

# E- Banking System in Pakistan

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# **ABSTRACT**

Our this research work is based on the E-banking technology in which customers can access more accurate, quicker and rapid banking services from the computerized banking system. This system has also been adopted by the international banks as well as by the local banks in Pakistan to give efficient services to their elite customers. The purpose of our research work is carried out to unlock the significance that Pakistani banks are connected with this type of e-banking technology that is being implemented by the banks for providing the electronic services to the customers and in what extent this technology is relevant to customers. This research work will also help to determine whether the e-banking services are more efficient, accurate and rapid banking services.

### **SUMMARY**

The purpose of this thesis is to research and implementation of electronic banking and to observe how banks are carrying towards on this advance system in Pakistan. The vital distinction between manual and electronic systems is that how bank scenario can be changed into advanced system. The thesis is an endeavor of a learning research to evaluate a topic which is still questionable in world. This study purpose is to appreciate connection between Banks and electronic systems and is depends on the behavior being used by Pakistani Banks. The inclusive rang of this media as well as transform in banking system have started paying benefits to their customers to attract the public attitude. Now Pakistani banks are going towards developed consolidation. The material for the study is composed from articles conference & general, websites, annual report of the banks, newspapers and the data collected from questionnaire which was designed and distributed to customers.

The thesis depends on five parts. The first part highlights on Introduction with the problems and it's Background. This section contains the research questions on which the study is depends on and which can take assistance from the literature. It also mentions the range and any restriction faced during the thesis. The second part shows the Literature Review, which gives a detail elucidation of the thesis and was in black and white after a comprehensive study and exposures of several books, journals and magazines to follow the experts view, and facts of the technological terms. In third part, it indicates detail of the Research Methodology which was concerned with the fourth part that is the Empirical Data Finding and Analysis with questionnaire. Fifth part of the thesis shows the conclusion of the study based on literature and answers the research questions to give the recommendations to the readers who may take benefit from the study, may be customers, firms or researchers and finally conclusion made at the end of the study.

# **ENTHUSIASM**

This effort is enthusiastic to,

Our beloved **PARENTS**, (May Allah bless him with All His blessings & happiness), who have always sustained us financially and morally during carrying out our research thesis, as our existence is because of them.

**E- Banking System in Pakistan** 

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# **List of Abbreviations**

•	ABN AMRO	Algemene Bank Nederland-Amsterdam Roterdam Bank
•	ATM	Automated Teller Machine
•	CRT	Cathode Ray Tube
•	ETO	Electronic Transaction Ordinance
•	EFT	Electronic Fund Transfer
•	MCB	Muslim Commercial Bank
•	PIN	Personnel Identification Number
•	RBS	Royal Bank of Scotland
•	SBP	State Bank of Pakistan

# **CHAPTER 1**

#### INTRODUCTION AND BACKGROUND

#### 1.1 INTRODUCTION

When Internet has entered into our daily life, the most dimensions of our lives such as education, communication, business, etc, were overshadowed by this novel phenomenon. One of these dimensions is to handle banking affairs through the Internet (Shirali & Shahreza, 2007). According to (Richard Nyangosi & Arora, Sumanjeet Singh, 2009) banking through electronic channels has gained much popularity in recent years. This system, popularly known as 'e-banking', provides faster delivery of banking services to a wide range of customers. Information technology is becoming an important factor in the future development of financial services industry, and especially in banking industry (Nami. M. R, 2009). In current business environments, customers using the services products of the banks want better choice. (Avkiran, 1999) stressed the importance of the human touch in the customer services. The capability of banking staff can be expected to directly affect the customer's satisfaction. However, e-banking technologies can help in better understanding customer's needs and customizing the services/ products according to their needs.

In the new era there is a need of bank customers to get improved electronic banking services and also better relations with the bankers. It is also the need of time to provide efficient services/products to the customers. In Pakistan however, such kind of electronic banking has started recently. Online banking system present to their consumers a set of information-related benefits that favors to adopt e-banking, including the facility for the customers to control their bank accounts at any time and any place, and to access information content for making investment and financing decisions (Howcroft B, 2002).

Due to the competition among the banks in Pakistan, the banks want to provide the services which are more efficient, rapid and enhanced the banking system. Therefore, the objective of e-banking is to create such working environment where customers can easily find about the information they require for performing financial transactions.

### 1.1.1 Definition of E-Banking

Electronic banking, known as Electronic Funds Transfer (EFT), it is basically the use of electronic methods or means to transfer money electronically directly from one account to another account, rather than cash or cheque.

We can use electronic funds transfer for:

- ❖ We can withdraw money by an ATM machine with a personal identification number (PIN), for our convenience, day or night. We can guide our bank or credit union to pay automatically monthly utility bills from our account, or our auto loan even our mortgage payment.
- We can buy food, fuel for our personal transport, and other goods at the purchasing point, using a credit card rather than cash.
- We can use a prepaid smart card embedded for our daily purchasing like pay phone, toll expenses, daily college expense or any bookstores.

#### 1.2 BACKGROUND

The increasingly change in worldwide competitiveness in commercial behaviors has improved the volume of bank in the world. It has produced additional banking knowledge and also improved customer demand of services given by banks. This revolution has set a motion in the banking sector for the provision of a payment system that is compatible with the demands of the electronic market (Balachandher, 2001). On the behalf of increased competition, many banks and organization did not only reduce their costs but they have also increased their products. Technology has changed the preconditions for service delivery, dramatically in recent years (Fredriksson, 2003).

The banks are the financial institutions to provide consumers savings services, money transmission services and credit services (Sinkey, 1990). In other terms, banks are concerned with safe transaction and collection of management functions. In this regard the main object of the banks is to making profits and giving best services to their customers. Customers are eager to a bank's behavior because the customers are the most significant cause of a bank's deposit and revenue creation. These customers may either be a single person or group of a person or organization. According to (Chaudhury &Kuilboer, 2002) the potential of providing innovative services over the Web is limited only by one's imagination.

Online services, especially banking services, are becoming more attractive and alternative to visiting service outlets or phone call centers for increasing their customers (HR- Focus, 2000). Therefore it become easy for the customers to prefer online services (Szymanski & Hise, 2000), feel more in control of the service process (Bateson, 2000) to avoid from human contact with time saving (Meuter M.L. 2000).

In Pakistan however, banking organizations have been focused on censure for not given to their customers with original and suitable banking services. Therefore, the outcome that some customers, find it suitable to keep their money or reserves at home than the banks. Studies will carry out by two famous banks working in Pakistan, which have researched and applied computerized technology for the delivery of banking services. Most of the bank branches have their own network across the country (Safo, 1990).

Although, banking administration has delayed to execute computer technology in banking exercises. A number of studies have concluded that IT has positive effects on bank services delivery to customers, bank productivity, cashier's work, banking transaction and banking investment. So, these have positive effects on the growth of banking system (Balachandher, 2001).

In addition, delivery the high quality services is a way for the banking to improve their relationships with their customers. By the Delivering high quality services, banks can achieve customer satisfaction and through customer satisfaction banks can gain loyal customers (Grönroos, 2000). Because of the highly undifferentiated services and products, financial organizations specifically banks become main tool for competing in this marketplace (Kim J.K, Han, Choi & Kim S.H. 1998).

Much research has been done about the quality of services and customer requirements in the traditional banking environment, where personal interaction between the customers and the bank employees takes place (Oppewal & Vriens, 2000). Therefore, this is very important for the online banking services providers to become more capable about the customer's perceptions of the online banking services quality. On the other hand the customers also have more expectations and demand when they are using e-banking services either the services are satisfactory or not. Because it is quite easier for customers to evaluate and compare the benefits of competing services (Santos, 2003).

#### 1.3 PROBLEMS DISCUSSION

The study about e-banking adaptation has gained special attention during the last decade as for instance; banking journals have devoted special issues on the topic (Waite & Harrison, 2002). There were a lot of grievances over the delays in traditional banking services, withdrawals and delay in processing. Time is money but the customers have to wait for a long time of their turn in the bank for any banking facility. Some time even from a remote area a customer has to travel to the concerned branch for any kind of transaction. On the closing hours it becomes more harmful if anyone want make a business deal for payment. Having the computerize operations and automated teller machine; it has made it easy that the banks would activate their e-units to support the online banking services.

In Pakistan, manual banking system was performing below standard services to the customers and it may be affected on the customer's support. Transactions of the money from one manual bank to the other can take five to ten days. Some time, when the purpose of transferring the money has almost dead.

Sometimes businessmen have to cancel their business deals due to the unavailability of the cash transferring facility in time in traditional banking system where services are as slow as non-secure, non-satisfactory.

In order to satisfy customer's needs, many banks build their set up through web sites and internet that provide the services and information to customers and the better service can help to get higher profitability (Lin, 2003).

With the studies of IT in substantial, that would put a positive effect on bank productivity, cashier's work, banking transaction, bank support, and delivery of bank service. These have positive effects on the growth of banking (Yasuharu, 2003). Now Pakistan Telecommunication Company Limited is providing broadband, which has enabled the customers to adopt the e-services instead of manual banking because these are much efficient and accurate.

In Pakistan there is low literacy rate in working woman whi are in serrvice. We can't concentrate and depend on the data from woman which will be more beneficial for our research study. But now a day young educated generation especially woman are trying to get jobs and taking part in nation building and economy and they have to use the banking services. Therefore the e-banking services will help and satisfy them regarding their expectations for efficient, accurate and rapiness services.

Recently, many local banks in Pakistan have used the online services as a new market channel to offer their customers a variety of services 24 hours a day. This e-banking, compared to traditional banking, heavily involves non-human interactions between customers and online bank information systems (Furst, Lang & Nolle, 2002). When the customer evaluate of the e-banking service they received from Banks, then their satisfaction depends on website features/user interface design (Doll & Torkzadeh, 1988) and that can be important to analyze the designed features of banking services delivered to the customers.

There are 3,424 online branches are facilitating with real-time e-banking services to the financial credit holders in Pakistan while 7,406 branches of 41 different banks it means that only 42.47% branches are providing online services to their customers (Shamshad, 2006).

#### 1.4 STUDY PURPOSE

The purpose of this study is to establish the important that how the customers fond the concept and carry out e-banking services and to determine whether the utilization from the e-banking services, make more efficient, accurate and in time of banking services and also to make a variety and excellence between automated and a manual or ordinary Banking systems.

To comprehend electronic Banking system in the context of Pakistan by the way of an analysis on the factors that manipulates customer's favorable reception of electronic banking services. Particularly to consider the services and products associated with ordinary banking and e-banking with their fast, rapid, efficient, enhanced are more useful methods and to provide the customers to recognize the online banking services.

It is to identify the significant aspects that shape the customers' view about electronic service and features and the outcome of these services on customers' satisfaction in Pakistani banking sector. The current study offers and considers a model to explain how ease, rapid, efficient operation, security, enhanced reliability and reaction positively and meaningfully affect customers' awareness of e- services and how these manipulates the customers' satisfaction.

The leading issues pay attention in the study of e banking customers to recognize the necessary dimensions of e-service provided by the banks. The study of the literature exposes the convenience, efficient operation, security and privacy, reliability with rapidness, and responsiveness with enhanced methods of e-banking service factors. These dimensions share many general facets of those quality determinants originated within the context of traditional service industries by earlier research (Parasuraman & D. Grewal, 2000). Alternatively, these dimensions have their distinct attributes inherent in automated service quality environment (Al-Hiwari & ward, 2006). The convenience dimension refers to ease of use and accessibility of the service at all times.

The customers prefer flexibility to meet their financial needs at all times, which affect their perception of the e service quality (Gerrard &Cunningham, 2003). Lio & Cheung, 2002 found that accessibility positively determines perception of quality of service. (Lockettt & Litter, 1997) and (Moutinho & Goode, 1995) established that time utility is a major contributor of customers' perception of e service quality. A lot of studies mentioned that the location e-service delivery is a strong driver of customers' perception of e service quality (Aldlaigan & Buttle, 2002.; Almossawi, 2001.; Levesque & McDougall, 1996). The second dimension of e-service quality, efficient operation, relates to efficient and speedy operation of these services. Efficient in operations enhances the resources for the customers. Customer's accord priority to user-friendliness of ATM. (White & Nteli 2004) found that efficient and faster delivery has positive effect on customer's perception for quality. Dilijonas, D.; Kriksciunien, D.; Sakalauskas, V & Simutis, R. 2009 argues that minimum breakdown of machines constitutes the essential aspect of e-service feature. (Al-Hawari & ward, 2006) talks about the efficient ATM functions positively affect the customer's perception of service quality.

The element of consistency and dependability describes accurate and assured service at all times. Online users want to obtain the right quantity and right feature of service at all times, as promised by the banks. The literature provides strong support that rapidness, efficient and enhanced are essential determinants of customers' perceived service quality and positively relates to customers' use of online services (Fassnacht & Koese, 2006.; Polatoglu & Ekin, 2001).

The responsiveness aspect of e-service quality relates to the ability of the bank staff to provide the agreed services timely, accurately, dependably, and promptly. Customers prefer to resolve their complaints expeditiously (Karjaluoto, Mattila & Pento, 2002). Prior studies indicate that responsiveness is crucial to sustain service quality and facilitates to build long term relationship between service provider and the customers (Bauer, Falk & Hammerschmidt, 2006.; Long & McMellon, 2004).

The research results will reflect a positive and strong relationship between online service quality and customers satisfaction.

#### 1.5 BENEFITS OF E-BANKING

- The e- banking services open seven days a week and 24 hours a day.
- To decrease the cost-line and no need of physical bank branches
- To create more deep collection for consumer's needs and expectations.
- Terms of services to customers for their personal choices.
- Easy access for all.
- With the e-banking money can easily be get within no time from ATM machine.

In current time E-banking has open out rapidly all over the world. Almost all Banks are making much use of E-banking amenities to offer good services. The extension of E-banking has also significantly advantaged the normal customer in all purpose.

### 1.5.1 Benefits from the customer's point of view

Common customers have been much affected in an optimistic manner by E-banking. A lot of ordinary tasks have been fully computerized resulting in much ease and reliable. The main benefit from the customer's point of view is major time saving by the computerized of banking services as well as online processing and an easy maintenance tools for managing customer's money. Some other key benefits of e-banking for customers are as follows (BankAway, 2001.; Gurău, 2002).

- Decreased costs in operating and using the banking e-services.
- Increased relief and timesaving operation can be made 24 hours a day, without consulting with the bank.
- Rapid and enhanced access to information. Organizations or customers will have much easy access to get information as, they can check on several accounts on click of a button.
- Improved cash management. E-banking services speed up cash cycle and enhance the
  efficiency of business operations as large types of cash management methods are
  available by e banking.
- Decrease costs in terms using the different e-banking products and services.

- Rapidness the reply of services is very fast therefore the customers can actually wait till the last minute before final fund transfer transaction.
- Customers can take their history of different funds management
- Consumers account is particularly accessible with in online account.
- Consumers can withdraw money at any time through ATMs that are now generally available all over the country.
- With withdrawing money, customers can also take mini banks statements, account balance on ATMs.
- Through online banking consumers can control their account while sitting in his
  office or in home.
- No need to go in the bank personally for such matters.
- E banking has also provided the facility in payment of utility bills. There is no need to stand in long queues for these matters.
- All these services are generally available at bank website.
- The development of credit card and its usage also owes significantly to E-banking.
   Now a customer can purchase anything worldwide without moving paper money with him.
- Banking services are available 24 hours a day; seven days a week or they are only a mouse click away.

### 1.5.2 Benefits from the bank point of view

Banking industry has also various benefits due to the development of E-Banking procedure. Some are mentioned as below.

- The core benefits for the banking point of view is that e-banking services are better response to the market. The main purpose of every financial organization is to boost up the profits for its vendors. Online banking services offer ideal chances for increasing the profits.
- Some clarifications for this pricing plan can be proposed
  - ➤ Banks receive extra profits on transactions completed via electronic channels.

- The abundance of payments is not a main concern for banks. Cross-subsidization in special services groups is used, for instance, profits from loan activity balance poor abundance from payment services.
- The development of E-banking has much helped the banks in minimizing their overheads charges and service cost.
- Many services and dull tasks have now been fully computerized and in better efficiency and good time usage.
- The growth of E-banking has made banks more economical. It has also led to growth of banking industry, commencing of new opportunities for banking processes.
- E-banking has reduced the paper work in banking industry, thus give them to work with paper less environment.
- E-banking has also provided facility to bank in proper records and documentation of the transactions.
- The e-banking capabilities of computer networks, like as the Internet, are much better than any branch network.

#### 1.6 ADVANTAGES AND DISADVANTAGES OF E-BANKING

With the fame of the Internet growing progressively, many industries are discovering new and attractive method to make it appealing medium to keep up with the continually altering preferences of clients. Nowadays, we can do almost everything over the Internet like shopping for home goods, business deals, contact with friends and so on. The Internet has apparently nonstop possibilities for the banking industry.

Most of us have known about online banking services, and more than a majority has perhaps not even tried it yet. Some of us are feeling more relax and easy to work with real people, paper work and money instead of its virtual complement. At last there are a many advantages and disadvantages of online banking services. In this study there will be outline of good side as well as the bad side of online banking services. That you can feel online banking is safer way to manage your transactions and you can be overcome your fears.

1.6.1 Advantages

Online banking is very suitable and convenient. It allows people to pay their bills and make transactions anytime during any time of the day and in the week. E-banking system never closes any time because people can access it through internet. There will be no matter in which country you are or anywhere in the world. Customers can make online

transaction and handle your finances with conveniently.

Secondly, e-banking services are very rapid, effective, enhanced and efficient. E-banking system also gives the option of transaction making in the different bank accounts from a

website.

Mostly e-banking websites are compatible with programs like Microsoft infrastructure,

which makes organization's assets more valuable.

1.6.2 Disadvantages

There are also some disadvantages in e-banking services. The main problem is that most people do not trust the transaction performed on online and almost wonder whether they did the right thing? Of course, people more relax and feel easy to find printing the transaction receipts of their transactions. The receipt will confirm them whether or not

their transaction has gone successfully.

For beginner e-banking can be difficult to learn and some time website could take time to start up. Some websites ask for identification, which can be very inconvenient for the

new comers in e-banking.

People like talking in person to person in case of any difficulty or problem. They like the 'personal touch' like austemer service and these kinds of people do not feel comfortable

'personal touch' like customer service and these kinds of people do not feel comfortable

with e-banking.

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#### 1.7 ELECTRONIC BANKING IN PAKISTAN

Electronic banking is the most recent in the line of technological aspects of the recent past in Pakistan. ATMs, mobile Banking, Credit Cards and Debit Cards, Internet Banking, Cyber Cash have come forward as useful delivery channels for usual banking services and products. In Pakistan, MCB & RBS took as a pioneer to introduce ATMs and credit cards in the mid 1990s. The Annual Report of SBP (2003: p. 110) mentioned this delayed access of electronic banking by regulatory hurdles, much costs for startup, reforms on-going banking sector and lack of technological knowledge.

The e-banking promoted with the circulation of the Electronic Transaction Ordinance 2002 by the Government of Pakistan. This attraction facilitates legal respect of digital signatures the risks associated, reducing documentation with the exercise of electronic technology in business. In current situation, almost all Pakistani commercial banks have their own setup and networks, they issuing debit and credit cards and have joined collectively in operating ATM Switch Networks with each others.

As according to (Kolachi, 2006) Pakistani banks offers the following online banking services and products to their customers.

- II **Inquiry:** Account balance inquiry, Account statement inquiry, fixed deposit inquiry, Check statement inquiry
- III **Payment:** Credit and Debit cards payments, Transfer of funds, Utility bills payments and direct payments.
- IIII **Request:** Demand draft requests, Stop payment requests, Cheque/Check book requests, New fixed deposit requests
- IIV **Download:** Statement download, download Customer profile, other information and guidelines.

The following table gives a summary of the growth of electronic banking in Pakistan. It demonstrates that the number of ATM networks, online branches, and debit and credit card owners have greater than before since the year 2000. The Annual Report (2005, p. 111) of SBP explains that domestic banks are the foremost provider of ATM facilities while foreign banks, like ABN AMRO Bank, Standard Chartered, and Citibank control the credit card business in Pakistan and over 95% of the total amount of transactions.

Electronic Banking	2000	2001	2002	2003	2004	2005	June
Statistics in Pakistan							2006
Item							
No of online branches	322	450	777	1,581	2,475	3,265	3,555
No of ATMs	206	259	399	552	786	1,217	1,612
No of Debit Cards	240	415	736	1,257	1,874	4,257	4,999
Holders (000)							
No of Credit Cards	217	292	369	397	808	1,257	1,512
Holders (000)							

Table 1.1 Sources; SBP Annual Report, 2006, p. 65

### 1.8 RESEARCH QUESTION

The research question is in the sense that, the endurance of any e-banking system based on the large extent that depends on the banks ability to maintain and attract customers by offering modern and technologically enhanced banking services and products. Investigate between customer perception of e-services and the services environment in Pakistan. In order to understand and to be accomplishing the purpose, the research question of the study defined as follows:

To what extent E-banking System is more efficient, rapid and offers enhanced opportunities compared with ordinary banking system in Pakistan?

# **CHAPTER 2**

#### LITERATURE REVIEW AND THEORETICAL FRAMEWORK

#### 2.1 LITERATURE REVIEW

Bankers' and customer's awareness of the advantages of electronic banking have draw the interest of many researchers, particularly from the last decade. Berry in 1984 emphasis that employees must be examined by the management as "internal customers". Protection of high level of employee's pleasure and retention is significant if banks are to attain high level of customer pleasure and retention.

(Bowen, Gilliland & Folger, 1999) supposed that when front-line employees feel they have been behave positively, they are more likely to behave towards the customers positively. In a consequent study of the relationship between bank customers and employees, (Bowen, Schneider & kim, 2000) found that employee confidence is strongly related to customer fulfillment, that is, when bank customers recognize front-line employees are happy with their work, bank customers are more likely to be fulfilled with the service they receive.

Normally banks allocate their managers responsibility for the advertising of the e-banking services to the customers (Lymperopoulos & Chaniotakis, 2004). Now it is the manager's consistency to make sure that the staff is proficient, dutiful and well-informed about the variety of services which are going to be provided by the bank (Moutinho, Davies, Deng, Miguel & Alcaniz, 1997).

(Moutinho & Phillips, 2002) found that Scottish bank managers considered efficiency and enhancement of customer service to perceived advantages of e-banking. Similarly, (Aladwani, 2001) discussed the rapid, easier, and more reliable or enhance services for customers, and improvement of the bank's competitive position to be the most important drivers of online banking among banks.

#### 2.2 THEORETICAL FRAMWORK

### 2.2.1 Electronic Banking System

Computerized banking system is the use of electronic equipment and application of advance computers and communication technologies for banking functions i.e. receiving, collecting, transferring, paying, lending, investing, dealing, exchanging and servicing of safe deposits, withdrawals, agency, trusteeship, custodianship money and claims for money both domestically and internationally. Automation banking is manifested, in the form of electronic banking and computerized banking otherwise known as **Backroom Technology** (Sinkey, 1990).

According to (Welch, 1999) the e-banking system is a system that can also be narrated as a group of electronic system or equipment called electronic fund transfer system, which involves the application of advance computer and communication technologies to the problem of effecting payment.

The transaction that is made other than paper transaction is the electronic fund transfer (EFT) system can be made by e-terminals, computers systems and telephonically that consist a financial organization to make debits and credits. The financial organization consists of Automated Teller Machine (ATM), Point of Sales, |Automated Deposits of Payroll, Electronic Cheques, Home Banking, Direct Deposit Funds (electronically), Debit Cards and Credit Cards etc.

# 2.2.2 Teller Banking

The Teller Banking refers as an assemblage of Cathode Ray Tube (CRT) terminals, hard-copy terminals, printers, software and other devices that support the bank teller by conducting routine teller functions. It is linked to a central computer so that transactions can make instantly in the centralized database (Evans & Schmalensee, 1999).

The banks that we have selected for our analysis have two types of computer operations.

#### I. On-line Network

In this network the terminals in the banks are directly linked with the server installed in the main central office. The entries can be made from terminal from any branch. On-line networks indicate that a terminal unit is connected directly to a central computer. Entries are made by each branch and are accrued in the server for updating the entries at the end of the day. The certain branch itself can get the required customer's necessary entries like accounts number, accounts type and balance information.

#### II. Real-time network

In real time network, computers store the information, transaction, data handling, processing, querying and updating in a central time. For this purpose telephone and telegraph system can be used. The concerned employee of the bank can get the information and data regarding the customers, by acquiring from the system. E-Banking service which are the most common are demand draft, demand deposit account, saving account, debit card, credit card, reconciliation of cheques, automated clearing system, commercial loans, payroll of customers, file information, cost accounting etc.

### 2.2.3 Automated Teller Machine (ATM) CARD

ATM card is made of a plastic having magnetic stride that hold all the information about the customers such as customer name, account, card number, card limit, concerned bank etc. According to (Rose, 1999), ATMs can be described as computer terminal, having recordkeeping system and cash vault in one unit, permitting customers to enter the bank's book keeping system with a card holding a Personal Identification Number (PIN) or by punching a special code number into the computer terminal linked to the bank's computerized records 24 hours a day. Banks offer different retail banking services through ATM cards to its customers. When a card is slotted into a machine, the magnetic reader of the machine reads the magnetic stride and verify for processing.

Both the services either Automated or human tellers boost up the production of the bank even during banking hours. These saves the customer time in service delivery and also queuing in bank halls, and they can invest their saved time into other activities. Automatic Teller Machine is a cost-efficient way of yielding for high production than human tellers. The average transactions for ATM per month are 6,400 compared to 4,300 with human tellers (Rose, 1999). Moreover after the banking hours ATMs remains work which is continual productivity for the banks but human teller stop working.

### 2.2.4 Technical Support and Development Systems

The customer information seems to be feasible for the employees to offer good and enhanced services which are significant parts of internal marketing (Gronroos, 2001).

If the customer information database system is missing employees might begin to reveal non challenge approach towards their job, which might decrease in good time of ebanking market.

Remarkable impression has been witnessed in the development of information technology, which has escort to the provision of useful support system in internal banking market. However, sustainable system and information technology has allowed the banks to accomplish their promises to offering customers with quick, helpful, swift, accurate, and enhance services as compared to manual banking system.

Furthermore the shortage of technological systems support also has a pessimistic impact on internal marketing process in the organization (Gronroos, 2001).

IT is becoming extremely important for more and more service procedures. If a complex web site is deliberated so that customer can find it difficult or unexciting. Those customers using a website do not get a rapid answer to their transaction; they might rapidly drop interest in the firm and its assistance. It is so simple to go to the next website. However, the Internet here is not critical. IT should also offer to get in touch with employees to get easily recoverable and dependable information about the customers they are serving. Actually, connections or communications between employees and customers are exaggerated and produce bad services quality. Different types of technology and corporeal resources used in the services procedures must also be customer-friendly and dependable. A technological resolution, or a corporeal resource that is mechanized to the wishes and needs of the customers and that fits the circumstances in which it is to be employed, may well enhance the services. It can increase the efficiency of procedures and profitability as well (Gronroos, 2001). In addition, technological foundation enables personnel to deliver a better with rapid enhanced services in short time. Suitable technology and physical resources, like computer systems tools, equipment, and documents may increase working conditions at the same time and enhance the inspiration of employees to give high quality services.

While on the other hand, where the technology do not used and those employees do not willing to use has a negative outcome on both internal connections in the organization and on external with the customer association like as in the ordinary or manual banking systems.

### 2.2.5 Interactive Marketing

The edge between production and utilization represents the buyer-seller relation that is truth of chance happen. The marketing impression of the interface occurs in interactive process that is called interactive marketing gathering. It happens at the time when the buyer and seller interact (Gronroos, 2001). In addition, customers are not only customers or consumers of services but also co-creators of the services. In this respect they are also resources in the interactive marketing process.

However, operational systems, physical resources, information systems, and the customers all these manipulate interactive marketing presentation. Although the role of the employees is most often paramount, it should not be over-emphasized (Gronroos, 2001). He also explained interactive marketing as a variety of circumstances in which customers cooperate only with physical resources and systems. Using an ATM, making telephone call, sending a messages from cell phone or purchase on the Internet are the examples of these circumstances. Second, employees require a service-oriented equipped system and appropriate technology, databases of customer and other corporeal resources to be able to generate optimistic moments of truth. However, if technology or computerized service system does not work, either servers are down or cannot be functioned; the key to recovering the situation is a service-minded and customer conscious (Gronroos, 2001).

The marketing influence of the customer, dealings with the people, systems, technology and other non marketing utilities ascertains whether customers or providers, will continue doing business with a given firm (Gronroos, 2001). All these customer dealings are interactive.

### 2.2.6 Analytical Framework Tool

# 2.2.6.1 Emerging of e-Banking Model

The principal factors of customer experience found in conventional *e*-banking are demonstrated in Figure 2.1. They contain the following:

- i) Navigation: or the capability to access and move almost the site,
- ii) *Information*: that is giving sufficient information to assist customers to make a purchase decision,
- iii) **Support:** that is providing customer to carry regarding a numbers of portions of the product or service and be able to answer questions on time.
- iv) **Logistics**, that is, usage, covering, and delivering the corporeal goods or service to the customer and organizing for payment.

The execution of above four elements is expected to have a positive impact on customer loyalty and, in turn, on long term growth and profitability (Heskett, Sasser & Schlesinger, 1997). Each of the above mentioned elements can also influence each other. For example, if no sufficient concentration is paid on making on the web site, that may have human interaction designed, easy to use, the result may be the raise of customers in number with their support. Information management can greatly decrease both customer support and logistics costs. Even today most companies prefer to build their viable priorities covering the first two elements: navigation and information.

An *e*-banking tool that develops the usual *e*-commerce aspects is outlined in Figure 2.2. Direction findings are still a main element in e-banking that suggest the elements to keep in mind when designing a web site (Wen, Chen & Hwang, 2001). Customer oriented cyberspace design and various issues of *e*-quality pertaining to the tangible aspects of the site that are the focus of many on-going research efforts, mostly from the marketing area (Parasuraman & Grewal, 2000).

An *e*-banking is an essential unified aspect of information handling. The ability to actually create and handle a customized experience in the customer interface discussed by (Wind, 2001), who presents the concept of customerization in e-banking services. The idea of customerization moves ahead of simply identifying customers and managing web pages with account information. Customerization creates a true customized experience

that integrates including a number of elements (Bakos & Brynjolfsson, 1999) with the customer's lives. Although it believes that a successful site will result in customer support requests, this has not been the experience of many successful internet firms i.e. Everdream.com, Amazon.com, LandsEnd.com etc, which have recognized the importance of customer support within *e*-service.

In *e*-banking, however, the dimension of logistics are replaced with financial intermediation and the management of risk (Holmer & Zenios,1995). In financial services, it is not the substantial transfer of products, as is the transfer of risks and the main element in the customer experience in *e*-banking, is trust, which can be achieved by an organized delivery of all the above mentioned elements of the framework. Despite all the presented and promising characteristics of *e*-banking being suitable 24 hours in a day and 7 days a week, dependable and at least to make safe with traditional banking. Trust is a thought to be the basis for successful and lasting relationships, as it finds out the customer's future actions and loyalty towards the business (Berry, 1984). (Reicheld & Schefter, 2000) also report that *e*-customers are less price sensitive as originally thought and more sensitive to trust.

Today, the investigation about the concept in *e*-banking, including its past history and its sub-aspects is at best in its early stages. However, the deficiency of relevant literature specific to *e*-banking, *e*-loyalty is considered by both academics and practitioners as the most important driver of long term growth and profitability (Reichheld & Schefter, 2000).

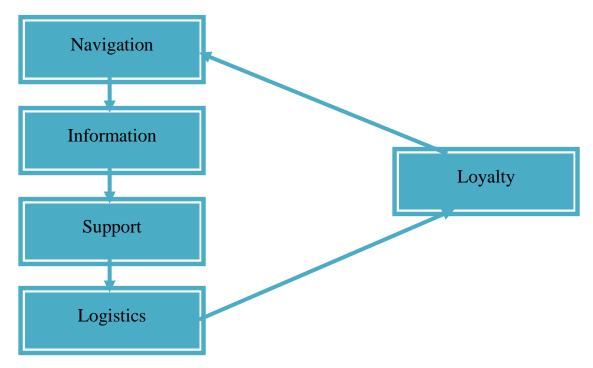


Figure 2.1: A traditional e-commerce framework.

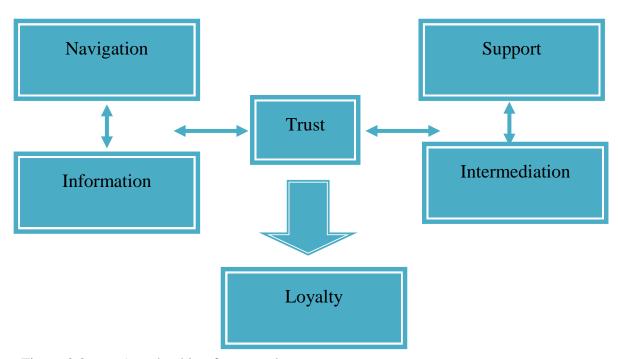


Figure 2.2: An e-banking framework.

# **CHAPTER 3**

#### RESEARCH METHODOLOGY

#### 3.1 CHOICE OF TOPIC AND DATA

In this chapter, we concentrate on our objectives to know how and why we preferred our topic. After going through the e-banking structure in Pakistan on International Marketing with the competition of foreign banks at the same time and same place, it stands important for us to bring into black and white of the automation or computerization of banking sector in Pakistan.

Although the banking industry in Pakistan has observed a marvelous progress and advancement, but still there are various problems unsolved. Some banks are creating developments in terms of customer satisfaction concerning with more efficient, rapid and enhanced and accurate delivery of banking services. This intensity of satisfaction has an effect on the customer's preferences for selecting a bank to deal business with. Due to this vision in mind, we found it interesting and selected two banks, one local commercial bank MCB (Muslim Commercial Bank Limited) and the other one is foreign bank RBS (Royal Bank of Scotland) simultaneously. In Pakistan there are five commercial banks, these are working almost in the same way. There are many foreign banks in Pakistan, like Dubai Islamic Bank, Standard Chartered Bank, HSBC Bank Middle East Limited and Citibank N.A. etc. We have selected a European bank the RBS for our research because RBS is the first foreign bank, who has started and introduced the ATM online banking in Pakistan. Therefore these two banks consider us for our research goal.

These two banks are using different modes of operational transactions for their customers and it has enabled us to consider one bank more urbanized in technology and the other one mostly on manual basis.

#### 3.2 CHOICE OF THEORETICAL FRAMWORK

The unique work about banking industry has also given us an insight into the literature review of the study with respect to services of e-banking and there rapidness, flow as compared to manual or ordinary banking. The literature review facilitates to gain more

knowledge of the study and the logical portion. It also enables to know about the customer's loyalty and trust on e-banking services, which can be on the base of banking information through their web-sites. It gives the support regarding various aspects of the e-banking Logistics, product and services. It handles packages and deliveries of the e-banking physical goods and services to their customers and arrange for payments.

According to (Gronroos, 2001) the development in technology has an important and remarkable attention because the technology and physical resources has used in the service process that can be customer-friendly and reliable. A technological solution or a physical resource is the geared to the needs and wishes of the customers. Which fits the situation in which it is to be used, may well enhance the quality of the service. It can improve the efficiency of operation and profitability as well (Gronroos, 2001). These helped in data compilation from our study by the state of questionnaire.

#### 3.3 DATA SOURCE

For E-banking in Pakistan, we have decided to apply the both approaches qualitative and quantitative, because the both approaches are appropriate and suitable methods to construct a research work. Qualitative research approach is open-ended, in-depth, and based on unstructured response from the customer's side that reflects their views feelings and attitude. On the other hand through quantitative approach, we can get response from the market in the form of summarized values, averages, percentages and other statistical values (Cateora, Philip, Ghauri & Pervez, 2000) and the research base on the memories and the experiences from those who have been concerned such type of situation. In our research work, we have focused on the both approaches. The data were collected from Royal Bank of Scotland (RBS) and Muslim Commercial Bank (MCB) in Pakistan.

#### 3.4 DATA COLLECTION METHOD AND PROCDURE

Our secondary sources of data is textual i.e. collection of data from business reviews and reports, articles, brochures, professional publications, annual reports and financial reports of Royal Bank of Scotland and the Pakistani Muslim Commercial Bank. (Yin, 1994) has described six types of sources for evidence to collect the data e.g. archival of the records, interviews, direct observation, participant observations and physical objects. The direct

observation relates with interviews which we have made through a questionnaire survey consisting of 12 questions. The purpose of this type of finding is an advancement of automation/computerization of banking services.

The information for the field study and to gather of essential data, we have formulated questionnaires. The questions are planned to incorporate open-minded with the purposes of findings and the exact reply of the customer's preferences that, why they have chosen the e-bank objectives, their satisfaction level with the e-banking services, accuracy of e-banking services, approaches and reasons towards the process of the banks.

- In the first question we have asked from the customers about the bank choice. It will give us the data that, what kind of thinking the customers have before choosing the banking system.
- In the second question we will come to know about the expectation and reliability, either they met or not, which they are expecting from an e-banking system.
- To know about the efficiency and rapidness of the services like cash deposit, withdrawals, transfer of money, monthly salary process and preparation of statement of account, we have included a question that will enable us to know the services from the banking side are efficient or not.
- In the next question we will know about the percentage of accuracy while opening an account in an e-banking system.
- Data of the customers about the satisfaction level will be known through the question number five.
- We have also included a question that will help us to know about the time taken during the e-banking services.
- We have also asked a question that will give us a comparison between e-banking system and a banking system that is not using the electronic services through the answer of the customers.
- Question number eight give us the data about the customers satisfaction regarding e-banking system.

- We have also arranged a question about the ATM services to know either e-banking system is time saving or not.
- In the last two questions we have asked recomendations for e-banking system and suggestions.

The views and ideas on the bases of above description will help us to conclude about the customer's loyalty on e-banking system that provides rapid, enhanced, accurate, efficient services including with time saving as compared with an ordinary banking system and also boost up the customers satisfaction level which they are expecting.

We have already planned to ask the questions according to the following summary. We thought that it will give us the idea of the customers to their age wise. We have also included the female views regarding our questionnaires.

Description	Muslim Commercial	Royal Bank of	Total Percentage	
	Bank	Scotland		
Age 18-25	10	10	20%	
Age 26-50	25	25	50%	
Age 51 and above	15	15	30%	
Male	43	40	83%	
Female	07	10	17%	
Employee	35	25	75%	
Businessman	15	10	25%	

Table 3.1: Summery of the respondents

For gathering the data from the customers we have planned a five days visit to the concerned bank branches. One of our group member physically visited both branches Royal Bank of Scotland (Jinnah Super Market Branch) and Muslim Commercial Bank, G-8/4, Islamabad Branch. There he met the customers one by one and got their views about the e-banking system. He asked questions from the customer randomly either he or she can spare few minutes to answer the questions. He distributed the question paper to the customer and received back at the same time after their answering.

After collection of required data and information from the customer's through questionnaire, we have evaluated the answers of the questionnaire and put them in a percentage form for the objectives of data analysis, explanation and presentation.

#### 3.5 VALIDITY AND RLIABILITY

We tried to generate exact data that will allow us to make research, which reproduces the circumstances on the ground. We tried to determine and discover the validity and reliability of the data composed for analysis.

Reliability can be identified as a condition whereby scales show a satisfactory level of internal steadiness, uniformity, self sufficiency and self determination. Analysis of reliability is observed when the instrument is designed to determine stable channels. Validity submits the degree to which a study precisely replicates or reviews the particular idea that the researchers are trying to calculate. (Campbell & Stanley, 1966) After taking data from our respondents, we have made sure that, data is confirmed from different sources, so that why questionnaire planned and interviews were established to review general awareness of the banks' automation/computerization procedure.

Questionnaire is planned and prepared for customers with the purpose of finding how professional, their accuracy level, satisfaction level, customers expectation level and how much time it takes them to get deposit and usage of other services offered by the bank. In this respect, we mainly eager to find out how customers acts to the services delivery in areas of withdrawals and deposit, ground works and arrangements of account balances, loan achievements and handling out the monthly salary and statement of accounts preparation.

The questionnaire will be based on Customer's background information, ATM performance. We want to find out how rapid and more enhanced banking services which bank offer to its customers usually. The questions here regard to ATM, we required to finding out how the automated system functions in relation to rapid and enhanced and more efficient in the banking operations. Finally, general questions determine customers' general observations and views about issues they preferred before selection of bank to do business.

#### 3.6 STUDY LIMITATION

In this study there will be lots of Limitations. The study is curbing to get empirical data by questionnaire from customers in the Capital area of Pakistan, who are using e-banking services. Only 100 customers from the both banks having different age category are asked the questions to some extent delimit the overview of the results and influence towards the experiences. The researchers are only considering the corporate clients of the Muslim Commercial Bank (MCB) and Royal Bank of Scotland (RBS) in Pakistan.

The authors also have decided to concentrate more on the study of customers having the age range 26-50, but banks may not be interested in people much from this age range, rather than more older customers who are likely more supposed to take higher loans, trade stocks etc. Although, the authors supposed, that banks should not ignored their younger customers aged below 26. They should deem with awareness of the satisfaction level of these customers as they are the valued customers who use the services for more time period in the future. That's why they should be paying more attention to the customers of the bank who they are using the services and not switch over to the other bank.

One more limitation of the fundamental study is that the questionnaire used includes only 12 questions for each bank. The questionnaire was urbanized and concise in purpose because of the time limitation and the situation under which the study was carried out. The authors are experienced that all this might be effect on the composed data and the study done on each of the aspects.

Finally, there are many other factors which can influence customer adaptation of electronic banking services such as computer self efficiency, compatibility, screen design, riskiness with enhanced and rapid flow.

#### 3.7 STUDY SIGNIFICANCE

The significance of the automation in banking industry has not been well established in Pakistan in view of the customer scenario, as it is in developed countries. For instance, In USA the achievement recorded by most banks has been approved to successful use of banking system. This research study will investigate the level of Pakistani banks that are

### **E- Banking System in Pakistan**

committed on advance technology and in conclusion the work would perform on the basis for further investigation and discussion on banking system. We hope the study will bear out the use of automation in banking sector and ATM, Credit Cards, Debit Cards, Cyber Cash, Mobile banking, Internet banking services influences customer preference and fulfillment of bank services approach.

# **CHAPTER 4**

#### **EMPIRICAL DATA FINDINGS AND ANALYSIS**

#### 4.1 E-BANKING AT 'MCB' AND 'RBS'

Most of the banks initially refer to manual systems of record keeping for all transactions in journals/ledgers being used by the bank with respect to its operations (Agembabiase, 1994). MCB Incorporated in 1947 and was nationalized along with all other private sector banks in 1974. To enhance the services with respect to rapid services to the customers and adapt for innovative system which is based on customer need, technical advances. MCB has concentrated on development through improving service quality, investment in technology from the last twenty years with utilizing its extensive branch network, developing a large and stable deposit base. MCB has wasted a lot of time before the computerized system. For example if someone wants to make debit or credit, opening an account or transfer of money, he has to wait for a long time due to ledger system. Then the old system turned into the new computerized system which is an online system reduced the problems associated with the previous systems. Customer information, their accounts and transactions can easily be accessed by the bank's officers. With this ebanking system information about all transactions can be made available for the both customers and banking staff without any delay. Therefore, a customer intend to open an account with such kind of bank in which customer's information is being inserted in to system and the details would be stored in the bank's centralized computer system for business to begin.

The second one bank which we have selected for data finding is ABN AMRO, was created by the merger between ABN Bank and Amro Bank on 22 September 1991 in Amsterdam. After the merger with Amro Bank in 1991, ABN changed its name to ABN AMRO. It launched its branches in Pakistan which began to provide the financial services in Pakistan through internet also. It is among the most formal banks, which are providing e-banking services.

After then The **Royal Bank of Scotland (RBS)** Group formally re-branded **ABN AMRO** branches in Pakistan on Friday, August 1, 2008 and be officially it was renamed as The

Royal Bank of Scotland Ltd (RBS). Now RBS in Pakistan is the second largest group of financial having total assets of 1,900.5 billion pound sterling as of December 31, 2007.

It has present to its customers in Pakistan first mc2 Card that is stylishly different in shape that refers new shape and shape of new things to come i.e. Smart Chip, Smart Technology and Smart Card.



If someone wants to draw the money from the bank, would have to give his cheque to the cashier but with the passage of time it changed into e-banking. Now accounts information can be seen by the customer on his computer screen and transactions and payments can be made without going to banks and without delay of time.

#### 4.1.1 ATM Function and Cash Withdrawal

ATM can be used for not only withdrawal of amount but also for transactions. As according to (Jim Bowen, 1998) functions of ATMs can be analyzed through the cash depositing, withdrawal of money, balance statement and inquiry, checkbook and cashbook orders. ATM card contains a chip, which contains the customer's account and information in the encrypted format, for the using of ATM card, first of all the customers insert their ATM card in to the slot of the ATM machine. Machine read the card for its validity while corresponding with the host computer of concerned bank and then gives the option to the customer for their PIN code and password. These are also be verified from the host computer of the branch. Then the customers have to select the transactions for withdrawal of amount or the amount which he wants to take. When a customer enter the amount through machine keyboard it is also be verified that either there is enough money in the customer's account or not. If the amount is less than the machine give the message of insufficient balance on the screen. If the account has sufficient balance then the amount will be ejected from the machine and withdrawn amount also be debited from the customer's account.

Muslim Commercial Bank has two types of ATM cards.

#### I. ATM Regular Card

It is also called classic card and with this card maximum Rs. 15,000 is allowed per day and maximum three transactions can be made in a day.

#### II. ATM Gold Card

This card allows withdrawal up to Rs. 25,000 per day with a maximum of 6 withdrawals per day per card.



### 4.1.2 Inquiry of Account Balance and Statement

On the ATM machine the customers of Muslim Commercial Bank and RBS can check their account balance and can also make the statement of their accounts. When a customer is identified and furnished bank account number, he can get his balance statement and accounts inquiry through ATM cards on ATM machines by inserting the card and performing some actions. The machines authenticate the customers by their PIN codes and send the request to the host computer which allows the customers for further actions for their desire.

In all a customer has no need to visit his/her concerned bank branch for the process. In this way the customers rely on e-banking and for their satisfaction banks are improving the services by their correctness and rapidness.

## 4.1.3 MCB Virtual Banking

MCB has also started virtual banking facility and gives a lot of services to the customers. It enhanced the trend of the customers towards the electronic banking. Customers can access their accounts information through internet connections easily and at any time and anywhere. Some of those are as given

- Account detailed and summary through internet
- Transaction history
- Funds transfer facility
- Payment of utility bills

- Request for cheque book
- Alert for reminding of payment/transfer
- Mobile recharge facility

#### 4.2 MANUAL OR TRADIONAL BANKING SYSTEM

Before the electronic system, the system on which the banks were act upon was traditional or manual banking system. In this system mostly the work was done manually and each customer has to visit to his concerned bank branch to get any bank service.

### 4.2.1 What is manual banking

Anything that is done by hand is called manual and the manual system in banks is also called traditional banking system. It is a process for containing the information of the customers by the banking staff with handwriting but not through computerized system. Opening an account, debit credit, withdrawal of amount, transactions and other utility bills are made in ledgers through hand-written without any automated system.

For an account opening and issuing the bank statement before computerized system MCB staff had to do this process. A customer had to fill a form for opening an account and necessary payment were made to the bank cashier who gave the payment slip to the customer. After getting the payment receipt, customer had to the other staff for verification and entering his information in the ledger book. Customer received a cheque book and a pass book along with account number after book keeping his information. Whenever he wanted to deposit or withdraw his money he had to go to the branch and wait for his turn in a long queue and gave the cheque to the bank officer and got a token. The cheque was verified and sends to the desk of cashier for giving the cash to the concerned customer having the same other relevant token. The cashier announced the token number of that cheque and gave the cash to the customer.

It was very complicated and time consuming process through which every customer has to adopt for services. For customers account statement a customer has to apply through an application along with his/her identification. The statement issuance staff gave him/her time of one or two days for collection of the statement. Then bank staff prepared statement of account based on the information in the ledger book and make the statement

of account before coming of consumers next time. It all time consuming and boring to customer.

### 4.2.2 Manual banking Problems

There may be a lot of problems due to the manual or traditional banking system which can be overcome with the help of computerized systems. Some most common problems are as under:-

- Time is money and manual system takes a long time for the processing of customer's accounts information.
- Customers have to come to the concerned bank branch for any help related to banking services.
- Customers have to wait in long queues to get their turn.
- Percentage of human error is more than an expert system.
- Boring and uncompetitive system
- Cost of labor is increased
- It is difficult to keep the backup of all the ledgers in case of any mishap like burning.

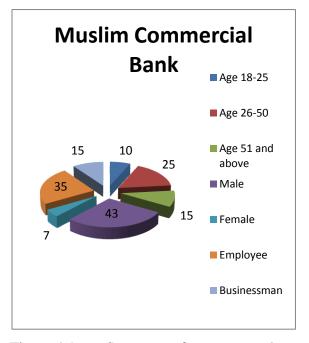
#### DATA COLLECTION FROM THE CUSTOMERS OF MCB AND RBS

# 4.3 QUESTIONS FROM THE CUSTOMERS

We have gathered the data of our designed questionnaire from the 100 customers, fifty customers from Muslim Commercial Bank and fifty customers having bank accounts in Royal Bank of Scotland (RBS). The summary is given as in table 4.1.

Description	Muslim Commercial	Royal Bank of	Total Percentage
	Bank	Scotland	
Age 18-25	10	10	20%
Age 26-50	25	25	50%
Age 51 and above	15	15	30%
Male	43	40	83%
Female	07	10	17%
Employee	35	25	75%
Businessman	15	10	25%

Table 4.1: Summery of the respondents



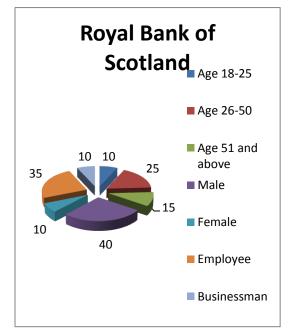


Figure 4.1: Summery of customers who were questioned

Mostly customers have their bank accounts type Saving Account. Out of total customers 20% are having below age of 25 and 50% customers have the age range between 26-50 and the remaining percentage that is 30% of the total customers have their age fifty one and above. Out of the total customers 83% are male and 17% are female and 75% are employees and 25% customers are businessman.

### 4.3.1 Performance of the Banks with Respect to Services

As the data gathered from the customer shows about the bank performance, customer's satisfaction and their loyalty on the e-banking services. When the following type of the question was asked to the customers that

Do you think that your expectations regarding e-banking services like operation of ATM, amount deposit, amount withdrawals and preparation of statement of account, have been met?

Yes [ ] No [ ]

We got the answer of the above the question with the following percentage of recommendation i.e. given below

Description	Muslim Commercial Bank			Royal Bank of Scotland		
Age	customer	Yes	No	customer	Yes	No
Age 18-25	10	9	1	10	10	0
Age 26-50	25	24	1	25	23	2
Age 51 and above	15	7	8	15	9	6
Total	50	40	10	50	42	8

Table 4.2: Expectations regarding e-banking services

We saw that the 82% of the customers are satisfied with the performance of the banks due to their expectations of the bank's operations and services regarding to the areas of deposit, withdrawals, loan acquisition and preparation of statement of account met. The customers told that it was the need of time and we are much satisfied, our expectation came true with e-banking while remaining percentage that is 18% remaining customers are not satisfied. Some of them were replied that they are not qualified and some time

they don't understand the whole computerized system. But they have also accepted this system to some extent. It all depends on the trust and reliability on the services which they are availing from the banks.

We have also tried to conclude about the efficiency of the banking performance with another question and regarding of how efficient the bank is performing in the areas of deposit, withdrawal, salary and statement. When it was asked that

The services provided in MCB/RBS for cash deposit, withdrawals, transfer, monthly salary process and preparation of statement of account are how much efficient and rapid?

Highly efficient [ ], Efficient [ ], Not efficient [ ]

The data gathered from the above question is under and we came to know that 22% of the total customers who were questioned, who were agreed with the banks highly efficient of the services providing with 11% of the both banks. 73% customers were voted in the favor of the services as efficient which are being provided by the banks to make their performance better but 5% customers are not satisfied with it.

Description	Muslim Commercial Bank			Royal Bank of Scotland		
Age	Highly Efficient	Efficient	Not Efficient	Highly Efficient	Efficient	Not Efficient
Age 18-25	3	7	0	2	8	0
Age 26-50	7	17	1	5	18	2
Age 51 and above	1	13	1	4	10	1

Table 4.3: Efficiency the bank is performing services

### 4.3.2 Preparation and Presentation of Accounts

To know about the percentage of accuracy with the preparation of customer accounts, their balance statements, here we found and get the data from the customers of 34%, 65% and 1%, who were agreed on highly accuracy, accuracy and inaccuracy simultaneously which is described through the given question and also in the table # 4.4.

What do you think about the percentage of accuracy for Preparation and Presentation of accounts?

Highly accurate [ ], Accurate [ ], Inaccurate [ ]

	Muslin	n Commerci	ial Bank	Royal Bank of Scotland		
Age	Highly Accurate	Accurate	Inaccurate	Highly Accurate	Accurate	Inaccurate
Age 18-25	2	8	0	3	7	0
Age 26-50	9	16	0	13	12	0
Age 51 and above	2	12	1	5	10	0

Table 4.4: Percentage of accuracy for Preparation and Presentation of accounts

It is clear that how much customers are satisfied with the services provided by the banks through e-banking system from the questionnaire. We also asked from the customers What is your level of satisfaction for monthly statements, withdrawal amount, loan, monthly salary process and preparation of statement of account?

Highly satisfied [], Satisfied [], Not satisfied []" and got the result that mostly customers have voted for this type of services with highly satisfied and satisfied. From the 100 customers 9 customers are with highly satisfied and the remaining all were satisfied for e-banking services. The gathered data is in table 4.5.

	Muslim	Commerci	al Bank	Royal Bank of Scotland		
Age	Highly Satisfied	Satisfied	Not Satisfied	Highly Satisfied	Satisfied	Not Satisfied
Age 18-25	0	10	0	0	10	0
Age 26-50	2	23	0	6	19	0
Age 51 and above	0	15	0	1	14	0

Table 4.5: Level of Satisfaction on E-banking Services

### 4.3.3 Time Consuming with e-Banking Services

When it was asked that how much time, it took to make deposits, withdrawals in e-banking and we got 95% customers said that not more than half an hour but 4% were in the favor that it can take more than half an hour. From the 100 customers 1 customer said that it can take more than one hour. It may depend on customer's knowledge and literacy rate because we have already mentioned that some customers having more than 51 are not so educated and don't know this system 100%. Responses of the questions are given in table 4.6. This analysis shows a positive relationship between e-banking and its services through which efficiency, customer satisfaction and time effectiveness in delivering these services.

How much time it take to process your cash deposit and withdrawal with the e-banking services offered by the bank?

Less than half an hour [	1.	More than half an hour [	1.	More than one hour [	1
Ecos man nan moar	17	Triore than han mour		Trible than one hour	

	Musli	m Commerc	ial Bank	Royal Bank of Scotland			
Age	Less than half an hour	More than half an hour	More than one hour	Less than half an hour	More than half an hour	More than one hour	
18-25	9	1	0	10	0	0	
26-50	25	0	0	24	1	0	
51 and above	13	1	1	14	1	0	

Table 4.6: Time consumed with e-banking services

### 4.3.4 Automation System in the Banks

During the questioning from the customers of the Muslim Commercial Bank and Royal Bank of Scotland, it was asked that due to the computerized and e-banking system, either the services are more efficient, accurate and rapid as well as improved the reliability of the customers on the banks than the banks those are still based on manual banking

system. The answer of this question from the customers can be analyzed from the given collected data.

Do you think automated system used by the bank is improved, efficient and rapid than the normal or ledger banking system?

Yes [ ] No [ ]

	Muslim Commercial Bank			Royal Bank of Scotland		
Age	Customer	Yes	No	Customer	Yes	No
Age 18-25	10	10	0	10	10	0
Age 26-50	25	24	1	25	25	0
Age 51 and above	15	13	2	15	14	1

Table 4.7: E-banking is an improvement, efficient and rapid than manual banking

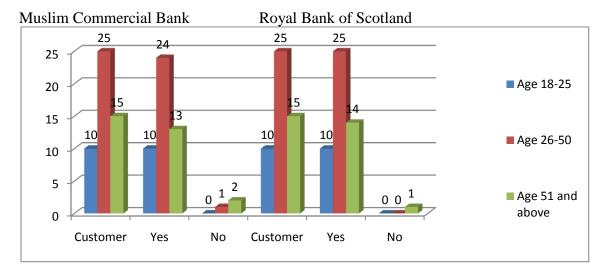


Figure 4.7: E-banking is an improvement, efficient and rapid than manual banking

### 4.3.5 Choice of Bank

To know about the causes of preferences of banks that in what terms customers have selected the e-banking. When it was asked from the customers that

#### **E- Banking System in Pakistan**

Why did you choose Muslim	Comm	ercial Bank/Royal Bank of Sco	otland'
Bank Location	[]	Automated banking systems	[]
Bank staff performance	[]	Bank rates	[]

Most of the customers have preferred the bank due to the automated system and choose that bank. From the data collected we saw that the 40 customers of the first bank i.e. Muslim Commercial Bank. They have chosen this due to the automated (E-banking System). From the rest of customers 2 selected due to bank rates, 3 customers preferred due to the staff dealing and 5 have selected due to the location of the bank. They have selected the banks because the bank branch is very near of their house.

Same like the first banks data, most of the customers of second bank i.e. Royal Bank of Scotland. They have selected RBS due to the e-banking system. Forty six customers have selected due to automated system in the bank. The detail data collections from the customers are in table 4.8.

	Age	Bank Location	Automated banking systems	Bank staff performance	Bank rates
Muslim	18-25	0	9	1	0
Commercial Bank	26-50	1	24	0	0
	51 and above	4	7	2	2
	18-25	1	8	0	1
Royal Bank of Scotland	26-50	0	25	0	
	51 and above	1	13	1	0

Table 4.8: Factor choosing e-banking

### 4.3.6 Data Findings on ATM

#### **4.3.6.1** Time Saver

All the customers of both the banks, who were interviewed, had the facility of ATM from their concerned bank. When it was asked about the ATM system, 98% of the customers replied with satisfaction to save the time with ATM. Only 2% of the customers replied in negative. The question along with data gathered on its bases is shown in table 4.9. Although ATM is the time saver with the context of questions asked from the customers but it is also enables the customers for their easy access to their amount at any time.

How satisfied are you from the ATM regarding time saving?

Satisfied [ ] Dissatisfied	[]
----------------------------	----

	Muslim Com	mercial Bank	Royal Bank of Scotland		
Age	Satisfied	Not satisfied	satisfied	Not satisfied	
Age 18-25	10	0	10	0	
Age 26-50	25	0	24	1	
Age 51 and above	14	1	15	0	

Table 4.9: ATM as a time saver

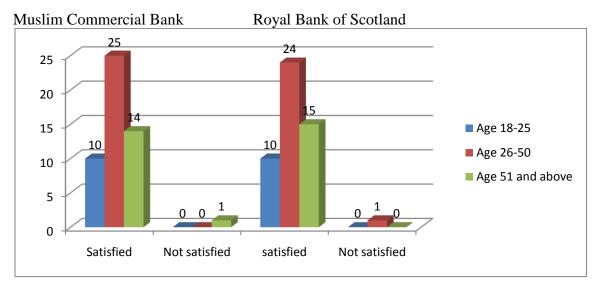


Figure 4.9: ATM as a time saver

### 4.3.6.2 Recommendations for E-banking as Time Saver

It can also be observed from the result of the above table that how ATM/e-banking system (innovation) and technology has improved for customer to turnaround their time. This is of its evidence that 96% of the customers recommend this system for time saving, which is illustrated in Table 4.10 where only 4% of the total strength of the interviewed customers did not recommend this system for time saving. They mentioned that some time the ATM system went off unexpectedly and we have to wait for its working.

Do you recommend e-banking system and services to adopt as for time saving?

	Muslim Commercial Bank			Royal Bank of Scotland		
Age	Customer	Yes	No	Customer	Yes	No
Age 18-25	10	10	0	10	9	1
Age 26-50	25	25	0	25	25	0
Age 51 and above	15	13	2	15	14	1

Table 4.10: E-banking recommendation for time saving

This shows that how the bank system is sensitive, which is facilitating the customers by the providing of quick and rapid services. It is fact that mostly customers who have the service of ATM that is very accurate, fast in rendering various customer services, satisfied with the system and how important bank customers attach value to e-banking system. Even though the interviewed from the customers appreciated and recommended the computerized system in banks with online services.

The above analysis helps us to make conclusion that the importance of bank customers attach to automation banking instead of manual operating banking system that would influence their selection of a bank to save time. Because ATM and e-banking system is the main factor for choosing a bank, and it is fact that e-banking would ensure the banking services with quicker and efficient and help to reduce time wastage at the banks, improve bank efficiency, customer satisfaction and meet customer expectations.

Therefore, e-banking operations have a direct and positive relation with customer satisfaction, bank efficiency and time effectiveness.

### 4.3.7 Data Finding of Suggestions for E-Banking

Most of the customers did not comment on the last question, in which they were asked to give the suggestions to make E-banking System more efficient, accurate and for rapid services but only few customers have suggested for their easy approach to the ATM. They have to go bank branches in case of any transaction while using ATM because in Pakistan every ATM has been installed in the front of banks. Therefore ATMs should also be installed at the public places either the bank branches exist or not on the same places. It will help the customers to have easy and quick access to the ATM.

#### **ANALYSIS**

#### 4.4 THEORETICAL AND EMPIRICAL ANALYSIS

In our thesis research we tried our best to develop the theoretical concepts from the empirical findings. In this part we will analyze the theoretical concepts in relation to the empirical findings from the customer's point of view through the questionnaire. Customers gave us their views, in the form of expectation from e-banking, trust and reliability on e-banking services, services as time saving, rapid, efficient and accurate which we have selected regarding the customers of these banks and asked the question for our data finding.

The technology and physical resources used for services processing should be customers friendly (Grönroos, 2001). These should be also reliable for technical support and solution, which equipped the needs and enhanced the quality of the services for valuable customers. Through this, the efficiency of the process and operation may be improved and let the customers to select the bank having this types of services. We have analyzed on the following points with respect to the e-banking services.

- Accurate, Efficient and Rapidness
- Trust and Loyalty
- Time Saver
- Customer's expectations and Satisfaction
- Manual and E-banking System

### 4.4.1 Services as Accurate, Efficient and Rapidness

The data gathered from the questionnaire shows the attachment of the bank customers with computerized banking system instead of manual banking system. It also make very clear from the customer's observations that, manual banking system brought hindrance in carrying banking services but with the e-banking services are rapid, accurate and efficient, customers turned towards the e-banking. Table 4.7 shows the data gathered from the customers in which mostly customers are in the favor that the services providing by the e-banking system are more efficient than the manual banking system. It is a reality from the customers that computerization is a main point for considering the selection of a

bank for future financial businesses. More than ninety percent customers have selected ATM as an efficient, rapid, and more enhanced customer service tool which can help the customers to reduce the wastage of their time.

It means Computerization would enhance bank competency, customer pleasure to fulfill customer expectation about bank services and operations. That is an optimistic relationship between banking automation and customer satisfaction, banking competency and time efficiency in providing customer services. In short, computerization system in a bank's procedures has a direct and constructive relation with customer satisfaction.

### 4.4.2 Trust and Loyalty

If we had a look at the findings described in table 4.2, it shows all about the parameters of trust loyalty and satisfaction, through the customers in Pakistan have accepted the e-banking instead of manual banking. It shows that more than eighty percent customers are satisfied and the remaining customers only avoid due to the non-familiar with the technology very much but this percentage also wants to continue with e-banking services because this type of services are trustable, secure and accurate and with the passage of time the non-familiar customers will learn about the technology in e-services.

Some people have also turned into this type of facility due to the information given by the banks are much designed in their websites.

#### 4.4.3 Time Saver

We came to know from the data finding that how ATM is significant and applicable for the customers in modern and progressive banking technology, which can raise the tempo of bank service delivery. Those customers who had used ATM accounts, remarked that ATM very perfect accurate functioning service, very efficient, faster in description and express their satisfaction with the services system. The customers also gave their views in favour of automated system which is a time saver system. From tha table 4.6 authors have checked that 95% customers are agreed with the ATM and can make his transction with in few minutes but not more than half an hour.

It was also observed that 98% customers were satisfied with ATM for its time saving property with its enhanced, rapid and efficient system of operation for processing than any manual banking system.

### 4.4.4 Customer's Expectations and Satisfaction

Now a day the customers are much sophisticates so banks consider the use of technology for their elite customer with the countinously changing requirements. Customer expectations and satisfactions can be met while prefering the services provided by the internet banking system. It has also been rising due to the convenience to undertake the banking transactions at any time outside of banking hours and from anywhere while internet access is available. In term of findings shown in table 4.2 we saw that the 82% of the customers are satisfied with the performance of the e-banking system and their services with respect to their expectations. Customer's satisfaction can also be analyzed from another question that was asked to the respondent, from the data given in table 4.5 shows that almost all customers are satisfied with the e-banking services.

Therefore, many local banks in Pakistan are going to be provided the online services as a new market channel to offer their customers a variety of services 24 hours a day. It involves non-human interactions between customers and online banking information systems (Furst, K.; Lang & Nolle, 2002). When the customer evaluate these type of services, then their satisfaction depends on website features/user interface design (Doll & Torkzadeh, 1988) and it can be important to analyze the designed features of banking services delivered to their customers. Through which a customer can be satisfied more to meet his expectations.

### 4.4.5 Manual and E-banking System

From the data finding more than 90% customers from the both bank, shown in table 4.7, have selected that automated system is better than the manual banking system. They recommended this system due to the positive effect on customer reliability level. It is the need of this era to adopt the e-banking system instead of manual banking system to compete the new world challenges. So for this it is also better for the banks to keep away from the manual system and adopt the innovative attitudes.

A customer's option for selection of bank is inspired by the modernization of the bank, the expediency of services offered, the efficient dealing of customer information and enhanced customer circle etc. This indicates that the existence of any banking firm to a large scope depends on the bank's aptitude to draw and take care of their customers through the presence of modern and computerized enhanced banking services and products in an efficient, rapid, suitable and precise manner. To meet the challenges, the bank should spread their services, computerize their procedures and functions to help turn transactions and customer data rapidly into information for timely appearance to make convenient for customer.

#### 4.5 WHY COMPUTERIZED BANKING IN PAKISTAN

It should also be clarified that due to which type of conditions force a banking system to turn into electronic banking system. In short some requirements are as under:-

- Improved customer circle of time.
- Customer on-line enquiry service.
- Develop and precise operation of account data.
- Specification of up-to-date information for business administrative and planning.
- Analysis procedure accumulates and recovers precisely huge accounts, statistical and other operation and customer information.

# **CHAPTER 5**

#### **CONCLUSION AND RECOMENDATIONS**

The rapid services in Pakistani banking sector, make available a proposal to use modern technologies to enhance operational efficiency and excellence of services to achieve and hold the customers. The use of ATMs in Pakistani banking services, offers opportunities to banks to operate customers' enthusiasm to adopt the services having much planned advantage. The banks should more keenly monitor customers' preferences for successful reaction. Banks should concentrate on important features of confidence and time alone as well as efficient processing of ATMs and other services. Banks should also enhance and expand their contribution through ATM to develop a durable and unceasing association with customers.

With connection of our study and research, it is noticed that customer wants to make an account which may help them to explain that why some of them make their accounts or do businesses with Muslim Commercial Bank (MCB) or Royal Bank of Scotland (RBS). since some times the bank offers higher payment rate and lower loan rate to attract to customers however, the reason for adoption is due to e-banking facility and their time saving services and some time they preffer the branches which are near to their home, town or business area.

One of another main observation is in the part of bank efficiency, customer satisfaction and time saving that customers of MCB from the remote area are disappointed with the services, because some of the remote branches are not yet connected with the computerized system. However, the customers from RBS which presented automated banking network system, were fully pleased and satisfied with the banks equipped implementation and services distribution and also observed that the bank performance is very efficiently perhaps when they spent times at the bank's premises.

Finally, it has been noticed that even though computerized banking system is an improved banking service system than mannual system, but customers still required even more than improved system which is enhanced system and delivery services which has been introduced by RBS and this is investigated by the fact that the customers

interviewed and answered of the questionnaire at RBS, who had an ATM account which provided suitable time saving and much faster banking services even to a computerized or a manual banking system.

#### 5.1 CONCLUSION

With the interpretation of study and data gathered from the customers, we can conclude that the commercial banks such as MCB although has been providing even e-services, also with using manual banking system. They have not been fulfilling the requirements well in terms of how rapidly these services are been providing to their customers. Almost certainly, it is because of the fact that the bank has offered a primary computerization network plan initially from the head office to its different branches to boost the standard level of the bank and consequently meet competition and customer's desires.

Those banks such as working on automation banking system either computerized banking or electronic banking (ATM), provided enhanced, efficient and rapid services to their customers. Perhaps due to this advantage, banks expand over its branches in the banking line for service providing facilities and also try to get more and more accounts, businesses and customers in the market.

The accuracy of working transaction by an automated system is more accurate than a manual banking system. Bank performance does not depend on whether the bank uses a manual system or automated banking system. The problem is that the manual banking system takes more time than an automated banking system with accuracy. Therefore customers like and choose to stay at home than to go at bank and avoid to consume their time and waiting for their credits or money requirements.

#### 5.2 **RECOMMENDATION**

According to the executions of literature study and analysis, there are some dilemmas were noticed and we can expect that the subsequent recommendations may reduce or solve these problems concerned with banks and customers. In our research study, it has been exposed how electronic-banking system can appeal customers to save time or make transaction with their banks. Automated banking system function through computerized networks or electronic systems which requires massive investment of money.

#### **E- Banking System in Pakistan**

We recommend that to support the banks and to give them confidence to execute these systems, the government should endow with important tax assistance for importers of computerized, automatic or electronic banking apparatus and equipments which will make them available without problems in future. Government should be in association with the State Bank of Pakistan that could endorse a law which would make sure that banks can earn good net profits at the end of their financial year and can also save some money from their profits for the persistence of automating operations.

In addition, for the banks to apply or purchase victorious and efficient automation banking system and there should be well developed country's telecommunication network system and unbreakable electricity supply for the automated system of banks. We should therefore, recommend that the government remain to supply and execute a much rapid and enhanced telecommunication and electricity plans with a good deal of apparent and advanced association with the classified sector.

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# **APPENDIX**

## **QUESTIONNAIRE DESIGN FOR CUSTOMERS**

	<b>Age:</b> 18-25 Years						
	Sex: Male	[ ] Female [ ]					
	Occupation: Employee	Businessman []					
	<b>Account Type:</b> Savi	ng Account [ ] Current Account [ ]					
1.	Why did you choose Muslim Commercial Bank/Royal Bank of Scotland?						
	Bank Location	[]					
	<ul> <li>Automated banking systems [ ]</li> </ul>						
	Bank staff performance	[]					
	• Bank rates	[]					
2.	Do you think that your ex	pectations regarding e-banking services like operation					
	of ATM, amount deposit,	amount withdrawals and preparation of statement of					
	account, have been met?						
	Yes [ ] No [						
3.	The services provided in MCB/RBS for cash deposit, withdrawals, transfer,						
	monthly salary process an	d preparation of statement of account are how much					
	efficient and rapid?						
	Highly efficient	[]					
	• Efficient	[]					
	• Not efficient	[]					
4.	What do you think abo	ut the percentage of accuracy for Preparation and					
	Presentation of accounts?						
	• Highly accurate	[]					
	• Accurate	[]					
	• Inaccurate	[]					
5.	What is your level of sati	sfaction for monthly statements regarding withdrawal					

amount, loan, monthly salary process and preparation of statement of account?

# E- Banking System in Pakistan

	Highly satisfied	[]
	• Satisfied	[]
	<ul> <li>Not satisfied</li> </ul>	[]
6.	How much time it take to p	process your cash deposit and withdrawal with the e-
	banking services offered by	the bank?
	• Less than half an hour	[]
	• More than half an hour	[]
	• More than one hour	[]
7.	Do you think Automation	system used by the bank is improved, efficient and
	rapid than the normal or ledg	ger banking system?
	Yes [ ] No [	]
8.	How much you satisfied from	m the e-banking system?
	• Extremely Satisfied	[]
	• Satisfied	[]
	<ul> <li>Dissatisfied</li> </ul>	[]
9.	What do you think that e-bar	nking is a reason for time saving?
	Yes [ ] No [	]
10.	How satisfied are you from t	the ATM regarding time saver?
	• Extremely Satisfied	[]
	• Satisfied	[]
	<ul> <li>Dissatisfied</li> </ul>	[]
11.	Do you recommend adopting	g e-banking system and services, for time saving?
	Yes [ ] No [	]
12.	Any suggestion to make E-b	banking System for more efficient, accurate and rapid
	services providing?	