of overall customers' satisfaction tends to increase significantly with age, range from 3.93 to 4.11. The lowest mean was indicated by the category of below 25 years old (3.93) whereas the highest mean was indicated by the category of 55 and above (4.11). The

results revealed that the respondents are satisfied and loyal to their banks. However, the results of Table 7:14 indicate that not only is the loyalty of respondents high, but so too is the length of the relationship between them and their banks.

Gremler and Brown (1996) have pointed out that the length of time of a relationship is the key indicator of service loyalty. Similarly, Beerli *et al.* (2004) have stated that in the banking market, the length of the relationship between the bank and the customer is an important feature. The tradition of the industry has been for banks to engage in developing long-term customer relationships. Table 6:2 in the previous chapter, reports the findings in connection with the length of time that the respondents had held their accounts with their banks. It shows that a high proportion of the respondents (55%) had held accounts with their banks for more than 5 years. About 61% of the study sample deals with only one bank. In their study, Jamal and Naser (2002) also emphasised that the length of the relationship between the customer and her / his bank might imply a reasonable degree of customer loyalty and satisfaction. At the same time, they reported that banks can make use of this result by adopting a strategy that contains products and services of a long-term nature (e.g. pension, saving schemes, long-term financing and mortgage) in order to improve and increase their customers' satisfaction and loyalty.

To sum up, these results indicate that service quality plays a major role in creating satisfaction and loyalty. At the same time, the impact of IT on service quality is significant. A review of the literature indicates that the use of IT for improving customer service and customer satisfaction has attracted much recent attention (Dabholkar, 1996; Zhu *et al.*, 2002; Lang and Colgate, 2003; Kolodinsky *et al.*, 2004).

7.8 Summary

This chapter is concerned with providing the research analysis to fulfil the objectives that have been mentioned in chapter 1. It has been divided into six main sections and in each one, several findings have been reached, which gave a clear picture about the nature of the banking sector in Jordan and how the Jordanian customers and branch managers regard their banks in terms of IT banking used and quality of service rendered. However, it has been found that the most important factor in influencing customers' choice of their bank is IT, followed by religion and cultural background. Meanwhile, recommendations from friends or relatives and knowing the bank's staff did not appear to have a major impact on customers' choices of their banks, since these factors have been located at the end of the bank's selection criteria list.

The results also reveal that Jordanian customers value all five dimensions of service quality but they value the tangible dimension more. At the same time, banks in Jordan need to pay more attention to the dimension of empathy in their desire to increase overall service quality. The results show also, that the managers' perceptions being very similar to those of customers, since the IT used in banks plays a vital role in terms of conservation of time and convenience; these factors seem to be the main motivating force in the adoption of the electronic distribution channels. Furthermore, banks need to do something with regard to customers' concerns about their privacy and security of their personal data, and they also need to increase their customers' knowledge about the IT use and its benefits. The research conclusions are presented in the next chapter.

CHAPTER 8

SUMMARY AND CONCLUSIONS

CHAPTER 8 : SUMMARY AND CONCLUSIONS

8.1 Introduction

This research presents a study of IT used in banks and its impact on customer service in the context of the Jordanian banking sector. This chapter is devoted to presenting the conclusions of the research findings and contribution(s) to knowledge. The research aimed to achieve five objectives. The first objective was to investigate the role of IT used in banking operations in improving service quality. The second objective was to investigate perceptions of branch managers and customers in the context of the banking system in Jordan. The third objective was to identify the criteria on which customers determine their bank selection decision. The fourth objective was to investigate the nature of the factors inhibiting and motivating the adoption by banks of the electronic distribution channels. The final objective was related to developing a strategy for the management of IT in order to contribute effectively to the achievement of service quality.

This chapter is structured in four sections. Section 8.2 is devoted to discussing the findings and implications. It will discuss briefly some of the significant empirical findings resulting from the literature and empirical work. This is followed by section 8.3 which presents the contribution to knowledge. Section 8.4 presents the limitations of the study and suggestions for further research directions.

8.2 Study Findings and Implications

In order to accomplish the research objectives a survey questionnaire strategy was conducted using two independent samples. The first sample was drawn from 67 branch managers who were willing to participate in the research. Sixty seven (67) structured interviews were conducted, which constituted a 100% response rate from this sample. The second sample was drawn from amongst the customers of the nine banks under investigation. Five hundred and fifty (550) potential respondents were targeted and 275 usable replies were received. This constituted a 50% response rate.

Objectives 1 and 2

(1) To investigate the role of IT used in banking operation in improving service quality. (2) To investigate the perceptions of branch managers and customers in the context of the banking system in Jordan

The banking industry has operated in a relatively stable environment for decades (Zineldin, 2002). Today, however, this industry is facing dramatically aggressive competition in a new environment (Polatoglu and Ekin, 2001). Banks that do not consider this new challenge and build and protect their 'competitive position' will probably become victims of that aggressive competition. As already indicated, many changes and developments have occurred in the banking industry in recent years, one of the most important of which is IT development (Zhu *et al.*, 2002; Kolodinsky *et al.*, 2004; Akinci *et al.*, 2004). Recent evidence shows that improving the quality of customer service is a key to achieving a 'competitive advantage' (Porter and Millar, 1985). IT is a strategic resource that facilitates major changes in marketing and customer service (Applegate *et al.*, 1999). In the banking industry, quality means not just meeting, but exceeding customer expectations, requiring banks to use their technology to best advantage to improve customer service quality. Likewise, customers are always interested in every new thing that is compatible with the needs of everyday life, especially in the field of banking services (Colgate, 1998; Lassar *et al.*, 2000).

The banking sector has always been a highly information intensive activity that relies heavily on IT to improve the quality of services that are rendered to customers (Porter and Millar, 1985). Investing in IT is highly important for improving core competencies for firms in the banking industry. IT can be, and is being used to improve customer service. IT now assumes an important role in customer service, and it is a powerful tool or enabler in that arena. Furthermore, IT can assist the delivery of superior quality customer service by ensuring fast, accurate, reliable and convenient services to the customers (Lang and Colgate, 2003; Kim and Davidson, 2004).

Generally speaking, IT can help banks to achieve higher levels of customer service (Lloyd-Walker and Cheung, 1998; Daniel, 1999; Sathye, 1999; Singh, 2004; Ryssel *et*

al., 2004). The overall of results of the empirical investigation show a significant and positive relationship between IT and service quality in the context of the banking industry, in specific context of Jordan. Customers and branch managers have indicated that the more IT is used, the better the quality of services is perceived to be. At the same time, in this research the outputs of hypotheses testing have indicated that the more IT is used in banks, the greater customer satisfaction will be. In this research a link has been established between 'high quality of service', which has the potential to increase customer satisfaction. In other words, the relationship between IT and service quality is positive and statistically significant. This result, therefore, supports the general conclusions of previous studies (e.g. Lloyd-Walker and Cheung, 1998; Kardaras and Papathanassiou, 2001; Zhu *et al.*, 2004; Ting, 2004). Bitner *et al.* (2000) mentioned that IT enables both customers and employees to be more effective in receiving and providing the service. These findings are important, because the more bank marketers understand what is important to customers in terms of service quality, the better they will be at providing the proper levels of service quality (Stafford, 1996). These findings provide useful information for banks when developing their operations and marketing strategies. Such information will guide banks to allocate more effort and resource to provide the services that meet customer needs and wants.

Knowing the relative importance of each dimension of service quality can help a service provider to prioritise efforts and resources and deploy them more effectively to improve overall customer satisfaction. The results of this study indicate that customers value all five dimensions of service quality (i.e. reliability, responsiveness, assurance, empathy and tangibles), but they value the tangibles dimension most. This result confirms the findings in the marketing literature in general and service quality in particular, which have reported tangibles as a distinctive factor (Bouman and Van der Wiele, 1992; Cui *et al.*, 2003) and the physical appearance has the greatest impact on the overall perception of service quality (Siu and Cheung, 2001). However, from this study it emerges that banks should pay attention to all five dimensions of service quality, and they should give more focus to the role of IT in increasing overall service quality. Table 8:1 gives a summary of how IT relates to these dimensions.

Table 8:1: The relationships of IT to service quality dimensions

Service quality dimensions	How IT contributes to each dimension
Reliability	▪ Accuracy in billing ▪ Keeping records correctly ▪ Helping customers in solving and or requesting anything by phoning or emailing their banks.
Responsiveness	▪ Timeliness of service (conservation of time) ▪ Mailing transaction slips immediately ▪ Calling the customer back quickly (prompt responses to customer's enquiries) ▪ Giving customers prompt service ▪ Reduction of processing time ▪ Faster response (communication) to customer demands
Assurance	▪ Financial security (using PIN number) ▪ Helping the bank's employees to serve the customers immediately by using computers (customers' databases). In other words, it helps to build up a complete picture of individual customers, which aid staff by giving them ready access to information they need to solve customers' problems.
Empathy	▪ The service is easily accessible (quick access) ▪ Explaining the service itself ▪ Learning the customer's specific requirements ▪ Recognising the regular customer (recording the transactions)
Tangibles	▪ Convenient hours of operation (the customer can make most of her / his transactions at any time) ▪ Convenient location of service facilities ▪ Physical facilities (availability of ATMs) ▪ Physical representations (materials) of the service (cards, cheque books, etc.)

Source: The researcher

Objective 3

Identifying the criteria on which customers determine their bank selection decision

The results of this research give another strong indication that IT is playing an important role in the banking industry with regard to bank selection criteria. Identifying important selection attributes will help banks to develop an appropriate marketing strategy. However, it has been found that the most important factor in influencing customers' choice of bank is IT. Some selection attributes have been found to be crucial in the selection of banks. Indeed, the single factor receiving the highest degree of importance in the bank selection process relates to the availability of ATMs. This factor (IT) has been reported in other studies (Zhu *et al.*, 2002; Akinci *et al.*, 2004), since the 'competitive bank' of the future is the one that can offer speedy technology-based services (e.g. ATMs, Internet banking). Convenient location of the banks and their ATMs and fast and efficient services have been also ranked at the top of the priority list from the customer point of view. The advantages of electronic banking services, such as increased convenience and functionality, are discussed in detail in this research.

On the other hand, the results revealed that the least important factor in influencing customers' choice is higher interest on savings and deposits, a predictable outcome strongly related to religion in this geographical area. Meanwhile, the variable of attractive rewards and prizes ranked as the second most unimportant factor, which also can be attributed to the religion of Islam and cultural background since customers believe that such rewards are undeserved and are therefore strictly prohibited by Islamic law. This result indicates that Islamic banks could enjoy a relatively strong power base among those customers who emphasise adherence to Islamic principles in the practices of the banks they select. In line with this, Metawa and Almossawi (1998) indicated that, since 1971, Islamic banks have continued to grow in size and number. As a result of this, Naser and Moutinho (1997) demonstrated that the current Islamic banking system is expected to face competition from two sources; the first threat is expected from the conventional commercial banks, while the second will be posed by other Islamic banks. Hence, in Jordan the marketing strategy of the Islamic Bank must be concerned with its ability to gain a 'competitive advantage' and establish a strong 'competitive position'.

At the same time, they added that in some cases, a conventional commercial bank may open what is called an *'Islamic window'*, where Islamic business activities are conducted, and this can be seen in Malaysia and City Bank in London.

In addition, the results of this study also reveal that friends' and relatives' recommendations, and knowing the staff of a bank, did not appear to have a major impact on customer choices, since these factors have been located at the end of the selection criteria list. It is worth noting, that the same result has been reached in a recent study by Akinci *et al.* (2004), who found that advertising and suggestions from friends and colleagues were seen as the least important factors, in terms of bank selection criteria. As already indicated, (e.g. Almossawi, 2001; Zineldin, 2002) because most banks offer almost the same products and services and because some customers prefer to act independently and genuinely, 'the friends and relatives recommendations' (i.e. word-of-mouth) seem to be not important in customers' choices in terms of bank selection criteria.

Generally speaking, customers tend to concentrate more on those factors, which give them quick and convenient access to bank services, rather than factors related to banks' hospitality. Electronic distribution channels can assist the delivery of superior quality customer service by ensuring fast, accurate and reliable services. Polatoglu and Ekin (2001) have stated that ignoring the trend in online banking could be a strategic mistake for the banks that emphasise total customer satisfaction.

Studies should continue in this respect, particularly with regard to customer behaviour and motives for choosing a bank, as well as levels of satisfaction. Accordingly, banks should carefully study customer comments about their services and reflect these in their strategy, for customer satisfaction is the key success.

Objective 4

Investigating the nature of the factors inhibiting and motivating the adoption by banks of electronic distribution channels

As noted, a review of the literature indicates that the use of IT for improving customer service has attracted much recent attention (Daniel, 1999; Lassar *et al.*, 2000; Ahmad and Buttle, 2002; Kolodinsky *et al.*, 2004; Zhu *et al.*, 2004; Eriksson *et al.*, 2005). However, since the customers are the end-users of IT-based services and it is their perception of service quality that matters most, banks must understand which attributes those customers look for when consuming services and which factors affect customers' intentions to use, and technology acceptance. The results of this study reveal that the five factors (conservation of time, convenience, privacy, accuracy and ease of use) are rated as relatively high. In other words, these factors strongly influence and motivate the adoption of electronic channels by customers and technology acceptance.

However, the most important factor that has been found was *conservation of time.* These channels offer and improve customer service, since customers do not need to wait to receive the services. Mols *et al.* (1999) pointed out that the main advantages of electronic channels from the customers' point of view are convenience and less waiting time. Parallel to this, Daniel (1998) has stated that factors influencing selection and adoption of Internet banking services were convenience aspects of the service and ease of use. This factor is followed by *convenience* of these electronic channels to customers. Zhu *et al.* (2002:71) have stated that convenience refers to "a generous number of accessible service delivery points that are available when customers need them".

Banks with an extensive electronic network will have the opportunity to attract new customers and increase customers' satisfaction. In the same vein, McDougall and Levesque (1994) pointed out that banks with an extensive branch office system and electronic distribution channels have an opportunity to attract new customers who are in this convenience segment. Customers are able to access banking 24 hours a day, seven days a week, at places convenient and private to them such as their homes and work places. Thornton and White (2001) mention that bank customers who are convenience-

oriented would want to use electronic channels that proved to be fast, and had easy access, whereas human tellers, who have limited hours and are geographically constrained, would be less attractive to convenience-oriented customers. Baldock (1997) uses the term 'virtualisation', by which he means the removal of the constraints of time, place and form, made possible by the convergence of computing, telecommunications and visual media; he describes the benefits offered to both the bank and the customer by electronic banking services. In general, the results of this study are in line with previous studies, in terms of the importance of IT convenience. Convenience aspects have had a crucial impact on customer service and will increase customer satisfaction (Kim and Davidson, 2004).

It may be interesting to note that a review of the literature reveals that 'security' is identified as the biggest obstacle to adoption in many studies (e.g. Ramsay and Smith, 1999; Sathye, 1999; Patricio *et al.*, 2003; Rotchanakitumnuai and Speece, 2003; Pikkarainen *et al.*, 2004). Meanwhile, in this study, the results show that Jordanian customers indicate that the security and privacy of their IT banking transactions are relatively high. In other words, they do not have any major concerns regarding their electronic channels services in general and Internet banking in particular. This is not surprising, since Internet banking is still limited in use by Jordanian customers and banks as well. However, with regard to the security aspect in using the Internet in the banking transactions, banks have to publicise their improvements through the media in order to increase customer confidence. Some of the measures that are available to banks include secure socket layer encryption methods to protect data being transmitted from the bank to the customer and vice versa, regular upgrades of electronic systems, digital signature, PIN and password. Such methods can improve the security and make customers feel safe in doing business via online banking (Singh, 2004).

The results reveal that the factor 'ease of use' has been considered as the lowest mean among the others. Sathye (1999) has pointed out that IT banking services 'must be easy to use' to ensure customer take-up or acceptance. Training the customers or even showing them how to use Internet banking and other types of electronic channels improve banks' service quality and gain their customers' satisfaction (Singh, 2004). In the same vein, Kardaras and Papathanassiou (2001) have stated that training

programmes will offer customers the necessary knowledge to help improve customer confidence in dealing with IT banking. On the other hand, it is important that banks choose qualified staff to render banking services, especially those who deal directly with customers and develop their skills in dealing with the customers. Hussein and Al-Tamimi (2003) have stated that significant budgets should be allocated to train employees and improve their skills. Training programmes given to employees should focus on learning how to learn in a new banking environment where the customer is 'king'.

In this context, Baron et *al.* (1996) state that it is important that tailor-made training programmes for individual employees are introduced, because some have greater product knowledge and experience than others, and so require less training. In the same vein, Rotchanakitumnuai and Speece (2003) have stated that new skills and new processes in the banks require employees to learn new things. New technology sometimes requires complex understanding and mental capability, and thus the technology may be difficult to manipulate due to the limited capability of bank employees. Rotchanakitumnuai and Speece added that the 'knowledge barriers' may come from a lack of diffusion capability, which is developed over time by gaining related knowledge and expertise in several areas, and the lack of investment in training for internal employees (Rotchanakitumnuai and Speece, 2003). Such training should be designed to facilitate the whole change process including unfreezing (creating the motivation to change), and changing (developing new attitudes and attitudes based on new information) (Yavas *et al.*, 2004).

Objective 5

Developing a strategy for management of IT, in order to contribute effectively to the achievement of service quality

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 central to a relationship management strategy. To meet customer needs / wants and keep up with competitors, IT banking such as on the Internet and through ATMs is becoming

a significant strategic area for financial institutions (Zhu *et al.*, 2004). Kim and Davidson (2004) have stated that IT provides more timely and accurate information to improve management decisions. For instance, IT can provide more information on existing customers and products / services of the bank to its employees, so that they can improve their daily decision-making procedures. It has been widely discussed (Porter and Miller, 1985; Katz and Aspden, 1997; Mols, 2000; Pedersen and Nysveen, 2001; Curry and Penman, 2004; Kolodinsky *et al.*, 2004; Kim and Davidson, 2004) that IT banking in general, and Internet banking in particular, offer fast and adequate information and enable banks to provide financial services anytime and anywhere. This gives easy access to their customers. Consequently, giving customers access to this kind of service may be seen as an indication of bank honesty and may be instrumental in building customer trust and loyalty, since, such services can help the banks to improve their image in the electronic channels and increase the number of customers performing their shopping through electronic channels (Pedersen and Nysveen, 2001). Banks also use IT to reduce labour costs. Kim and Davidson (2004) have stated that IT-based on-line banking and management systems 'should decrease' labour and the total administrative expenses of the banks, adding that in the banking sector, many expenses are driven by the services required by individual customers rather than by corporate customers. Most of the transactions processed for individual customers are routine, and can be easily processed by on-line banking. This explains why moving to IT banking is very important for cost 'reduction' and 'increased' profitability.

The results indicated that the marketing strategy should be directed towards young people, especially those who graduate and enter the labour market (25-34 years of age). Almossawi (2001) has mentioned that this new generation of customers tends to put more emphasis on the factors which give them quick and convenient access to the bank services, rather than factors related to the hospitality and location of the bank. In this context, Lewis *et al.* (1994) have stated that banks regarded young customers as a key market for personal financial services, assuming that young customers will be profitable in the long term. Attracting this category and gaining their trust means attracting a customer that may remain for a relatively longer period. It is worth mentioning that the marketing literature reveals that young customers today expect higher levels of service

quality than their predecessors, so banks cannot assume that those customers will become loyal customers, since some of them will switch if they feel there is better service elsewhere (Lewis *et al.*, 1994). As bank customers are of a higher educational standard than the norm (BA holders and postgraduates represented 69.1% of respondents), they can deal with modern technologies. Accordingly, the banks should take this point into consideration, because satisfaction and loyalty cannot be won without offering effective quality services. Giving the customer individual attention, understanding the customer's needs and wants and building strong relationships are the best ways to do this.

The retention of a customer is more important that attracting a new one (Zeithaml *et al.*, 1996; Baron and Harris, 2003) and the marketing strategy must realise a certain service level for current customers, because customer retention is more cost efficient. Customer retention can only be achieved through satisfaction which is mainly based on meeting customer desires and needs, and paying special concern to expectations of service quality. In this context, banks need to pay more attention to *service recovery*, since the customers want to see their banks care about their problems and find it unacceptable when the banks are slow to deal with / solve them, or if it too much effort is needed to get someone to deal with them.

Banks should learn to cope with the technological development in the field of banking services, which has become the token of the present age (Porter and Millar, 1985). It is worth mentioning that two Jordanian banks, namely Arab Bank and Housing Bank, have now automated banks that offer complete electronic banking services (Phone Bank, Home Bank; Internet Banking; Foreign Currency Exchange; ATM and Information Screen); a matter which indicates their 'competitive capabilities' to cope with the 'IT revolution'.

Bankers generally agree on the fact that moving to Internet working and IT strategy provide new or enhanced distribution channels. Because of the increase in technology and the number of channel components required today, bankers should place more time and effort in the design of their IT structures and the architecture of IT channels than ever before.

Generally speaking, increased competition among the banks will result in a greater use of IT in service delivery (Pikkarainen *et al.*, 2004). Banks use IT as a means to offer their services to their customers through the use of new channels such as ATMs, Internet, and phone banking. These channels have reshaped the banking industry, and bankers are now in a highly 'competitive market' (Kim and Davidson, 2004). For them, the true benefit of IT is its ability to harness available resources to meet market demands and achieve business objectives. Properly designed and implemented, IT can assist retail bankers to increase revenue by providing faster new or enhanced delivery channels and consumer products and services. It can help to reduce costs by protecting technology investments and bring down total operations, development and maintenance expenses. It also helps to gain 'competitive advantage' through creative applications that allow banks to compete more effectively (Lucas, 1990). Consequently, IT can help bankers meet their business objectives: greater product or service accessibility, customer convenience, better-targeted products and services, and increased customer wallet share and profit margins. Banks are looking for productivity improvement and getting more value from IT by tapping the strategic potential of their IT for 'competitive advantage'. IT can enable them to survive in existing markets and allow their entrance into entirely new markets (Watkins, 1998). To facilitate these channels, new or improved back-office environments are being developed that include transaction switching processors, data repository centres, relationship management environments, and call centres for customer support and centres of expertise. As a result, there is a greater dependency on information (voice, data, and imaging) and its flow within and between each channel and environment.

Jordanian and foreign banks in Jordan should not rely on the current position in terms of the degree of their customers' satisfaction with the quality of services. Jordan has signed the free trade treaties, so opening the way towards participation with Europe, and this means the introduction of giant banks in the Jordanian market. These giant banks are able to offer services with 'high quality' due to the fact that they have substantial potentiality and are armed with high-tech worldwide. Most banks in Jordan, especially the small ones, should reconsider their marketing philosophy in the light of this severe

competition. It is desirable, therefore, for the small banks to amalgamate to provide the resources required to develop, improve, expand and compete with the giant banks.

Finally, service quality and customer satisfaction seem to be the main factors influencing customer loyalty. Simultaneously, dissatisfaction does not always mean switching to another service provider, especially when the competitors do not seem to offer a superior performance and the current provider is still better than the alternatives, or because some customers feel that the costs, time and effort, of switching banks too high 'hostages' (Colgate and Lang, 2001; Baron and Harris, 2003).

8.3 Contribution to Knowledge

This research contains a wide ranging and detailed study of IT and service quality in the Jordanian banking sector. The contribution to knowledge relates particularly to bank selection criteria, and the following paragraphs describe the three major areas in which this contribution has been made.

8.3.1 Bank Selection Criteria

This research has provided a number of contributions to the service quality literature in general and to banking services in particular in several ways. Since Jordan has been witnessing the introduction of new banking technologies in the field of marketing, this research has provided service quality literature of particular value to the banking system of Jordan. There have been some studies conducted previously within the particular context of Jordan (See Appendix 3). However, it could be argued that these studies are more limited in scope than the present research:

- Some studies focused on the point of view of managers and neglected the customers' point of view (See Al-Zu'bi, 1999). Others focused on the customers' point of view and neglected the managers' perspective (See Abdul Khalig, 1993; Al Khatib and Gharaibeh, 1996);

- Some studies investigated both managers' and customers' points of view and neglected IT as an independent variable (See Shaheen, 1995; Ma'ala, 1998; Al-Efashat, 2001);

- Some studies were confined to investigating one or more banks, and did not take into account the vast majority of the Jordanian banks (See Akel, 2000; Abu Mousa, 2000);

- Some studies concentrated on Jordanian commercial banks and neglected foreign commercial banks in Jordan (See Al-Nadari, 1990; Al-Qidah, 1998; Al-Efashat, 2001);

- Some studies did not deal with IT as an independent variable and instead they considered it as an environmental variable (See, Abdul Khalig, 1993; Shahin, 1995; Ma'ala, 1998; Abu Mousa, 2000; Al Efashat, 2001); and

- It is obvious that the above mentioned studies have been selected among many studies which have dealt with banking sector in Jordan. However, most studies neglected *bank marketing* which is why the present study focused solely on the above mentioned studies. Other studies which were conducted on more general financial issues were not considered.

Accordingly, the significance of the present study emerges as being the first study that deals with IT and its impact on customer service in the Jordanian banking sector, covering nine Jordanian and foreign banks in Jordan, which represent 76% of the total banking sector and also represent different kind of banks. It incorporates both customers' and branch managers' point of view regarding IT and service quality; IT as an important environmental variable, and IT use in banks and its relationship with customer service; satisfaction and loyalty. This research will contribute to a better understanding of IT and service quality measurement with particular reference to banking services in a developing country. Being the first study of its kind it provides significant insight into the development and understanding of services marketing in a specific sector (Jordanian banking sector).

Another contribution comes as a result of the analysis of the simultaneous relationships between IT and customer service (service quality, customer satisfaction and customer loyalty), an analysis which makes a significant contribution to the understanding of relationships in services marketing. The overall of results of the empirical investigation of this study show a significant and positive relationship between IT and service quality in the context of the Jordanian banking industry. Customers and branch managers have indicated that the more IT is used, the better the quality of services is perceived to be. At the same time, the outputs of hypotheses testing have indicated that the more IT is used in banks, the greater customer satisfaction and loyalty will be. In this research a link has been established between 'high quality of service', which has the potential to increase customer satisfaction and customer loyalty. In other words, the relationship

between IT and customer service is positive and statistically significant. Most of the previous studies in bank marketing have focused on the relationship between IT and service quality or customer satisfaction, making little or no consideration of the relationships among four variables. This research has investigated the relationships among those four variables, and has taken into account customers' and branch managers' points of view with regard to IT banking and service quality.

Furthermore, this study makes a contribution to electronic banking literature by providing insights on the factors that seem to affect IT banking acceptance. The results suggest that conservation of time and convenience are the critical factors influencing the acceptance, while security was found to have a relatively weak relationship with the acceptance. This is in contrary to many studies conducted during the past few years (See Chapters 2 and 7). The results of this research also give another strong indication that IT is playing an important role in the banking industry with regard to bank selection criteria. Identifying important selection attributes will help banks to develop an appropriate marketing strategy. However, it has been found that the most important factor in influencing customers' choice of bank is IT.

The study has contributed to the literature of services marketing (banking sector) through providing significant empirical evidence that the religious factor plays a major role in the minds of Jordanian customers. It has been found that religious and cultural background has a vital effect on customer behaviour. The effect of this factor on customer behaviour had not previously been realised. Previous studies did not pay any attention to the religious factor in terms of bank selection criteria and how other aspects besides service quality and IT could impact on the customers, especially in the field of financial services marketing area in a developing country. Hence, this research has contributed to the marketing banking literature knowledge with regard to the cross-cultural understanding of service marketing. It is advisable for banking strategists to start thinking about the importance of religion and cultural factors.

8.4 Study Limitations and Future Research Directions

This study expands our knowledge of the relationship between IT and customer service. However, although this study has fulfilled its aim and objectives, it is thought that there are many areas for additional studies and empirical research, given the limitations of the research.

The choice of population was limited to a single industry, namely banking, which has a tendency to limit the generalisability of the findings in the context of other industries. The role of IT in customer service and marketing, from a different industry perspectives, needs to be clarified.

On a geographical dimension, this study was primarily limited to nine banks in Jordan, located in one city (Amman). An interesting line of enquiry would be to replicate the research across the corporate sector of the banking industry. In the same way, other studies elsewhere in Jordan and even in a similar context (Arab World) would provide valuable comparative data for managers and academics about the cross-fertilisation of IT with both marketing and customer service.

The methodology that has been chosen to achieve the research objectives was limited to one method of data collection (the questionnaire survey), due to a number of constraints mentioned in the methodology chapter. Furthermore, service quality was measured using only customers' perceptions, rather than exploring the difference (gap) between expectations and perceptions. This limitation, however, has been justified in chapters 3 and 7.

The statistical methods (non-parametric statistics) used to test the hypotheses have been described as not as 'robust' as their parametric tests. However, Leedy and Ormrod (2001) have stated that the 'robustness' of using a particular statistic lies in whether or not its assumptions are met, and if so, the statistic test yields generally valid results. Rees (2001:161) has pointed out that "parametric tests are generally preferred if the assumptions of these tests can be shown to be valid". In spite of this, non-parametric

tests have some advantages over parametric tests, and t-test, descriptive statistics and means have been used to 'decrease' this limitation.

Although the focus of this study is exclusively on the importance of IT and customer service in the Jordanian banking sector, and the study has confirmed the centrality of IT in banking industry, the researcher believes that the religious and cultural background will play a major role in the future of the banking industry. As noted earlier, Jordan has signed the free trade treaties (with EU and USA), which mean the introduction of giant banks into the Jordanian market. As a result, further research is required to explore the relationship between the Islamic religion and Western (European) or any other conventional banking systems. Will the European banks adopt Islamic rules in their banking operations (if they work inside an Islamic country), or will these banks try to persuade Muslim customers to adopt their philosophy in their banking practices, contrary to their religion belief and traditions?

Finally, it is not possible for any single study to cover every aspect of a particular topic, and this study is no exception. In broad terms, the 'evolution and revolution' of customer service and IT will continue, and therefore the topic deserves further investigation. For instance, it is important to investigate how banks can manage new service channels, such as the Internet banking, to improve overall customer service in an efficient way.

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Appendices

PAGE

NUMBERING

AS ORIGINAL

Appendix 1: English translation of the customers' questionnaire (originally in Arabic)

School of Management

University of Salford

Manchester

UK

Dear Valued Customer,

I am a PhD student in School of Management at University of Salford, United Kingdom.

I shall be grateful if you will help my research by answering the following questionnaire. This questionnaire forms part of research project investigating the impact of information technology used in banks on customer service in Jordan. Your co-operation in filling this questionnaire will aid me in achieving the main goal of the research.

If you are unsure of any of your answers, please respond to the best of your knowledge. Should you wish to expand on your answer, please feel free to attach additional sheets.

Should you have any queries, please do not hesitate to contact me

Suleiman Ahmed Al Khattab

Ma'an P.O. Box (20) Home Tel. (03-21337688)

E-mail: suliemanus@yahoo.com Mobile phone (0777908405)

Thank you for your time and participation in this research

ALL DATA PROVIDED WILL BE TREATED AS STRICTLY CONFINTIAL

AND FOR ACADEMIC USE ONLY

A-CUSTOMER PROFILE

1-Your age group is?

a-below 25( ) *b*-25-34( ) *c*-35-44( ) *d*-45-54( ) *e*-55 and above ( )

2-Your gender is

a-Male ( ) *b*-Female ( )

3-Are you

a-Married ( ) *b*-Single( ) *c*-Other( )

4-Your highest education level

a-High school ( ) *b*-Diploma/some college study ( ) *c*-University graduate( )

d-Post graduate degree( )

5-Your monthly income in Jordanian Dinar is

A- Below 150( ) *b*-151-300 ( ) *c*-301-450 *d*-451-600( ) e-601 and above ( ).

B-CUSTOMER TRANSACTIONS

6-Which is the **main** bank with which you deal (i.e. the bank which holds your **main** current account)?.....

7-Do you have any account with other bank? *a*- yes ( ) *b*-no ( )

Please go to Q 9

8-If so,

a-What is its name?

b-Which account types do you hold have?

9- How long have you dealt with your **main** bank? (In years)

10 –How important are the following factors in influencing your choice of main bank?

Benefits sought	1 Not at all important	2 Not important	3 Neutral	4 Important	5 Very important
1-Reputation of the bank					
2-Fast and efficient services					
3-Accuracy of transaction					
4-Recommendation of friends or relatives					
5-Knowing bank's personnel					
6-Friendliness of bank's personnel					
7-Honesty and trustworthiness of staff					
8-Higher interest on saving and deposits					
9-Lower interest charges on services					
10-A wide range of services provided					
11-The availability of the ATMs					
12-Convenient location of the bank					
13-Atractive rewards and prizes					
14-Internal appearance of the bank					
15-External appearance of the bank					

C-IT BANKING /CUMPUTER EXPERIENCE

11-Do you have a personal computer? *a*-Yes ( ) *b*-No ( )

12-Do you have Internet access *a*- Yes ( ) *b*-No ( )

13-How often-daily do you use Internet?

a-30 minutes or less ( ) *b*-31minutes - 1hour ( )

c-1 hour – 2 hours ( ) *d*-over 2 hours ( )

14-Do you use IT banking service? a- Yes ( ) b-No ( ) if No, **please go to Q 17**

15-Which type of IT banking service do you use?

a- Internet banking ( ) *b*-PC banking ( ) *c*-Phone banking ( ) *d*-ATMs ( )

e- Credit Card ( ) f- Other …

16-Please rate the IT banking services presented by your **main** bank based on the statements listed below

Statements	1 Strongly disagree	2 Disagree	3 No opinion	4 Agree	5 Strongly agree
1-It is easy to use IT banking services					
2-IT banking services save my time					
3-IT banking services make my banking more convenient					
4-IT banking services provide privacy in my banking transaction					
5-IT banking services provide accurate account information					

D-SERVICE QUALITY DIMENTIONS

17-the following set of statements relates to your feeling about your bank. For each statement, please show the extent to which you believe your bank has the feature described by the statement. Please describe your perception regarding the service quality dimensions offered by your bank for each statement below.

Statement	1 Strongly disagree	2 Disagree	3 No opinion	4 Agree	5 Strongly agree
1-When your bank promises to do something by a certain time, it does so					
2-When you have a problem, your bank shows a sincere interest in solving it					
3-Your bank performs the service right the first time					
4-Your bank provides its services at the time it promises to do so					
5-Your bank keeps you informed about when					

services will be performed					
6-Your bank's employees give you prompt services					
7-Your bank's employees are always willing to help you					
8-Your bank's employees are never too busy to respond to requests					
9-The behaviour of your bank's employees instils confidence in customers					
10-You feel safe in your transactions with your bank					
11-Your bank's employees are consistently courteous					
12-Your bank's employees have the knowledge to answer your questions					
13-Your bank gives you individual attention					
14-Your bank has your best interested at heart					
15-your bank's employees understand your specific needs					
16-Generally, your bank's employees are competent					
17-Your bank has modern-looking equipment (e.g. computers, counting machine, fax, banknote, etc.)					
18-The physical facilities of your bank are visually appealing					
19-Your bank's employees are neat-appearing					
20-Materials associated with the service are visually appealing at your bank					
21-Your bank has convenient operating hours					

E-CUSTOMER SATISFACTION/LOYALITY

18- Please rate your **main** bank based on the statements listed

statement	1 Strongly disagree	2 Disagree	3 No opinion	4 Agree	5 Strongly agree
1-Overall, I am very satisfied with my bank					
2-I will say positive things about my bank to other people					
3-I intend to continue doing business with my bank					
4-I will encourage friends and relatives to do business with my bank					
5-I doubt that I would switch					
6-To me, my bank is clearly the best with which to do business					

19-If you wish please add any comments / suggestions or any of the issues raised above.

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THANK YOU FOR YOUR TIME

Appendix 2: English translation of the bank managers' questionnaire (originally in Arabic)

A-Managers profile

1-Your age group is?

a- below 25 ( ) *b*-25-34 ( ) *c*-35-44 ( ) *d*-45-54 ( ) *e*-55 and above ( )

2- Your gender is

a- Male ( ) *b*- Female ( )

3-Are you

a- Married ( ) *b*- Single ( ) *c*-Other ( )

4-Your highest education level

a- High school ( ) *b*-Diploma/some college study ( ) *c*-University graduate ( )

d- Post graduate degree ( )

5- Length of service with the bank.....

6-Status of the interviewee.....

7-Bank's name.....

B- IT Banking Services

8- Please rate what are the main factors inhibiting and motivating the adoption by banks of IT?

Statements	1 Strongly disagree	2 Disagree	3 No opinion	4 Agree	5 Strongly agree
1-It is easy to use your IT banking services					
2-IT banking services save your customer time					
3-IT banking services make your customer banking more convenient					
4-IT banking services provide privacy to your customer transactions					

5-IT banking services provide accurate account information to your customer					

C- Service Quality Dimensions

9-The following set of statements relate to your feeling about service quality offered in your bank. Please, describe you perceptions about the service quality dimensions rendered to your customers?

Statement	1 Strongly disagree	2 Disagree	3 No opinion	4 Agree	5 Strongly agree
1-When you promise your customers to do something by a certain time, you do so					
2-When your customer has a problem, your bank shows a sincere interest in solving it					
3-Your bank performs the service right the first time					
4-Your bank provides its services at the time it promises to do so					
5-Your bank keeps customer informed about when services will be performed					
6-Your bank's employees give your customer prompt services					
7-Your bank's employees are always willing to help your customer					
8-Your bank's employees are never too busy to respond to customer's requests					
9-The behaviour of your bank's employees instils confidence in customers					
10-Your customer feel safe in her / his transactions with your bank					
11-The bank's employees are consistently courteous					
12-The bank's employees have the knowledge to answer customer's questions					
13-Your bank gives a customer individual					

attention					
14-Your bank has your customer's best interests at heart					
15-Your bank's employees understand your customer's specific needs					
16-Generally, the bank's employees are competent					
17-Your bank has modern-looking equipment (e.g. computers, counting machine, fax, banknote, etc.)					
18-The physical facilities of your bank are visually appealing					
19-Your bank's employees are neat-appearing					
20-Mterials associated with the service are visually appealing at your bank					
21-Your bank has convenient operating hours					

10-Do you think there is any other important feature with regard to the IT and service quality has not been discussed?

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Thank you very much for your time and co-operation in completing this questionnaire

Appendix 3: Jordanian studies

The researcher found it crucial to devote a separate appendix to cover the following: Reviewing the literature relevant to banking in Jordan and pointing out the conclusions. Highlighting the importunate of the current study and how it is different from other studies conducted in Jordan. In other words, the researcher believes that this study is going hopefully to complement other, offering a summary of the main conclusions of these studies.

1. Al-Nadari study: (1990)

This study has been conducted to investigate the efficiency of information systems and their influence on the decision–making effectiveness in the Jordanian commercial banks. It has handled the issue of "decision-making efficiency" as being a dependent variable whereas the information systems were viewed as the independent variable .In the light of these two variables, the researcher investigated the statistical importance of the relation between the above mentioned variables. The sample of the study was distributed into groups according to job and years of experience.

The results of statistics revealed that there was a positive relation between the information systems and the decision-making effectiveness although this relation does not demonstrate a statistical significance. The banks with more efficient information systems do not necessarily earn higher profit ratios; the efficiency of the system is revealed in the quality and the promptness of the service rendered for the public. The quality of the equipment used in the information systems was of 66%.

2. Abdul Khalig study: (1993)

The study has been conducted to identify the criteria used by customers when selecting their banks. It also identified the relative importance of these criteria from the customers' point of view in a way that assists decision-makers of banks to direct and plan their marketing efforts, especially the promotional efforts via their concentration on the most important criteria viewed by customers. The results have shown that the most important criteria were employee efficiency (the cordial dealing with customers,

personal relationship with the customers, etc.) followed by the bank reputation and then the access to bank services, the clear picture of the bank in the mind of customers and finally the cost of bank services. As regards the demographic features of the customers they have their impact on customers with regard to the bank they deal with. The study has identified that these criteria are not different in terms of sex, income, and number of years of dealing with the bank or customer's age, while they are different with regard to social status, educational background, and the name of the bank. This can be attributed to the fact that customers, in general, have average or high educational levels. This makes the evaluation process based on rational basis. Hence, customers verify the selection criteria of the bank they choose.

3. Shahin study: (1995)

This study lent itself to the principal impact or development of banking by the Jordanian commercial banks. The researcher identified the possible consequences for nine main factors on developing banking through interviewing those in change of developing administration and service at Jordanian banks. He classified those impacts into two main groups:

A. The external impacts; they include competition among banks and financial foundations, government laws and regulations that organize banking activities, efforts by bank's branches and their representative offices in the field of development and innovation, the changing needs and financial and insurance inclinations of customers and the level of the technological development inside and outside the country.

B. The internal impacts: they include the organisational and administrative atmosphere at the banks, efforts for research and development for the banks managing development process for the bank and efforts for innovation inside the bank.

One of the most important findings in the study was that there is a significant statistical impact of the technological development, the administrative and organisational atmosphere, competition, the governmental laws, managing the development process and the change in the needs and the financial and insurance inclinations of customers.

4. Al Khatib and Gharaibeh study: (1998)

This study aimed at assessing bank customers' expectation and perception of service quality through questionnaire, which was distributed through out Jordan. The findings indicated that location of the bank and availability of parking spaces are the most important factors that customers look for, while the external and internal appearance of buildings are not important. Other factors that met the expectations of customers were the number of bank staff, credit cards and office hours. Other factors were the source of complaint such as lack of individualized services, computers, speed of services rendered, and confidentiality, high fees levied by banks, and queues at peak hours.

5. Ma'ala study :(1998)

This study aimed at developing an index that can be used to measure the banking quality rendered by the Jordanian banks. The study concluded that the level of the actual banking performance for customers was passive and that the actual quality was low while the anticipated quality was high. The study also showed that there was no difference between measuring the service quality by using the actual performance index and using the gap theory. Also, the study showed that the number of years of dealing with banks has a direct impact on evaluation in terms of justifying dealing and loyalty.

6. Al-Qidah study: (1998)

This study was conducted on Jordanian banks. It aimed at identifying the features of using modern automation by Jordanian banks to marketing their banking to their clients and measuring this use in banking to realise the increase of sales. The study concluded that the competition between the banks and the other financial institutions was one of the most important factors which motivated banks to use automation as it accomplishes tasks quickly and increases competition. The study also showed that there is a reciprocal relationship between using automation and product / service.

7. Al-Zu'bi study: (1999)

The study addressed itself to the impact of strategic information system in the achievement of 'competitive factors' on Jordanian banks. The study was practically

conducted on 14 commercial banks, which represented the population of study. The sample of study, represented by (the general manager, vice president, and 75general manager's assistants). This study was an attempt to examine and analyses the degree of participation of the strategic information system on the achievement of 'competitive superiority factors' (i.e. market share, growth of stocks market value, growth of return on investment) through building and developing 'competitive advantage' (i.e. differentiation, cost leadership, innovation, growth, alliances) by the top management of that banks. Finally, the study recommended the sample banks to continuously follow-up and update the information systems because of their importance in indicating the opportunities and threats and diagnosing of the internal strengths and weaknesses.

8. Abu Mousa study: (2000)

This study aimed at recognizing the actual level of presented banking service quality in both Islamic and Housing banks in Jordan. It also aimed at recognising the level of customer satisfaction, in addition to the degree of their loyalty to their banks. It also aimed at relating banking quality service. The study concluded the following results:

There is a significant statistical difference between the customers' evaluation of Housing Bank and the evaluation of Jordan Islamic Bank. There is a gap between the customers' evaluation of Housing Bank and Jordan Islamic Bank regarding the level of banking service quality that is actually presented. There is no statistical relationship between both, service quality and satisfaction presented by Housing Bank and Jordan Islamic Bank and profitability. There is a statistical relationship between banking services quality that are actually presented in both Housing and Jordan Islamic Banks and customer satisfaction.

9. Akel study: (2000)

The study focused on the strategic use of information systems (IS) and their role as a 'competitive tool', and their ability of giving a 'competitive advantage' to commercial banks in Jordan in general, and in Arab Jordan Investment Bank in particular.

The study aimed at uncovering the level of utilisation of IS as a 'competitive tool', and at uncovering IS and Information Technology used in the bank under study, and discussing the current strategic implications and the suggested IS .The study also measured the level of clients knowledge of IS, and IS effect on them and on the level and quality of service provided for them. The findings were that Arab Jordan Investment Bank showed a good level of utilising IS as a 'competitive tool', which helped in increasing the value of services provided to clients. In addition, linkage was found between the banks systems and their 'competitive strategies'.

10. Al-Efashat study: (2001)

The study was conducted on Jordanian banking market. It showed that the bank survival depends on its capabilities that help in presenting a high service quality which bear the characters (features) proportional to the nature of the period and enable it possess the 'competitive character' required to struggle against the local and foreign banks. At the same time, it meets the desires and needs of customers in a manner that prevents them from moving to other banks.

The results confirmed that there was a correlative and effective relationship between both customer satisfaction and the service quality in marketing service that is adopted by the bank. There was a great effect of quality on satisfaction as there is a mutual relationship between the service quality and the satisfaction of the customer. Also, it is found that the Jordanian banks adopt rational strategies at a higher level and adopt the defensive strategies. The study included a number of recommendations: the Jordanian banks must realise that there is a gap between the level of service quality and the level of customer evaluation of this quality as seen by the banks. So, they must expand the survey of the demand and needs of the customers concerning the service quality and try to translate that really in the quality of their services to meet the expectations of their customers concerning the service quality.