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FACULTY OF BUSINESS ECONOMICS
Master of Management

Master's thesis
Future of E-Banking in Pakistan

Promotor :
Prof. dr. Koenraad VANHOOF

Supervisor :
De heer Ahmad Zyad M AL_GHZAWI

Muhammad Afzal Solangi
Thesis presented in fulfillment of the requirements for the degree of Master of Management

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universiteit hasselt

(Future of E- Banking in Pakistan)

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ABSTRACT

The research focuses on e-banking through which customers can access fast and accurate banking services along with advantages, benefits and risks involved. The world has become a global village and transactions internationally and domestically taking place simultaneously hence to cope with this banking in Pakistan needs to grow at fast pace. The central bank of the country is also striving hard and has brought many solutions branchless banking is also one of them. The research focuses the interviews from the bankers to foresee the future of e-banking in Pakistan along with mitigation of risks to provide more efficient and convenient banking round the clock.

SUMMARY

The main purpose of this thesis is to research how e-banking is growing in Pakistan to meet the growing global challenges. The business transactions are growing and the needs of the industry are too. Customers want quick and accurate service as time is counted as money. The world has already shifted to paperless banking and long ago shifted from manual banking but in Pakistan there still exist somehow manual banking along with e-banking but the need of the time is to shift completely to e-banking. The banks in Pakistan have the infrastructure and required sources to carry the business but the customer base is not acquainted.

The thesis consisting of five parts. First part highlights the introduction of banking, problems and how it evolved to e-banking. The second chapter consist of literature review and discuss the topic in detail from various sources. The third chapter is about how research methodology is used in the thesis. Fourth chapter is of findings and the last one is conclusion and recommendations.

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Chapter 1

1.1 How Banking started (A brief History).

Banking started when Jews started from the Lombard street issuing notes of certain kinds. That notes were acceptable and slowly they started taking deposit from people and lending them further away.

Lombard Street was originally a piece of land granted by King Edward I (1272 — 1307) to goldsmiths from the part of northern Italy known as Lombardy (larger than the modern region of Lombardy). Until the 1980s, most UK-based banks had their head offices in Lombard Street and historically it has been the London home for money lenders. Number 54 was the long-standing headquarters of Barclays before the financial institution moved in 2005 to One Churchill Place in Canary Wharf. Number 60 was the headquarters of the Trustee Savings Bank. (Crux taken from Practice and law of Banking in Pakistan by Asrar H.Siddiqui)

When the computer industry developed and lot of people started using Banks then arrived the need of computer applications in Banking. Internet made the transactions easy and the most recent developed application is mobile Banking and related applications.

The Future of internet Banking is broad and lot of products will be developed in coming days. When people will be aware and technology will grow more.

1.2 INTRODUCTION:

Since the barter system people needed some means or the others to trade with each other, whether the commodities, coins or the paper currency. As population grew rapidly there arose a need of some common means. As discussed above after Banking started to grow more means were developed to make it easier, faster and convenient. The IT and internet Banking has dramatic effects on the life of people concerning personal and professional both. Internet has changed the Business models and basic frameworks to do Business. The technology is changing rapidly with computing speed and development of related technology. “Organizations are acquiring more and more technology systems to assist in everything from manufacturing to management information to the provision and improvement of customer service. Harnessing and coordinating this computing power is challenge. New tools and innovative perspectives with which to examine, interpret, and comprehend these rapidly evolving environments are always needed and sought (Beard, 1996 quoted in A Sample Research paper on E-Banking)

Internet transformed the way business is conducted. Computers prepare invoices, pay bills, mobile top ups, issue cheque books, dispense and withdraw cash, statement of accounts, change pin, transfer funds etc. New software’s are being developed, with a lot of help being taken with cloud computing and other latest means. Thus computer has completely transformed the ways of doing business. Online business is on the rise and so does needs the equal potential in IT and internet (The Banker’s Opinion).

The world is growing rapidly so does the technology. Hence, the use of computer becomes the dire need of every financial industry because of its speed, accuracy and capability to accumulate huge data and process. There are various kinds of Banks like Micro Finance Banks, Agriculture development Banks, but this research is primarily focuses on use of Internet applications in commercial Banks of Pakistan. In Pakistan various Banks are working in public sector and private sector. The major commercial Banks are as under:-

1. Allied Bank Limited.
2. Bank Al Habib Limited.
3. National Bank of Pakistan.

4. Soneri Bank Limited.
5. Habib Bank Limited.
6. United Bank Limited.

Apart from these Banks there are many other Banks working in Pakistan but I will focus my research on following three Banks.

1. Allied Bank of Pakistan (www.abl.com.pk)
2. Bank Al Habib Limited (www.bahl.com.pk)
3. National Bank of Pakistan(www.nbp.com.pk)

The motivation of selection of three above banks was that to get the overall idea of banking in Pakistan. Allied Bank of Pakistan is one of the oldest bank in Pakistan with large branch network and now pioneer in e-banking technology having already a large clientele and branch network. Bank Alhabib limited is rather newly established Bank with latest technology and young staff. It is growing very rapidly and providing the best customer services with special focus on security. As the two Banks deal to private sector, hence, we select the third bank which is a government owned bank with lots of limitations and wide range of business but due many complexities not so quick to adopt the changes. Moreover, being the government bank it has to deal with all government salaried class, the government treasury and commercial functions, so needs synchronization of many software's. The employee of all three banks have been interviewed and included in the 4th chapter to have overall idea of the banks and the customers.

1.3 PROBLEM STATEMENT:

The main objective of this study is to identify how effectively Electronic Banking have revolutionized the Banking industry with increased speed and accuracy and curbing the chances of internet frauds to meet the growing demands of financial industry and merits and demerits of electronic Banking in Pakistan. One of internet's products is Electronic banking.

Electronic banking is a faster way for clients to transact with the banks personnel. Clients can still transact with banks while on the comfort and safety of their homes. The main purpose of this proposed research is determine the advantages and disadvantages of E-banking in Pakistan. The research will try to determine the effects of E-banking to certain kinds of Banks.

1.4 RESEARCH OBJECTIVE:

The main objective of this study is to identify how effectively and efficiently commercial Banks in Pakistan are introducing new technologies and software's to meet the growing demands of clientele and come up with the stiff competition. Moreover, how much industry has been revolutionized and grown so far with relative customer satisfaction and role in economic activities. Also how mobile Banking applications can meet the growing demands with curbing the chances of frauds and higher security in perspective of National Bank of Pakistan, Allied Bank of Pakistan and Bank Al Habib Limited. The study will be descriptive nature and data will be acquired from the personnel of these Banks, Examining strengths and weakness of implementing E. Banking, Customer Education and difficulties in adoption. These are discussed later in the findings.

1.5 SCOPE OF STUDY:

The scope of this research study is to analyze how effectively commercial Banks in Pakistan are using computer applications and what benefits are being derived by the general public and how this all is beneficial for the country and how Banks can introduce secure electronic Banking applications. The study intends to get the appropriate data needed by conducting interviews from different bankers to give appropriate solution to the problem. The study also intends get the necessary information needs to create a good conclusion and recommendation. The methods that this study will take must also be credible and help researchers in knowing how to look for particular information and know how to analyze them. It is through this that researchers will then be able to find out how they will be able to focus on their particular investigation and also know the possible methods that they may choose in the possible time to conduct their study. Thus, another significance of this study is to serve as a guide for researches that focus on the analysis of the advantages and disadvantage of E-banking on

different banks in Pakistan. Apart from them this study will also be helpful for different Banks to know the real problems in E-Banking in Pakistan and difficulties in their implications. (E-Banking system in Pakistan by Muhammad Rahimuddin and Syed Asif Abbas Bukhari) Moreover, it will also help the Bank's to inculcate the habit of e-banking in growing population of Pakistan and step forward to paperless and manual banking in Pakistan.

1.6 Research Question.

To what extent E-banking System is more efficient, rapid and offers enhanced opportunities compared with ordinary banking system in Pakistan? With enhanced security looking to customer base of Pakistani Banks and how to tackle growing volume of transactions to reach paperless (and even branch less) banking.

Chapter II

Literature Review and theoretical Frame work.

Banking is one of the fastest growing sector in Pakistan having more than 12,000 online Bank Branches which are inculcating the needs of 6th populated country of the world. As the world is globalizing so does the trade and relative increase in business transactions made it essential to have shift from manual banking to e-banking. There are number of factors due to which this transition is necessary. In this regard, we will review the literature in this chapter and discuss it in detail and how this will be useful in our questionnaire design and relative results in later chapters.

2.1 Literature Review.

In rapidly growing international payment arena, Pakistan is also leaping forward as the year 2013, 14 registered a robust growth in usage of electronic Banking and payments. The progress has certainly bodes well for country's electronic and mobile Banking since they have emerged as fastest growing payment channels in alternative Delivery channels (ADCs) in terms of volume and value (State Bank of Pakistan annual report on electronic Banking)

According to figures provided in above mentioned report Internet Banking shows an impressive growth of 80% reaching 17 million transactions and mobile Banking shows a substantial increase of 149% reaching Rs. 67.2 Billion during the year. Retail Payments during FY 2013,14 also registered inspiring growth and POS (point of sale) Transaction reached 24 million, valuing Rs. 124 Billion. These Transactions are 33% higher in volume and 38.5% in value. ATM Transactions also recorded notable increase and stood at 258 million transactions valuing Rs. 2.6 Trillion showing a growth rate of 4% in volume and 17% in value.

Further the recent report delineates that the Real time online Banking (RTOB) transactions have increased to around 98.5 million in terms of volume and Rs. 30.2 trillion in value showing a growth of around 11% each. In large value payment systems, during the FY 2013-14, RTGS processed over 600,000 payments worth Rs. 149 Trillion as compared to 488018 transactions of value Rs. 162 Trillion in FY 2012-13 showing an increase of 23% while the value showed a decrease of 7.7%.

Moreover, as innovative products and channels are continuously introduced by different financial institutions and payment operators in financial markets across the globe. On one side,

the proliferation of electronic payment products like e- wallets, m-wallets, multi-purpose cards and smart applications enabled by new technologies like Near field communications (NFC) cards and MPOS is being witnessed, on the other side non-Bank players like payment system operators (PSOs) and payment system providers (PSPs) are entering into the market for collaborative products and innovations. State Bank of Pakistan, being the central Bank of the country, cognitive of these changes and realizing the need for Pakistani market to remain aligned with the international developments, has been taking a number of initiatives to promote efficiency, security, innovation, and mass acceptability while ensuring competition and level playing field for all payment participants.(State Bank of Pakistan annual Report on E- Banking)

2.2 Definition of E Banking:

Electronic Banking is basically Electronic Fund Transfer (EFT) with the use of electronic methods or means to transfer money electronically directly from one account to another account, rather than cash or cheque or withdraw money from ATMs rather than going to Bank counters.

(Daniel (1999) as quoted by Dr. Ala`Eddin Mohd Khalaf Ahmad) “defines electronic banking as the delivery of banks' information and services by banks to customers via different delivery platforms that can be used with different terminal devices such as a personal computer and a mobile phone with browser or desktop software, telephone or digital television 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 (standing instructions) to pay automatically monthly utility bills from our account, or our auto loan even our mortgage payment.”

Moreover, 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 also pay through our prepaid card whatever we want to pay.

(E-Banking system in Pakistan by Muhammad Rahimuddin and Syed Asif Abbas Bukhari)

2.3 Back Ground of Study:

Electronic Banking is the solution of all kind of speedy and accurate Banking when one thinks about the future of Banking. When Interviews were conducted from different Bankers

they were of the opinion that due to increase in population and related volume of transactions and international Business, the electronic Banking is the only viable solution. The term electronic Banking as used here refers to any banking activity accessed by electric means which includes automated teller machines (ATMs), automated call centers, digital cash, internet banking, and screen telephones and so on. These delivery channels can be used for paying bills, transferring funds, cash deposit and withdrawal, and providing other financial services.

A shift is taking place from vertical integration to virtual integration. Banks and other financial intermediaries must realize that they are in financial information industry. The internet makes it possible to bring both customers and suppliers together to share critical business information.(Gup, 2003 quoted E-Banking system in Pakistan by Muhammad Rahimuddin and Syed Asif Abbas Bukhari)

2.4 Benefits of E Banking.

There are number of benefits which can be derived from electronic banking few of them are described as under.

The e- banking services open seven days a week and 24 hours a day. This makes banking transactions with in the reach all the time. We don't need to take care of any timings of bank branches. The cost is also decreased as no vast physical Branches network required.

Customer can order Debit/Credit cards at home via internet. Customer can also chose services of their choice. Easy access for all. With ATM machine money can be withdrawn any time anywhere and funds can be transferred, Bills can be paid and there is no need to go to the branches any more. The safety is also very important and people can perform all the transactions online and no need to go anywhere with carrying money. These are also discussed in the questionnaire to know how much these benefits affect and facilitate the customer.

2.4.1 Customer's Point of View:

Apart from Bankers customers have benefited a lot from E-Banking as they can save a lot of time and can perform financial transactions at home. They can save time and avoid pain of

standing in queues in front of banks as the electronic Banking have facilitated all types of transactions. Moreover, the Bankers have commonly listed following benefits for the customers:-

Decreased costs in operating and using the banking e-services. Increased relief and timesaving as operation can be made 24 hours a day, without going to the bank. Rapid and enhanced access to information as they can see statement of account and all financial information via online statement of account or on ATM. Customers can withdraw money at any time through ATMs that are now generally available all over the country. Customers can take mini statement of account, balance inquiries pay bills and etc. through ATMs. By online and home Banking customers can operate account by sitting in office or at home. And no need to go bank personally for such matters. E banking has also provided the facility of payment of utility bills there is no need to stand in long queues. All these services are generally available at bank website or at ATM. The development of credit card and its usage also owes significantly to E-banking. It is now visa , master and different other debit and credit cards which are acceptable all over the world so no need to take huge amount of cash with oneself. Banking services are available 24 hours a day; seven days a week. Improved cash management services. 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. Large companies operate through one central account and funds all over the country deposited in that account (Cash Management).Decrease costs in terms using the different e-banking products and services. Customers can take their history of different transactions.

2.4.2 Bank's Point of View:

Banks are taking the most benefits from E-Banking, few of them are listed below as mentioned by the Bankers while interviewed.

E-Banking is the core competences advantage for banking to attract the customers. They can attract and retain customers by innovative E-Banking services. The Banks have curtailed lot of costs. As before electronic Banking employees' salaries and physical buildings needed to be maintained but now much of the work is taken by machines with less costs. 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'-banking has reduced the paper work in banking industry, thus give them to work with paper less environment-banking has also provided facility to banks 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. These concepts have been discussed in the questionnaire and findings.

2.5 ADVANTAGES AND DISADVANTAGES OF E-BANKING

With the development of internet ways and means of doing Business are also developing very rapidly from online advertising to purchase all is done through the internet. To meet with these challenges Banks are also advancing rapidly in the field of electronic banking?

In Pakistan most people want to interact with the employees of the Bank rather to go on the internet but the ease of internet is forcing customers to use the internet too. Apart from above there are certain advantages and disadvantages of e-banking as listed below (Bankers opinion).

2.5.1 Advantages.

Internet has made life easy and convenient before the internet people used to stand in long queues to pay their bills and deposit/withdraw money from Banks or for any other financial transaction but after internet people can access all these facilities 24/7. There will be no matter in which country you are or anywhere in the world. Customers can make online transaction and handle finances with convenience.

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 or from ATM.

Thirdly, we can purchase tickets, buy online, pay our expenses by sitting home. People are relieved of tension to carry large sum of money with themselves. E-Banking has also reduced the cost of usage of paper and other stationery and salaries to employees.

The paper or manual banking does not only included the risks and difficulties but also chances of error and frauds were too many and these were detected too late.

2.5.2 Disadvantages

Apart from advantages there are some disadvantages of e-banking as well. Privacy and hacking are the most burning issues. Besides, frauds are also common and there are some technical faults as well hence people don't trust e-banking all the time.

As customer base of Banks in Pakistan is not literate so the bankers are of the opinion that they face difficulty in operating e banking and relevant transactions. Some Bankers think that e-banking has reduced the jobs in banking sector.

2.6 Electronic Banking System.

Electronic Banking system as the name suggests is the use of electronic equipment's, applications and latest communication technologies for banking function i.e receiving, collecting, transferring, paying, lending, investing, dealing and etc domestically and internationally.

(As per payment system and Electronic Fund Transfer Act, 2007) "Electronic Fund means money transferred through an Electronic Terminal, ATM, telephone instrument, computer, magnetic medium or any other electronic device so as to order, instruct or authorize a banking company, a Financial Institution or any other company or person to debit or credit an account and includes monetary value as represented by a claim on the issuer which is stored in an electronic device or Payment Instrument, issued on receipt of funds of an amount not less in value than the monetary value issued, accepted as means of payment by undertakings other than the issuer and includes electronic store of monetary value on a electronic device that may be used for making payments or as may be prescribed by the State Bank."

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.

Electronic Fund Transfer” means any transfer of funds, other than a transaction originated by cheque, draft or similar paper instrument, which is initiated through an Electronic Terminal, telephonic instrument, point-of -sale Terminal, stored value card Terminal, debit card, ATM, computer magnetic tape or any other electronic device so as to order, instruct, or authorize a Financial Institution to debit or credit an Accounts. (As per payment system and Electronic Fund Transfer Act, 2007 Electronic Fund)

2.7 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 quoted E-Banking system in Pakistan by Muhammad Rahimuddin and Syed Asif Abbas Bukhari).

Teller is normally the person who deals with the customers and solve their problems and receives and pays the cash at counter. The teller after performing the transactions on computer posts the same on the computer connected to central server. Teller Banking was a kind of start of electronic banking as the manual ledgers were replaced by the computer.

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

2.7.1 Online 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.(within the same Bank)

2.7.2 Real Time Gross Settlement system

A payment system through which final settlements of funds, payment obligations, Book entry government securities and instruments take place within the same day between any Banks

through SBP which may determine on transaction to transaction base.(Transactions with all Banks through SBP)

2.8 Automated Teller Machine (ATM) Card

ATM card is made of a plastic having magnetic stripe that hold all the information about the customers such as customer name, account, card number, card limit, concerned bank etc. According to (Rose, 1999 quoted E-Banking system in Pakistan by Muhammad Rahimuddin and Syed Asif Abbas Bukhari)

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 stripe and verify for processing.

As per State Bank of Pakistan annual report 2013-14 ATM transactions recorded sizeable increase and stood at 258 million transactions valuing Rs. 2.6 Trillion showing a growth rate of 4% in volume and 17% in value.

2.9 Technical Support and Development

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 quoted E-Banking system in Pakistan by Muhammad Rahimuddin and Syed Asif Abbas Bukhari)

The missing customer data base might create challenges for the employees in absence of E-Banking and the staff may lose interest.

Significant impression has been witnessed in the development of information technology, which has escorted 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 the IT as a whole package becoming the most important and not the internet alone. If the customers are not answered properly of the queries raised than Internet is of no use and customer might lose interests.

More and more software's are being built with lot of innovation and help is being taken with cloud computing to reduce cost and obtain the requisite expertise with corrective approach. Technical support and development is continuous improving part of IT of any organization to remain in the competition.

While the Banks operating by manual Banking or employees are not willing to inculcate the latest changes lag behind from other Banks and competition.

2.10 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 quoted in E-Banking system in Pakistan by Muhammad Rahimuddin and Syed Asif Abbas Bukhari). Besides, customer in this process does not remain consumers but are part of co-creators of services, hence they are part of interactive marketing.

All the customers dealing are interactive when he is dealing with the system or resources which determine whether he will be customer or not due to influence of marketing. Employees need the technology and data base of customer to generate moment of truth.

2.11 Emerging of E Banking Model.

The principal factors of customer experience found in conventional e-banking are as below:-

- i) **Navigation:** The capability to access and move almost the site.

- ii) **Information:** sufficient information available to customer to proceed for purchase decision.
- iii) **Support:** To provide customer the required support in carrying no. of steps to complete the transaction and answering all the questions.
- iv) **Logistics,** that mainly focuses on delivering the goods and services to customers.

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 quoted in E-Banking system in Pakistan by Muhammad Rahimuddin and Syed Asif Abbas Bukhari). Above elements are interdependent to each other. e.g. if no satisfactory attention is paid on making 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 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 E-Banking system in Pakistan by Muhammad Rahimuddin and Syed Asif Abbas Bukhari) who presents the concept of customization in e-banking services. The idea of customization moves ahead of simply identifying customers and managing web pages with account information. Customization 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). (Reichheld & 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).

2.12 Electronic Banking in Pakistan.

Electronic Banking is recently taking pace in Pakistan. Being 6th populated country Banks were unable to cope with needs of growing population and volume of Business transactions. ATMs, mobile Banking, Credit Cards and Debit Cards, Internet Banking, have come forward as useful delivery channels for usual banking services and products. In Pakistan, MCB, UBL, ABL and other private sector Banks are competing to take lead in electronic Banking. The Annual Report of SBP as mentioned above delineates the story how electronic Banking in Pakistan is growing rapidly.

The *e*-banking promoted with the circulation of the Electronic Transaction Ordinance 2002 and electronic payment act 2007 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, all Pakistani Banks have their networks and linked ATM (By one Link and M- net) and facilitating the transactions.

According to Bankers opinion and as observed Pakistani banks offers the following online banking services and products to their customers.

- 1. Balance Inquiry:** A customer can inquire balance, print or see statement of account, and view detail of transactions.
- 2. Payment:** Bill payment, debit and credit card payments, and other payments.
- 3. Request:** Demand draft request, cheque Book request, stop payment of cheque, or any other standing instruction.

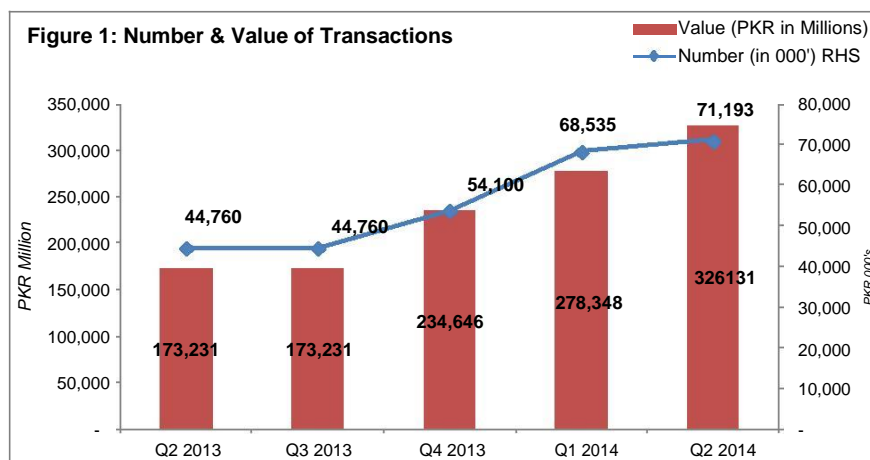
4. Download: can download statement of account, customer profile.

State Bank of Pakistan 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. While among Pakistani Banks UBL is in leading position in promoting credit cards and aggressive banking.

Over the time financial institutions in Pakistan have grown very rapidly in terms of online and electronic banking as also evident from above mentioned report of state Bank of Pakistan. The data in this regard is collected from Pakistani banks and discussed in later chapters.

2.13 Branchless Banking.

Branchless banking is an alternative delivery channel used for carrying financial services without relying on the outlay of physical Bank branches. Example of branchless bank technology includes the internet, automated teller machines, POS devices mobile phones. As per state Bank of Pakistan currently 8 BB providers are operating in the market with the mix of innovative model and technologies accelerating financial inclusion in the country. Moreover, as per figures given by SBP during the April to June 2014, BB transactions rose to 71.1 million valuing Rs. 326.1 Billion which is 4% higher in volume and and 17% higher in value as compared to previous quarter. The number of BB accounts have also increased by 11% compared to 10% rise in previous quarter reaching to 4.2 million in number.



Source. State Bank of Pakistan

As the industry is witnessing growth and evolving so the BB providers can be categorized into three categories.

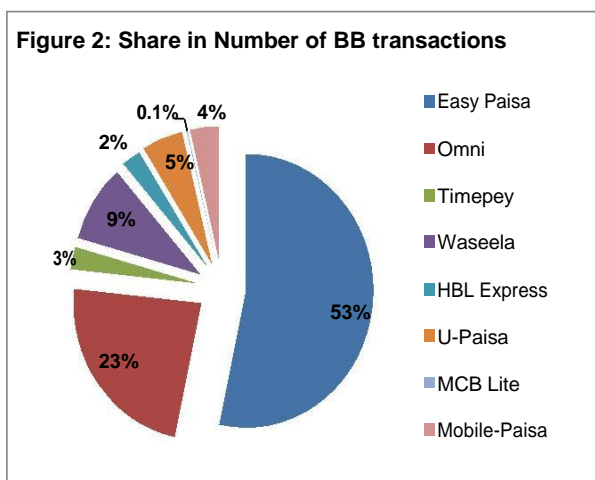
- i. The experienced market leaders operating for more than last three years.

- ii. Intermediates with an experience of not less than a year in the market.
- iii. The beginners having experience of less than a year.

The most important factor is that the combined agent network of these players has increased to 168,615 agents largely owing to agent sharing phenomenon. “In recent months, BB players have increasingly moved to the connectivity with payment infrastructure especially linking the wallets of their customers and agents to ATM switches and IBFT (Inter Bank Fund Transfer – an online real-time connectivity).” (SBP).

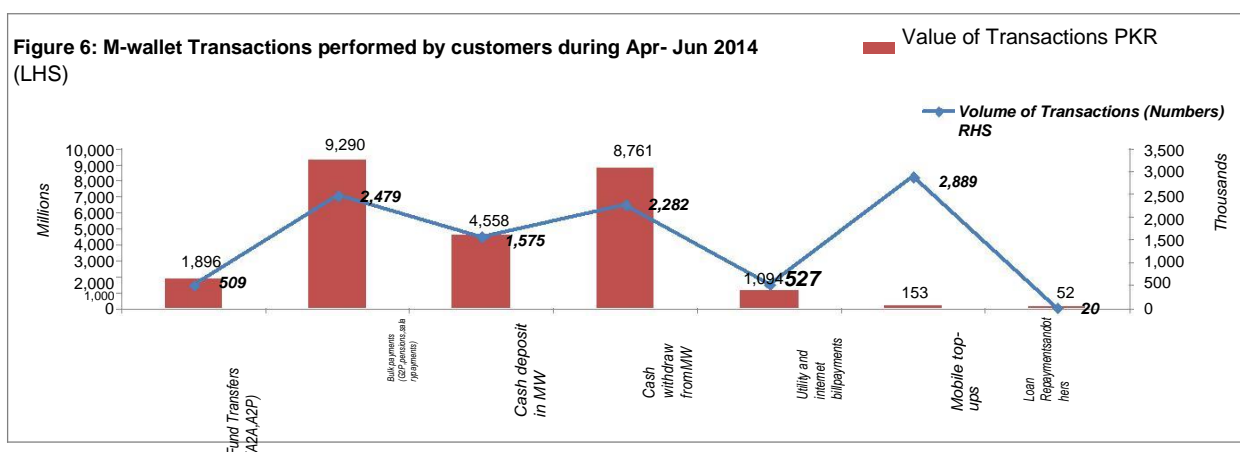
As per SBP, almost there was no growth seen in easy paisa and UBL OMNI during the quarter, whereas U-paisa grew by 46% and mobicash grew by 26% in volume during the quarter. The competition is visible in the market share as in terms of easy paisa and omni held 53% and 23% market share respectively. However, still over the counter transactions are preferred mode of transactions by the customers with 85% share in terms of volume, and 50% in value. The share of M-wallet transactions remained 14% in volume and 8% in value during the quarter.

During the above mentioned quarter, BB customers carried out more than 57 million OTC transactions valuing Rs. 161.7 billion. The highest contribution came from P2P fund transfers with 45% share in volume, where customers carried out 25.8 million transactions worth Rs 107.9 billion. The second highest share in volume (41%) stemmed from utility and internet bill payments with 23.4 million bills paid worth Rs 29.7 billion through OTC channel. (SBP) “Receiving transactions from CNIC” seized the largest chunk of OTC funds transfer with over 13.1 million transactions worth Rs 54.8 billion.



Source. State Bank of Pakistan

M-wallet holders carried out 10.3 million transactions valuing 25.8 billion, showing growth of 7% in volume and 21% in value compared to previous quarter. BB providers are offering IBFT facilities to their m-wallets holders. During the quarter, 20,534 Bank account to m-wallet transfers worth Rs. 197 million were recorded that is 146% higher in number and 223% higher value than previous quarter. Besides, 11,325 m-wallet to bank account transfers worth Rs 157.1 million were made showing 80% and 87% growth respectively. Moreover, m-wallet to person transactions declined by 21% in value and 23% in volume.



Source: State Bank of Pakistan

During the quarter 428,890 new BB accounts were opened cumulatively reaching to 4.2 million. Out of the new accounts, 94% are M-wallet accounts reaching to 4.1 million in number. Due to increase in BB accounts, deposit in same has also raised to 6.2 billion as of June 2014. Around 60% of the new accounts opened during this quarter were by Easy Paisa followed by 25% by Omni. Agent number grew by 14% during the quarter, reaching 168,615 by the end of June 2014.

Branchless Banking snapshot (Key indicators)

Indicators	Q1 2014	Q2 2014	Quarterly Growth
Number of Agents	148,324	168,615	14%
Number of Active BB Agents	124,560	140,747	13%
Number of Accounts	3,831,868	4,238,178	11%
Deposits as of date (Rs. in millions)	4,911	6,219	27%
Number of transactions during the quarter (No. in '000')	68,535	71,194	4%
Value of transactions during the quarter (Rs. in millions)	278,348	326,131	17%
Average Size of Transaction (in Rs.)	4,061	4,581	13%
Average number of transaction per day	761,501	791,041	4%

Table 2: Volume and value of different types of transactions

S. #	Type of Transactions	Jan-Mar 2014		Apr-Jun 2014	
		Volume of Transactions (Numbers)	Value of Transaction	Volume of Transactions (Numbers)	Value of Transactions
1	Agents transfers for liquidity				

	Agent account to agent account	2,068,785	46,003,315,394	2,749,183	63,685,291,088
	Agent account to bank account	392,909	11,439,816,785	174,159	11,819,773,309
	Bank account to agent account	1,565,842	42,197,471,041	558,647	47,744,605,937
	Cash Deposit in L3 by agents	274,520	12,492,656,717	333,412	15,308,425,045
2	Fund Transfers				
	<i>Fund transfers through M-wallets</i>				
	MW to MW transfers	71,515	44,280,944	75,236	50,690,089
	MW to bank account transfers	9,713	134,290,970	11,325	157,117,592
	Bank account to MW transfers	17,591	164,922,350	20,534	197,299,753
	MW-to-person fund transfers	522,855	1,893,594,080	401,414	1,491,239,176
	<i>Fund transfers through CNIC</i>				
	Person to person sending	11,134,371	44,952,956,975	12,688,632	53,117,214,282
	Person to person receiving	11,663,145	46,979,442,559	13,130,997	54,792,538,657
3	Bulk Payments				
	<i>Government to Person Payments</i>				
	G2P through MW	1,789,049	6,670,001,753	2,374,375	8,698,775,441
	G2P through card	3,635,080	13,549,732,481	2,705,142	9,486,443,172
	<i>EOBI Pensioners</i>				
	Pension payment through MW	78,465	310,610,935	88,573	344,071,584
	Pension payment through OTC	33,474	173,943,985	35,919	137,826,780
	Salaries payments and Others	32,861	241,639,970	16,625	247,829,706
4	Cash deposit & withdrawal				
	Cash Deposited in MW (including person to MW Transfers)	1,773,217	4,686,307,994	1,579,371	4,572,254,038
	Cash Withdraw from MW	1,694,942	5,831,896,154	2,281,723	8,761,079,295
	Cash withdraw through card (G2P)	3,330,385	10,849,732,390	3,134,722	10,127,098,508
5	Bill Payments & Top ups				
	Utility Bills Payment	23,653,820	25,861,565,712	23,780,275	30,610,624,255
	Internet Bill Payments	204,689	241,737,086	220,046	257,681,478
	Mobile Top-ups	3,516,185	246,708,028	3,282,503	239,977,369
6	Loan				
	Disbursement	157,407	556,834,322	16,475	281,558,196
	Repayment	552,439	1,627,372,702	673,034	1,006,500,249
7	Others				
	Donations	11,131	444,111	8,236	488,590
	Retail Payments	20,153	158,983,296	12,244	48,402,425
	PIA ticketing	14	255,287	77	1,462,762
	International Home remittance	24,032	662,946,821	24,203	674,408,943
	Account Opening Transactions	70,436	18,967,220	70,983	18,549,453
	Cash collection/payment services	236,094	355,194,301	745,642	2,251,451,389
	Total	68,535,119	278,347,622,360	71,193,707	326,130,678,560

OTC V/S M-wallets

Type of Transactions	OTC		M-Wallets	
	Volume of Transactions (Numbers)	Value of Transactions	Volume of Transactions (Numbers)	Value of Transactions
Fund Transfers				
Fund transfers through M-wallets				
MW to MW transfers	-	-	75,236	50,690,089
MW to bank account transfers	-	-	11,325	157,117,592
Bank account to MW transfers	-	-	20,534	197,299,753
MW-to-person fund transfers	-	-	401,414	1,491,239,176
Person to MW fund transfer	3,990	14,290,707	-	-
Fund transfers through CNIC				
Person to person sending	12,688,632	53,117,214,282	-	-
Person to person receiving	13,130,997	54,792,538,657	-	-
Bulk Payments				
Government to Person Payments				

G2P through MW	-	-	2,374,375	8,698,775,441
G2P through card	2,705,142	9,486,443,172	-	-
EOBI Pensioners	-	-	-	-
Pension payment through MW	-	-	88,573	344,071,584
Pension payment through OTC	35,919	137,826,780	-	-
Salaries payments and Others	97	498,190	16,528	247,331,516
Cash deposit & withdrawal				
Cash Deposited in MW (including person to MW transfers)	-	-	1,575,381	4,557,963,331
Cash Withdraw from MW	-	-	2,281,723	8,761,079,295
Cash withdraw through card (G2P)	3,134,722	10,127,098,508	-	-
Bill Payments & Top ups				
Utility Bills Payment	23,260,373	29,524,147,439	519,902	1,086,476,816
Internet Bill Payments	213,284	250,304,927	6,762	7,376,551
Mobile Top-ups	393,474	86,897,606	2,889,029	153,079,763
Loan				
Disbursement	621,171	1,049,465,061	-	-
Repayment	68,258	238,126,654	80	466,730
Others				
Donations	1,192	224,041	7,044	264,549
Retail Payments	-	-	12,244	48,402,425
PIA ticketing	77	1,462,762	-	-
International Home remittance	24,203	674,408,943	-	-
Account Opening Transactions	70,983	18,549,453	399	1,795,415
Cash collection/payment services	744,965	2,249,017,073	278	638,901
Total	57,097,479	161,768,514,255	10,280,827	25,804,068,926

(All the above data of branchless banking is taken from the central bank of Pakistan)

The data given above shows the strong growth of Branchless banking in Pakistan and the agent network. More interesting to note that since 1941 till yet only about 12000 physical bank branches are opened while if we see the agent network of BB started in 2010-11 and till the second quarter of 2014, the number of branches of agent network is 168,615. This shows the outreach and success of this system and the popularity among the people. This also has reduced the burden from branches, gave an additional income to agents, a channel for banks, a facility for customers and a broad network. This has also reduced the risk and social interaction is possible as the contacts are with agents instead of machines. This resulted in wide spread of e-banking for less privileged class of the society. Further, branchless banking is also discussed in the questionnaire and relative findings.

Chapter 3

Research Methodology

3.1 Choice of topic and Data

This chapter will focus on our selection of topic that why we chose this topic for a research thesis and what was objective behind it. As world is globalizing and so does the business is thriving to survive on digital ways hence banking also needs to be streamlined with that. Banking around the world has changed so does in Pakistan. Therefore, in order to meet the growing demands of the industry and clientele banking needs to take a shift to electronic banking.

Though, Banking in Pakistan has changed and improved dramatically during the recent past after denationalization of the banking sector encouraging open competition in the sector but still some problems remain unsolved. The success factor of any bank depends upon the level of customer satisfaction and services provided by the bank resulting in increase of deposit and profitability. To deal with this we chose three Pakistani commercial Banks. one of whom is in private sector i.e. Allied Bank Limited and Bank AlHabib Limited and one in public sector i.e. National Bank of Pakistan (government own majority shares).

Out of these three banks National Bank of Pakistan mostly deals with government employees or business and said to be a three dimensional Bank because it is a commercial Bank, work on behalf of government where central bank is absent and inculcates the needs of government employees and business and customers are of all types largely manual Banking. While, the other two Banks are striving hard to attract the private business and advancing very fast in the field of automation and introducing innovative products and services.

3.2 Choice of theoretical Frame work.

The review of literature as discussed in detail in 2nd chapter and interview conducted amongst the Bankers gave us the insight of e-Banking products and services as compared to work being done in manual Banking. As days passing customers are starting to trust e-banking and becoming loyal to banks which are providing innovative services. As the most

business transactions are carried through banking and due security plastic money has replaced the physical cash.

According to (Gronroos, 2001 as quoted in E-Banking system in Pakistan by Muhammad Rahimuddin and Syed Asif Abbas Bukhari) the development in technology has an immense and notable attention because the technology and physical resources used in the service process that can be customer-friendly and reliable. A technological solution or a physical resource is 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.

Moreover, as per the current reforms and improvements are introduced by the central Bank of Pakistan has improved the banking sector a lot. Looking to this scenario we have based our questionnaire.

3.3 Data Source

We have applied mostly the qualitative approach to collect the data and construct the research work. Qualitative research work is based on interview conducted from bankers and secondary data i.e. published data obtained from the Banks including the central Bank as discussed in chapter 2 (Branchless Banking in Pakistan). The data was also collected from the above mentioned three banks and the interview conducted from the staff of three banks.

3.4 Data Collection method and Procedure.

Secondary data is collected from business reviews, reports, articles, brochures, professional publications, annual reports, and financial reports of three banks. (Yin 1994) has described six types of sources to collect data i.e. archival of records, interviews, direct observation, participant observation and physical objects. The direct observation is relied upon the interview and questions asked from the bankers. The purpose of this questionnaire was to know the real insight of the development going in the field of electronic banking, advantages and disadvantages of E-banking and people's acceptance along with ways to mitigate possible risks.

The questionnaire contained both the open ended and close ended questions to know the opinion of bankers on this topic and the problems faced with remedies and amicable solutions.

The findings and questionnaire is discussed in detail in 4th chapter, however, we have included the question about the reasons for choosing E-banking as this will give us the required feedback as why people use e-banking. The second question was about the frequency of using e-Banking as this will answer the ease of usage. Third question was asked about which online features they use regularly. Fourth question was even step further about usage of mobile banking. Then a question was asked about the features of mobile banking and about information of e-banking. A question about challenges faced by banks in adopting e – banking, followed by risks faced, there solution and remedies and a concept of paperless banking and successful emergence of branchless banking. The views and ideas based on above discussion will help us letting know the benefits of e-banking and how many problems it can solve. Moreover, it can give us and overview that how it can attract more customers and can end the system of long queues still prevalent in Pakistan due to large population and illiteracy rate.

To interview the bankers we have designed the questionnaire asked from bankers as per crux given in the above list and also we have recorded some of the interview questioners for reference. The questionnaire is attached in appendix. To conduct interview above mentioned branches were visited and questions were posed to the staff members. Randomly staff members were asked questions about E-banking, its services and the future perspective of E-banking in Pakistan. The interviews were conducted and following data was gathered and analyzed.

3.5 Validity and reliability.

In order to get the data we interviewed the concerned personnel of the bank so that we may be able to generate valid and reliable results.

The data gather is valid and reliable as it comes directly from the staff of concerned Banks which are directly related to our research problem. As they have the exact and reliable data and in some way or the other the data of all staff members is relevant.

The interview was designed in such a way to know the advantages and disadvantages of E-banking along with risks involved and hurdles to implement that in all spheres of banking including mobile banking. The research mainly focused how customers being facilitated with e-banking, and what factors are most important to attract the customers. The questionnaire also included the risks in e-banking and also sought the ways for their solution. This also included the concept of Branch less banking which will be introduced later in this chapter.

3.6 Study Limitation.

As the study focused the interview of few employees of three banks only and related to one city of Hyderabad Pakistan so there are lots of limitations of this study. The research also focused on the young employees of these banks which are quite familiar with the current trends and information technology. However, the aged employees were not that much familiar with the technology and less concerned about the issues. Same was the case with customers as the customers mostly keep deposit and are interested in taking loan are above the age of 40 years and not that much aware of latest changes taking place in the field of E-Banking.

Moreover, the population of Pakistan is mostly distributed in urban and rural areas, and 60% population lives in rural areas where basic facilities are lacking so that might affect the overall data.

Finally, there are several other factors influencing this research as the customers of one bank differ the other, the education base, the trust on banks and the user friendly services provided by the banks.

3.7 Study Significance.

The significance of E-banking is being realized now in Pakistan as world is globalizing and so does the trade and services. Compared to developed world i.e USA and Europe, Pakistan lags behind in the field of e-banking as the customer base is not well educated and literacy rate is low. Hence, banks are reluctant to offer wide range of e-banking services to all customers.

The banks in Pakistan are going on automation very rapidly due to growing need of population and increasing number of business transactions which are beyond the control of manual banking. The state bank of Pakistan being the central bank of the country is taking serious and severe steps to promote e-banking and now the license of opening of branch is issued after completing certain formalities like ATM and etc. to inculcate the needs of growing population the concept of branch less banking is introduced which is discussed in chapter 2 and will also be discussed later.

Chapter 04

Empirical Data Findings and analysis

4.1 E-Banking at ABL, BAHL and NBP.

Before the emergence of technology, the Banks used to operate through manual Banking, the Journals/ledgers and all records were kept manually. As the number of business transactions grew and the queues in front of banks along with the time taken was too long that it created lots of troubles. Then there arose the need of electronic banking. ABL started its operations in 1942 in Lahore (before the creation of Pakistan) with the name of Australasia Bank and when the Banks were nationalized in 1974 it became as Allied Bank of Pakistan but later in 2004 the ownership was transferred to a consortium Ibrahim Group and the Bank was named as Allied Bank Limited in 2005. In its seventy two years of existence its has built an strong deposit and equity and asset base. The Bank has a network of more than 900 online Branches with 700 ATMs in Pakistan providing at large the financial services to its diverse clientele.

Allied Bank has invested a lot of amount on providing innovative and internet products i.e. internet Banking with the key features include Account statement, SMS Alerts, Interbank and intra bank funds transfer, Cheque book request, utility bills payment, mobile top ups, credit card payments pay anyone , donations and etc. The Banks extensive and large online network has enabled the Bank to attract a lot of deposit.

The second Bank which we have chosen for the survey is Bank al Habib limited. Bank Al Habib Limited was incorporated in 1992 but the history of its sponsor's date's backs to 1941 with the establishment of Habib Bank limited which was later nationalized and subsequently privatized again. This Bank is not only operating in Pakistan but having overseas branches as well. In span of just 20 years Banks asset have grown to 380 billion with a network of more than 450 online branches. BAHL provides various internet banking facilities to its customers with the highest security measures. This bank has developed its own software of banking and online banking with the team of IT department.

National Bank of Pakistan is one the largest commercial bank of the country started its operation in 1949 with the promulgation of National Bank of Pakistan ordinance. It is a three

dimensional Bank as it is owned by the government but providing commercial services as well along with the agent to central Bank and the government treasury.

National Bank of Pakistan has an extensive network of 1341 online Branches and more than 22 overseas Branches. The Bank has the assets of more than one trillion. Being the government bank it fulfills the needs of government employees and all type of customers so in the field of internet banking the bank is too strict and does not provides too many services. Apart from ATM services and balance inquiry it has kept herself away from electronic Banking. This the reason why the bank still has the long queues during salary and pension days. The Bank has now changed its policy to compete with other banks by introducing number of agreements of updating to profile software and core banking applications. NBP is changing very rapidly to counter the competition with other banks and bringing in latest technologies.

4.1.1 ATM Functions and cash withdrawal



The ATM is the most important part of E-Banking now a days and almost all financial institutions use ATM machines to facilitate the customers. The Banks mentioned above also provide ATM cards to their customer and having various forms facilities. ATM is not only used for funds withdrawal but also for depositing money, cheques, balance inquiry, funds transfer, paying bills and other like facilities.



4.2 MANUAL OR TRADITIONAL BANKING SYSTEM.

Manual Banking system was prevailing before the advent of technology which subsequently was replaced by the computerized/electronic Banking. In manual system customers have to visit the concerned branch for performing transaction.

Before the computerized banking every banking job was done manually and large ledgers and books were needed to be maintained. The large statement of accounts were needed to be written, manual cash payments and etc. It was very time consuming and complicated.

The manual banking has had faced number of problems. It was time taking, cumbersome and labor intensive with lot of errors. Customers needed to wait in queues and all files and records needed to be kept manually. Customer records needed to be updated manually and lots of mistake, errors and cuttings were common. The handwriting was also an issue and many type or errors also occurred in record keeping. All the record was gone if it is burnt, difficult to keep record, copy record, and having business continuity planning. So electronic and online banking has a lot of impact on the life of customers, staff and the sponsors of the banks as discussed in the advantages and benefits of e-banking in chapter 2.

4.3 Data collection from ABL, BAH and NBP.

In order to collect the relevant data the concerned branch staff were interviewed with specific questions regarding E-banking. The interview was conducted with the staff of all these banks personally.

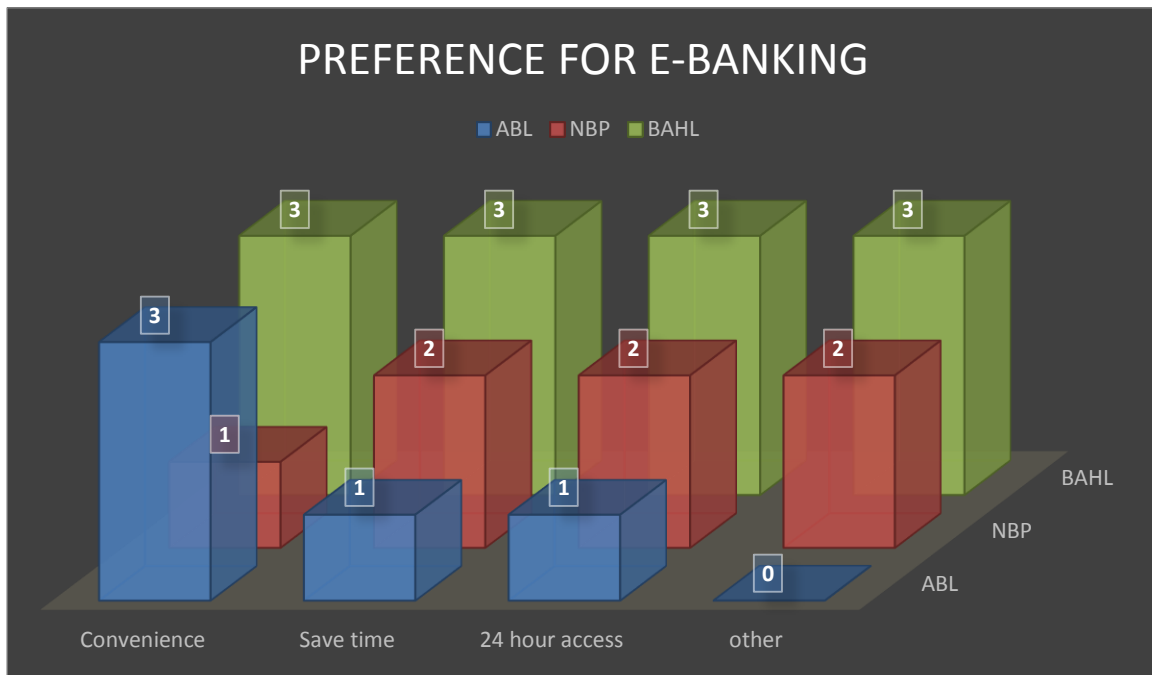
4.3.1 E-banking general perceptions.

When the data was collected by interviews regarding general perceptions of E-banking from the officers of above mentioned banks following questions were asked.

What were your reasons for choosing of E-Banking? Please select all that apply?

- a) Convenience
- b) To save time
- c) 24 hour access

d) Others

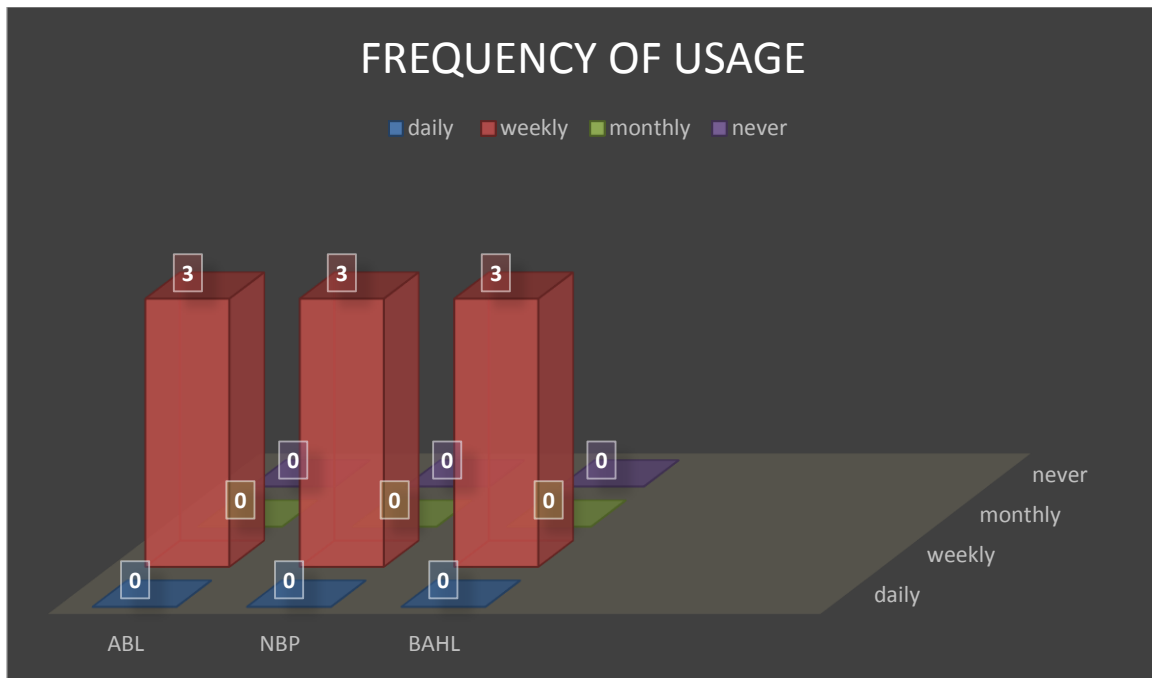


We got the answer as shown above in the graph.

Convenience was the most important factor selecting the e-banking along with other factors. The staff of BAHL was inclined to convenience, time saving, 24 hour access and other reasons like risk. They consider all factors equally important because the majority of their customers are educated and young businessmen as the bank is relatively new and penetrating in the market with lots of research on customer satisfaction, convenience and time saving. The NBP staff also showed some sort of mixed response and the same was the case with ABL. The more important factor was convenience for ABL and BAHL but for NBP it was less because it has a lot of problems to deal with security as the base of clientele is not the same being the government bank. So NBP staff considered risk, the most important factor. Moreover, as we discussed in the previous chapter these were the main advantages and benefits of e-banking.

How often you use E-Banking services?

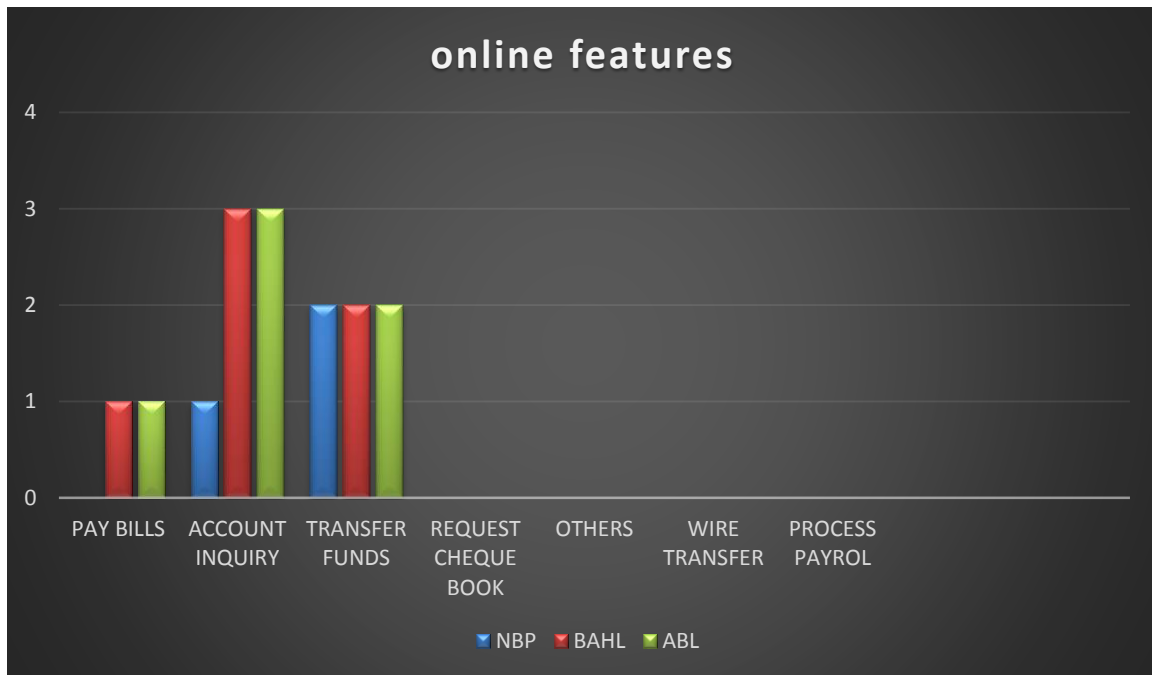
- a) Daily
- b) Weekly
- c) Monthly
- d) Never



As the figure above suggests that the all respondents were using the e-banking facility weekly. Because they say that now all transaction can be carried online so they do not bother for Banks to be opened or related timings and when on weekends they find time they perform the transactions and watch the accounts statements.

Which online feature you use regularly? Please select all which apply?

- a) Pay Bills
- b) Make an account inquiry
- c) Transfer funds
- d) Wire transfers
- e) Process payroll
- f) Request cheque book
- g) Others



The above graph shows the most account inquiry is the most used online feature followed by the transfer of funds and paying bills. As we see that the paying bills is not selected by NBP employees as the bank does not provide that facility through ATM yet. As in manual banking people use to go to branches to transfer funds, pay bills and even for account inquiry hence this has a great impact that people can do all that via ATM.

Would you use your mobile phone for E-Banking?

- a) Yes
- b) No
- c) N/A

All the officers interviewed showed positive response to use mobile phone for e-banking except one. As it is more convenient and transactions can be performed everywhere.

Which of the following mobile bank features would you use? Please select all that apply?

- a) Balance Inquiry
- b) Funds transfer
- c) Email and text alerts
- d) Mobile top up
- e) Others

All the respondent showed interest in using mobile phone for e-banking with all above features. As it is the most convenient and easy to carry anywhere.

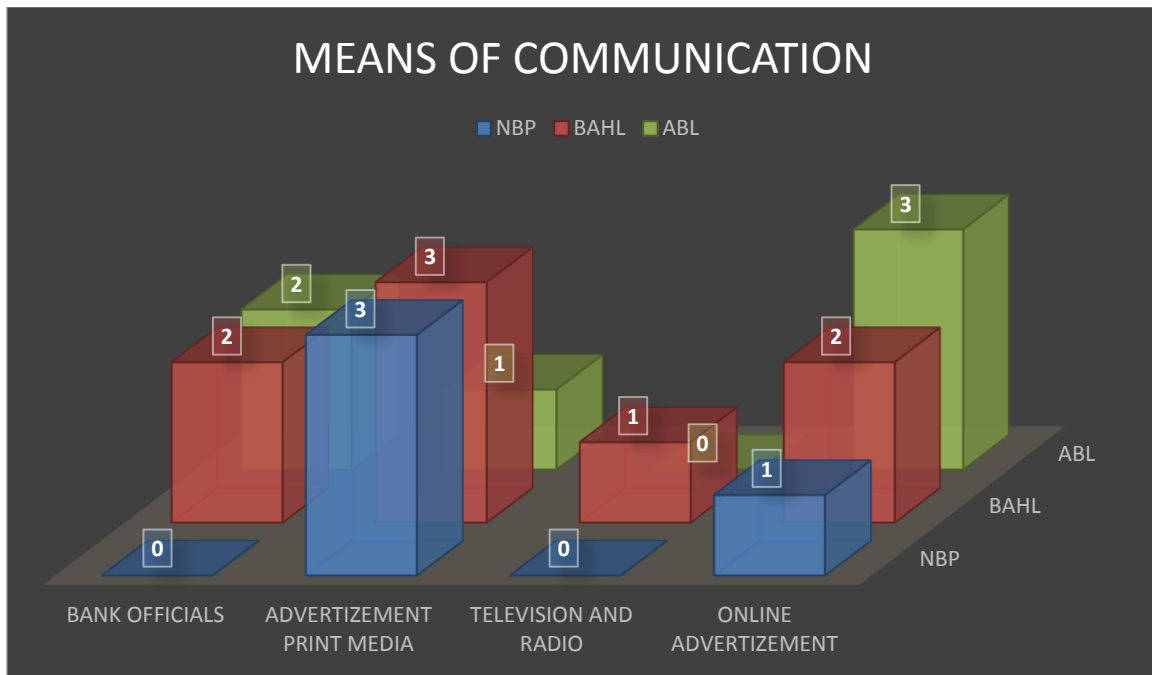
Which of the following E-banking services are provided by your bank?

- a) ATM banking
- b) Telephone banking
- c) Credit Cards
- d) Debit Cards
- e) Mobile banking
- f) P.C. banking
- g) Electronic transfers (EFTs)
- h) Internet banking

Most of the services are provided by the above mentioned banks except credit cards as NBP does not issues credit cards and BAML issues credit cards to very selective customers.

How do you let your customers know about E-banking services you provide? (Tick the Applicable one(s))

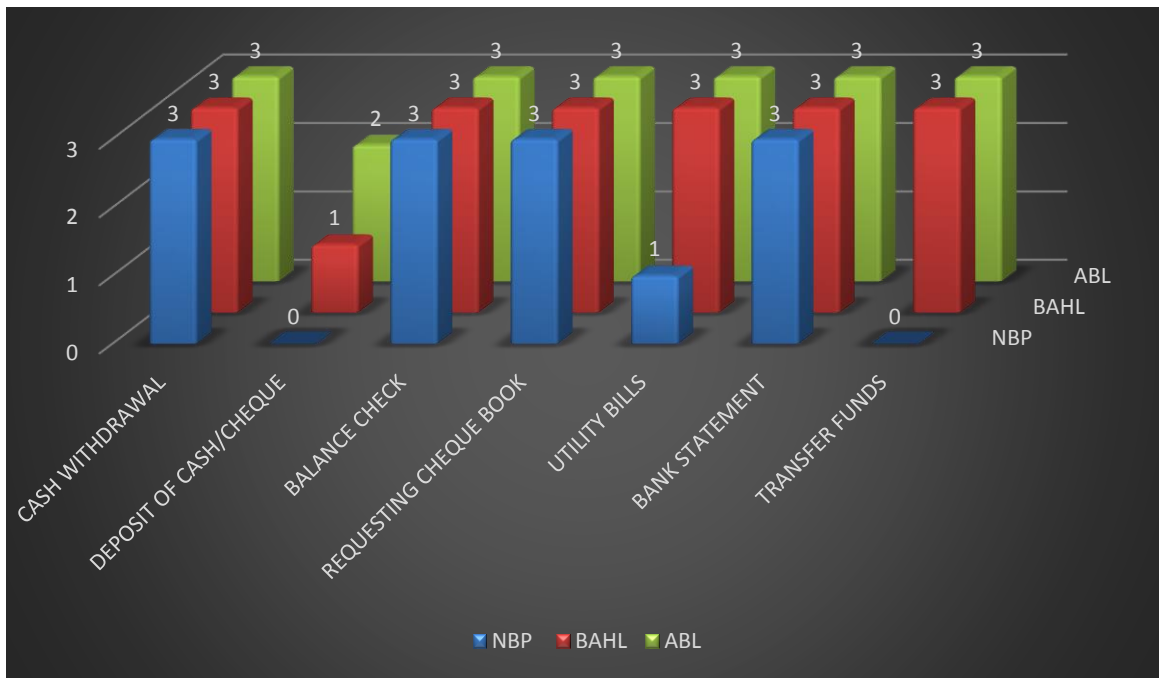
- a) Through bank officials
- b) Advertisement in Print Media
- c) Television and Radio Advertisement
- d) On line Advertisement
- e) Through their employers) Any other (Please specify)



The officers showed interest in using all available means to educate the customers and bring e-banking services into their knowledge. However, as the NBP still not providing all the facilities through online banking so there is lot of rush in the branches hence they said employees won't find time to educate customers rather print media is the better option.

Indicate by ticking the services offered through ATM in your bank

- a) Withdrawal of cash
- b) Deposit of cash and cheque
- c) Balance check
- d) Requesting cheque book
- e) Paying any utility bills
- f) Check bank statement
- h) Transfer of funds

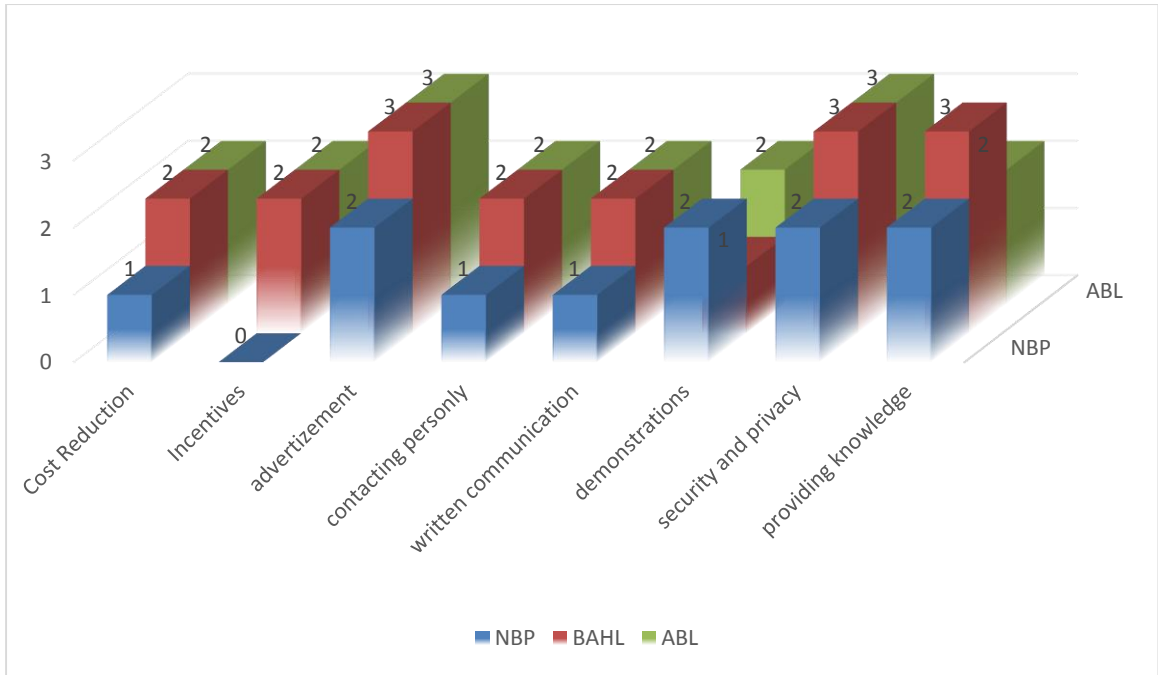


Most of the services are provided through ATM by BAHL and ABL, but as we discussed earlier NBP is not providing all the services through ATM due to number of reasons. i.e. safety, available customer base and being the government bank.

What are methods you use to encourage your bank clients to use E-banking?

(Tick as many as applicable)

- a) Make them cheaper by reducing charges and fees
- b) Incentives to E-banking users
- c) Intensive advertisement
- d) Contacting every customer personality
- e) Keep on reminding customers through written communication
- f) Demonstrating on how to use services to them
- g) Giving them guarantee of security and privacy
- h) Giving the technological knowledge to customers through seminars

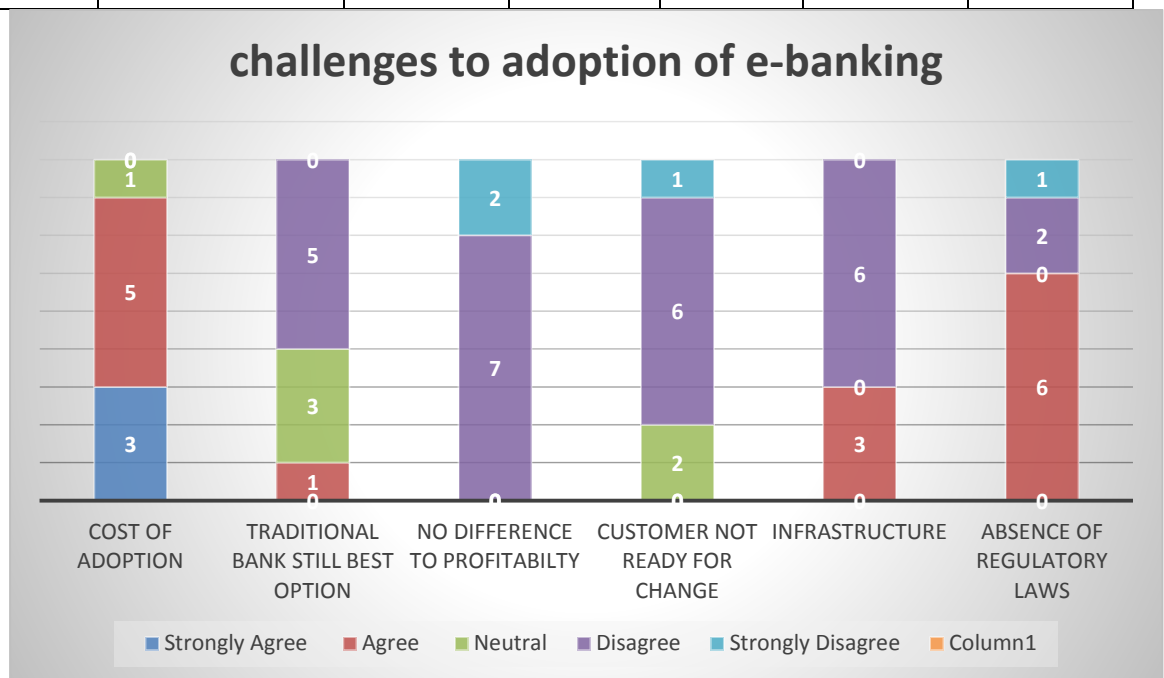


The most of the respondent were of the opinion that the customer can be encouraged through advertisement and ensuring security and privacy, while cost reduction and other factors also do matter. Cost is already reduced as by sitting home transactions can be performed without going to the bank hence, transportation cost is saved.

In your own opinion what are the challenges facing the adoption of E-banking Technologies? (Please give your opinion to the following statements in the appropriate Column.)

S.No.	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	The Cost of adoption is very high					
2	Traditional banking still remains the best option for your clients					
3	No difference to					

	profitability as compared with branch banking					
4	Customer base is not ready to accept the change					
5	Lack of infrastructure					
6	Banks fear because of absence of regulatory laws on E-Banking					

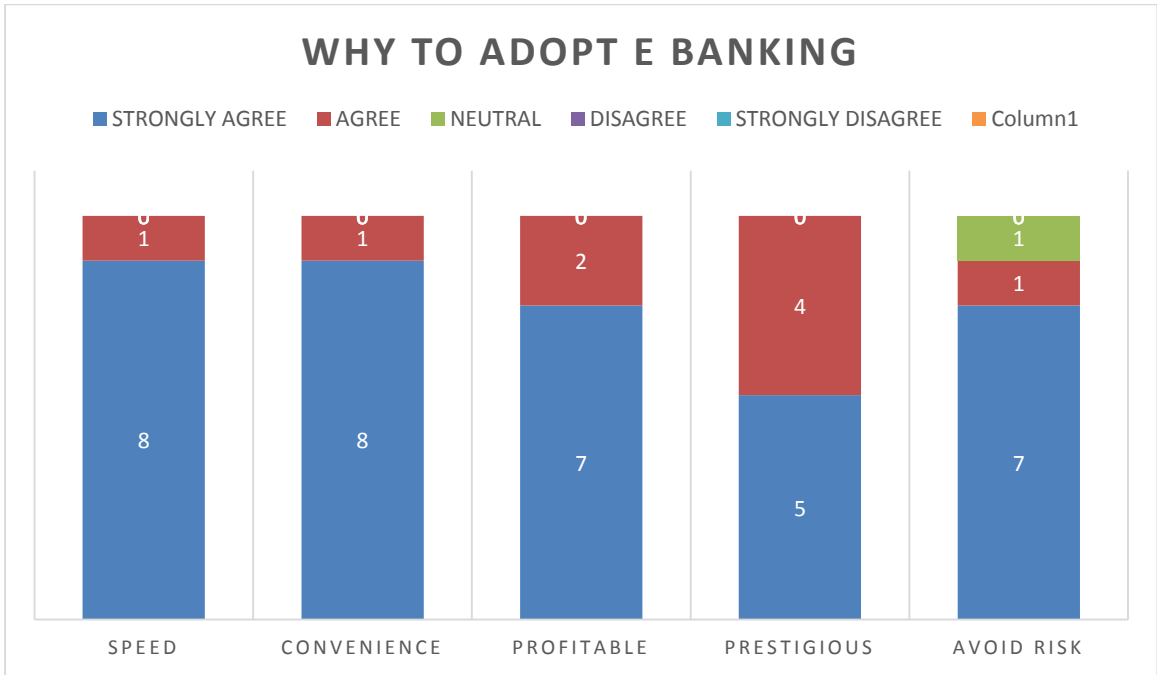


The respondents were of the view that the cost of adoption is an important factor to adopt the information technology and e-banking. While most disagreed on the idea that it does not impact on profitability. They were also of the opinion that the regulatory laws are absent so they need to made.

Why do you think it is important to adopt E-banking services? Please give your Opinion to the following statements in the appropriate column.

S.No.	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
01	E-banking services are generally faster than traditional banking which helps customers to avoid long queue in banking Halls.					
2	There is high degree of convenience in E-banking as you can access the banking Services from anywhere.					
3	E-banking services are more profitable than traditional Banking services.					
4	Using E-banking service is more prestigious than queuing At the bank halls.					
5	E-banking may help in avoiding many risks like robbery in physical handling of					

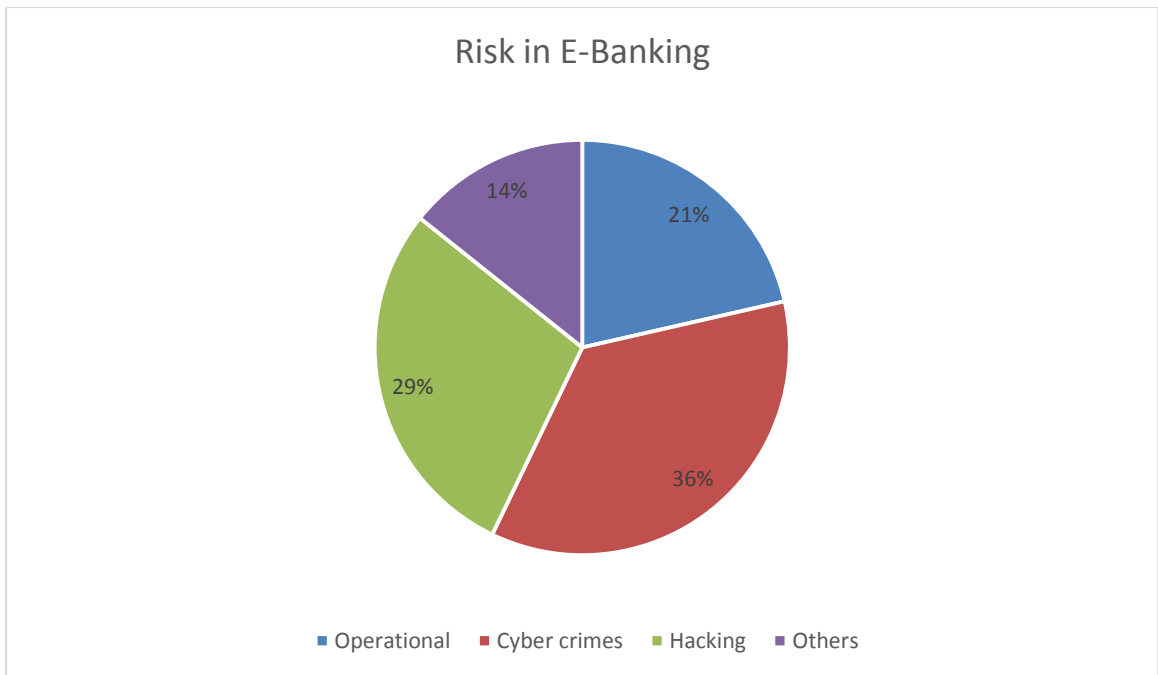
	Large amount of cash.					
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Most respondents were of the opinion that e-banking should be adopted speed and convenience with profitability and avoids risks. There also other factors but these factors matter a lot. As discussed in the introductory chapters that these benefits are the reason why shift took place from manual banking to e-banking.

What are the risks in using E-Banking? Please select all if applicable?

- a) System failure(operational risk)
- b) Cyber crimes
- c) Hacking
- d) others



The most important risk mentioned by the respondents was the cybercrime followed by hacking and operational risks. These risks need to be solved to build the trust of the people and lot of research needs to be done in this field to mitigate the chances of risk. These are discussed as disadvantages or demerits of e-banking in 2nd chapter.

How to solve these risks?

The most bankers were of the opinion that the operational risks can be mitigated through proper Business continuity planning. While the risk regarding cyber security, hacking, phishing, Hacking can be resolved through high technology software's and security programs. However, Banks are working on these issues and guiding the customers how to operate with security.

Why people don't trust or reluctant to use E- Banking?

In bankers opinion people trust e-banking but are reluctant because there is lack of proper legislation in Pakistan and security issues which needed to be resolved to build the confidence of customers.

How Banks can develop trust among people for E- Banking or can change the image for online banking in Pakistani people?

With proper security and conducting seminars and advertising on television and print media they can build a positive image amongst the people as said by the bankers.

What are the hopes for the future of E- banking in Pakistan (Banks perspective)?

E-Banking has already been very popular as it is very convenient and time saving. It is beneficial for customers as well as for staff and shareholders of the bank as it reduces the paperwork and cost.

What do you think are the parameters attracting or distracting people from online Banking?

Convenience and time saving attracting the customers while security issues and operational risk might distract people.

Do you think E-Banking is reliable and secure Banking to customer Base available in Pakistan?

Yes, as most banker replied because the e-banking service should be provided to the class which can understand and operate the same. It can reduce cost and save time.

How Banks can educate their customers to safeguard from E-banking transactions?

Banks can educate the customers through media, seminars and bank officials.

Is Branch less banking a step further to E-banking? Is this linking customer relation with e-banking?

Yes, branchless banking is the solution to growing transactions as the branches of branchless banking is more than the actual physical bank branches. The agent network is removing the social hurdles and linking the customer with banking.

Do you think the recent concept of branchless banking introduced by state bank of Pakistan in Pakistan is mitigating the risk and facilitating the masses? How this can reduce the risk?

As the agent network of SBP is very successful and customers are dealing with agents so they have a social interaction and physical evidences that is why it is mitigating the risk.

This concept is also discussed in detail with available data of the central bank in chapter 2. Which showed an impact able growth and ease to customers. That is the reason it is very successful in Pakistan.

4.4 Analysis.

Theoretical and empirical analysis.

The interview conducted from the bankers mostly constituted of above mentioned questions whereby the bankers showed the hope of strong growth of e-banking and latest technology. The customers are following the latest trends and the most important long queues are diminishing now. Another most important factor was 24 hour access to e-banking facilities. Most of the bankers were in favor of mobile applications and other latest sources and wanted to use their mobile device for all kind of banking transactions. Apart from number of factors there still remains few security concerns and all were agreed that strong chances of security breaks, hacking and operational risks remains the key issues in adoption of e-banking along with cost.

The services provided with e-banking is fast, accurate and chances of error are almost zero. It is time saving and free from cumbersome and manual banking. It builds customer satisfaction and loyalty. E-banking is fast, accurate, efficient and the only solution of growing business transactions. The e-banking has not only benefited the customers but also the bankers to save themselves from manual and cumbersome work.

Chapter 5

Conclusion and recommendation

Banking is the top most growing sector of Pakistani economy with high profits. As the growth is witnessed every year in profit and deposits of the bank so does the competition. In order to meet the challenges and competition banking sector is striving very hard to provide innovative and quick services. Every Bank is trying to provide the best services.

Especially as we discussed about the three Banks. They trying to capture the maximum business by providing something new to the customers. ATMs is the major source of providing e-banking to the customers. Majority of the services are provided through ATM. A new concept of Branchless banking has emerged and got huge success in short time. Since from the independence of Pakistan till yet not more than 13000 bank branches have been opened but thanks to branchless banking started in 2010-11 and since then more 150,000 branches have been opened. This has sorted some sort of risks of e-banking and social draw backs. The customer base of Pakistan is of mix nature so there should also be mix of banking products and services. Hence, banks are trying present the best mix of products which may suit the educated and elite class but also the other portion of the community.

Conclusion.

With the data gathered and interpreted we came across with numerous benefits and advantages of e-banking. But there are some disadvantages too. Apart from that the industries and business trends are growing so does the banking sector. In order to cope with growing trends banks in Pakistan needs to implement quick changes enabling them to fulfil the needs of industry. As the competition is very stiff and the banks are fighting for their profit so they are trying to provide the best services. This has given the community an added advantage of cheap and free services. From looking the data it has been observed that bank branches cannot be opened everywhere and the e-banking is the only viable solution. Branchless banking is also fulfilling's the gap through bank agent network.

Moreover, the accuracy and speed provided by the e-banking system cannot be obtained through manual system. However, people are still reluctant to carry large transactions through e-banking due to chances of fraud and other risks in e-banking. Though the banks are trying

very hard to cope this situation there still needs to be research conducted to solve these problems.

Recommendations

According to literature reviewed, data gathered and analyzed, there still remains many problems in for providing e-banking services to customer base available in Pakistan. Though the branchless banking is one kind of solution but there needs to many more to inculcate the needs of Pakistani customers and growing business transactions. In the research conducted it is clear that the e-banking is convenient, saves time but it also costs money to be maintained properly. There are also some risks involved like hacking and cybercrimes. So there is a dire need of solving the security concerns of Pakistani community along with user friendly and secure software's.

The most important factor in success of e-banking is the legislation. The government of Pakistan in coordination with state bank of Pakistan should formulate laws for the security of the public money as the banks are the custodian of public money. Apart from them banks should invest in infrastructure needed for automation and prepare business continuity plans, in time of energy crises, power issues, social commotions, strikes, or during any other unpleasant event.

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Appendix

Interview Questionnaire Design from Bankers

Name: (Optional)

Gender:

Employer :(Bank Name)

1. What were your reasons for choosing of E-Banking? Please select all that apply?
 - e) Convenience
 - f) To save time
 - g) 24 hour access
 - h) Others
2. How often you use E-Banking services?
 - e) Daily
 - f) Weekly
 - g) Monthly
 - h) Never
3. Which online feature you use regularly? Please select all which apply?
 - h) Pay Bills
 - i) Make an account inquiry
 - j) Transfer funds
 - k) Wire transfers
 - l) Process payroll
 - m) Request cheque book
 - n) Others
4. Would you use your mobile phone for E-Banking
 - d) Yes
 - e) No
 - f) N/A
5. Which of the following mobile bank features would you use? Please select all that apply?
 - f) Balance Inquiry

- g) Funds transfer
 - h) Email and text alerts
 - i) Mobile top up
 - j) Others
6. Which of the following E-banking services are provided by your bank?
- a) ATM banking
 - b) Telephone banking
 - c) Credit Cards
 - d) Debit Cards
 - e) Mobile banking
 - f) P.C. banking
 - g) Electronic transfers (EFTs)
 - h) Internet banking
7. How do you let your customers know about E-banking services you provide? (Tick Applicable one(s))
- a) Through bank officials
 - b) Advertisement in Print Media
 - c) Television and Radio Advertisement
 - d) On line Advertisement
 - e) Through their employers
 - f) Any other (Please specify)
- 8). Indicate by ticking the services offered through ATM in your bank
- a) Withdraw of cash
 - b) Deposit of cash and cheque
 - c) Balance check
 - d) Requesting cheque book
 - e) Paying any utility bills
 - f) Check bank statement

- g) Order cheque book
- h) Transfer of funds

9. What are methods you use to encourage your bank clients to use E-banking?

(Tick as many as applicable)

- a) Make them cheaper by reducing charges and fees
- b) Incentives to E-banking users
- c) Intensive advertisement
- d) Contacting every customer personality
- e) Keep on reminding customers through written communication
- f) Demonstrating on how to use services to them
- g) Giving them guarantee of security and privacy
- h) Giving the technological knowledge to customers through seminars

10) In your own opinion what are the challenges facing the adoption of E-banking Technologies? (Please give your opinion to the following statements in the appropriate Column.)

S.No.	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	The Cost of adoption is very high					
2	Traditional banking still remains the best option for your clients					
3	No difference to profitability as compared with branch banking					

4	Customer base is not ready to accept the change					
5	Lack of infrastructure					
6	Banks fear because of absence of regulatory laws on E-Banking					

11. Why do you think it is important to adopt E-banking services? Please give your Opinion to the following statements in the appropriate column.

S.No.	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
01	E-banking services are generally faster than traditional banking which helps customers to avoid long queue in banking Halls.					
2	There is high degree of convenience in E-banking as you can access the banking Services from anywhere.					
3	E-banking services are					

	more profitable than traditional Banking services.					
4	Using E-banking service is more prestigious than queuing At the bank halls.					
5	E-banking may help in avoiding many risks like robbery in physical handling of Large amount of cash.					

12. What are the risks in using E-Banking? Please select all if applicable?

- e) System failure(operational risk)
- f) Cyber crimes
- g) Hacking
- h) others

13. How to solve these risks?

14. Why people don't trust or reluctant to use E- Banking?

15. How Banks can develop trust among people for E- Banking or can change the image for online banking in Pakistani people?

16. What are the hopes for the future of E- banking in Pakistan (Banks perspective)?

17. What do you think are the parameters attracting or distracting people from online Banking?

18. Do you think E-Banking is reliable and secure Banking to customer Base available in Pakistan?
19. How Banks can educate their customers to safeguard from E-banking transactions?
20. Is Branch less banking a step further to E-banking? Is this linking customer relation with e-banking?
21. Do you think the recent concept of branchless banking introduced by state bank of Pakistan in Pakistan is mitigating the risk and facilitating the masses? How this can reduce the risk?

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Richting: **Master of Management-Management Information Systems**
Jaar: **2015**

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