Adoption Issues of Internet Banking in Pakistani’ Firms

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Adoption Issues of Internet Banking in Pakistani’ Firms

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Abstract

In the world of banking, the development in information technology has an enormous effect on development of more flexible payment methods and more-user friendly banking services. Electronic banking services are new, and the development and diffusion of these technologies by financial institutions is expected to result in a more efficient banking system. This technology offers institutions alternative or non-traditional delivery channels through which banking products and services can be delivered to customers more conveniently and economically without diminishing the existing services level. In recent years, almost one fourth Pakistani’s banks have started to offer Internet banking services to their customers. The purpose of this research was to explore and analyze the issues that influence Pakistani’s firms’ intentions toward Internet banking services adoptions. Based on a detailed literature review, a research model was developed. Five sub issues were selected from system trust area in order to gain a better understanding of Internet banking service quality and customer thoughts about these services. A qualitative research approach was used to get a better understanding of theses issues. The empirical data were collected from three different Pakistani’s firms by using questionnaires and consulting case-studies. Data analyses were done in accordance with the research questions and research model. The findings from respondent data show that they have greater level of worry regarding trust, and they do not have confidence to make any big financial transactions over internet, and have no satisfaction from Internet banking services. Thus lack of system security concerns as the prime reasons for slow adoption of Internet banking in Pakistani firms. Finally the results from respondents’ data and conclusions were drawn by answering the research questions.

Keywords: Internet Banking, Trust of the System, Security, Reliability, Risk, Response Time, Privacy, Firms, Pakistan.
Acknowledgment

The process of this master thesis writing was a wonderful learning experience on my academic life which was filled with challenges and rewards. The completion of the present study leads a new beginning and a step forward towards my future and when writing this preface, a quotation by the famous Scottish Physicist James Clark Maxwell came to my mind. Maxwell once stated, “What is done by what is called myself is, I feel, done by something greater than myself in me.” The question is justifiable. Did I really do this? Did I really manage to get it all together?

This preface provides a welcomed opportunity and chance to acknowledge the help and assistance of the people who with their intellectual insights or constructive criticism, other times in the form of friendship have helped me to develop this research.

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Outside of academia, I would like to thank all my friends for their fully support and finally, the great thanks are directed to my family; My father; that have taught me to get the priorities straight and to focus on the whole instead of getting lost in the details; My mother who has meant me the real meaning of patience and helped me by her advices to have this thesis finished on schedule and finally; my brothers and sisters for continues support along the way.

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5.1 Within Case Analysis: Pakistan International Airline (PIA)
CHAPTER 1: INTRODUCTION AND BACKGROUND

This chapter begins with the background of selected area, followed by brief introduction; Problem Discussion concentrates which will help reader to understand the insight of the research area. The problem discussions end with a research problem and specific research question. Finally, the delimitation of the research and the disposition of the thesis are presented.

1.1 Background

Global internet access exceeded 1094 million people in December 2006 (IWS, 2006), offering new markets for internet-based services such as internet banking. Internet is a technology that spreads faster than any other technology - the use of Internet is estimated to double in every hundred days. Since the new millennium, internet banking has experienced explosive growth in many countries and has transformed traditional banking practice. By offering internet banking services, traditional financial institutions seek to lower operational costs, improve consumer banking services, retain consumers and expand share of customer.

Pakistan is considered to be a successful example of fast introduction of information and communication technologies in spite of the fact that little more than 10 years ago it was technologically relatively backward in Asian countries.

Pakistan is situated at the crossroads of the Middle East and South Asia. It is bordered by Iran and Afghanistan in the West, China in the North-east, India in the East, and the Indian Ocean in the South. These countries influence the economic, political, social and cultural development of Pakistan. The growth of the Pakistani economy has been fast and stable, and today it’s became an attractive market for Gulf States and Far East countries for doing business.
The conduct of monetary policy in Pakistan has undergone a paradigm shift in the aftermath of financial sector reforms that were initiated in the late 1980s. Pakistan is considered as one of the most advanced emerging markets in Central Asia. It has been an associated member of the OIC in February 1972 (www.finance.gov.pk)

The GDP growth of 8.4% in June 2005 places Pakistan among the fastest growing economies in the region. The economy has grown by an average 6% every year since 1999. The continued growth of exports to Middle East and western markets, integration with Asian countries, and institutional and regulatory reforms has thus laid a strong foundation for sustainable economic growth. The economy is likely to grow by 5-6 per cent per year in the near future (state bank of Pakistan, 30th June 2006)

The financial services industry was one of the first to recognize the potential of the Internet as a means of interacting with customers, however, current data compiled by the Web Marketing Association shows that banks are falling behind other industries with respect to innovation within their Internet channel (Bruno-Britz, 2006). Since Pakistan’s banks made a debut on Internet banking in March 2005, surveys of general Internet use show that the average user is gaining experience and confidence online and is increasingly going to the Internet to perform tasks important to their daily lives including conducting financial transactions and seeking information about finances (Daily Time Pakistan, December 2005).

The purpose of this research is to identify and describe the issues that effecting the adoption of internet banking in Pakistani firms and to give awareness to the banks by highlighting these issues. This research is organized as follows: firstly it provides a brief description of Pakistani’s ICT as well as IT, Pakistani banking sector, Internet banking definition, overview of Internet banking in Pakistan. Problem areas and problem issues, utilized in the study, is outlined prior to a discussion of the results obtained.
1.2 Pakistani’s ICT background

Nations worldwide have recognized developmental opportunities and challenges of the emerging information age characterized by Information and Communication Technologies (ICT). These technologies are driving national development efforts worldwide and a number of countries in both developing and the developed world are exploring ways of facilitating their development process through development, deployment and the exploitation of ICT within their economies and societies.

Government has a vital role in facilitating the usage of ICT. All government institutions in Pakistan were pooled into portal www.infopak.gov.pk in 1997. Pakistan first time introduces the e-government system in 2005 while using Internet for internal public administration communication. Pakistan has been also a pioneer with discussions about e-banking but currently the implementation has been delayed due to some factors (DAWN Edition 15th June 2006).

Pakistan is emerging as a global player in telecommunications services and ICT production. 60% of current revenues from Pakistan's small- and medium-sized ICT and telecommunications enterprises come from exports. Government tax reductions have contributed to increased growth in foreign call centers, which has resulted in more ICT firms in Karachi, the top financial hub in Pakistan. Over the past four years, a key focus of foreign investment in Pakistan has been ICT (telecom) infrastructure, accounting for about 20 per cent of 130 major investments. In the last three years Pakistan has established a thriving mobile telecommunications sector, winning the GSMA global trade association's Government Leadership Award for 2006 (www.moit.gov.pk).

The performance of Pakistani’s ICT cluster is based to a large extent on the developments of telecom as telecom provides substantial input to computer services and equipment production (DAWN 2005). This has also been a prerequisite for Internet usage growth because providing good quality Internet connections is vital for attracting wider public to the Internet. Pakistan was one of the first countries in South Asia to get foreign
investments into the telecommunications industry when Alwarid Telecom and Telenor Telecom acquired a 57% stake in the PTCL in 2003/2004. From 2005 PTCL enjoying the exclusive rights for providing basic services granted by the Concession Agreement. Since 2003 the number of telecommunications companies increased remarkably which means higher competition, diversity of services and growth of quality (PTCL annual report 2005).

1.2.1 IT Sector in Pakistan

IT is a term that encompasses all forms of technology used to create, store, exchange, and use information in its various forms (business data, voice conversations, still images, motion pictures, multimedia presentations, and other forms, including those not yet conceived). It is a convenient term for including both telephony and computer technology in the same word.

With most of the global IT company presence in Pakistan, and with revenues growing by 35% year on year, the IT industry is probably the most exciting and dynamic sector in the country today. An industry characterized by about 100,000 professionals, major ongoing IT projects within the government and the private sector to the tune of hundreds of millions of US dollars, and world-class software product and services companies bears testimony to the vibrancy of the IT and IT enabled services sector in Pakistan. The convergence of communications, computing, and entertainment has resulted in the blurring of boundaries between disciplines and IT companies now come in all shapes and sizes. IT has indeed been taken out of the closet and has been mainstreamed into every aspect of industrial and economic activity within the country.

1.2.2 Internet in Pakistan

The Internet is a network of networks, linking computers to computers sharing the TCP/IP protocols. Each runs software to provide or "serve" information and/or to access
and view information. The Internet is the transport vehicle for the information stored in files or documents on another computer.

The Internet is likely to continue to revolutionize the way people communicate and access information. The basic principles adopted for the Internet growth in the country would be to encourage competition, avoidance of un-necessary regulations, provision of low cost, reliable and broadband Internet access, Universal Internet Access in the areas connected with the telecom network, free Internet access for public sector Universities and support for the development of national Internet content.

Internet access has been available in Pakistan since the mid-1990s. PTCL started offering access via the nationwide local call network in 1995. The first international Internet service in Pakistan was launched by Digicom in 1995. The licensing of commercial Internet service providers began in 1996. By mid-1999 licenses to provide Internet services had been issued to approximately 100 organizations, of which approximately 40 were offering service. By mid-2000, the number of Pakistani users had grown to 500,000–700,000, or nearly 0.5 percent of the population. Now there are 12 million Internet users, with 2.5 million connections and over 150 ISPs are operating in various cities of Pakistan. The number has grown significantly in the last couple of years with service providers moving beyond Peshawar, Islamabad, Lahore and Karachi to reach more of the country's 166 million population (www.moit.gov.pk).

Unfortunately Pakistan doesn’t have a proper Internet backbone. Each ISP leases lines for both domestic and international connections. Only in 2000 were developments underway to create a network access point (NAP) at which Pakistani ISPs could exchange traffic. Without such NAPs, traffic from one domestic ISP to another has to travel outside the country and back.
1.3 Pakistani banking sector

The State Bank of Pakistan is the Central Bank of Pakistan. The state bank of Pakistan started its operation on 1st July 1948. State Bank is not only responsible for issuing domestic currency and regulating foreign currency but also for analyzing domestic economy. The bank has been operating with a mission of promoting both monetary and financial stability and to promote the financial system for achieving sustainable growth by reducing inequality. The relevant provisions of law which vest powers in State Bank of Pakistan (SBP) to carry out inspection of banks are contained in the Banking Companies Ordinance, 1962. Besides, State Bank of Pakistan Act, 1956 and the Bank’s Nationalization Act, 1974, The Financial Institutions (Recovery of finances) Ordinance, 2001, Companies Ordinance, 1984 and Statutory Regulatory Orders (SROs) are the relevant legislations, which cover the activities concerning the banking sector (www.sbp.org.pk).

As the responsibility and work scope have increased, the size in terms of staff also have followed suit. To manage the ever-increasing workload and staff, the need for an integrated computer system also increased. State Bank of Pakistan looks to install totally new system that would computerize its work process and integrate all 17 nation-wide branches into the computer network.

The financial sector in Pakistan comprises of De-Nationalized Banks (DNB), Development Financial Institutions (DFI), Foreign Banks (FB), Investment Banks (IB), Micro Finance Banks (MFB), Nationalized Commercial Banks (NCB), Private Scheduled Banks (PScB), Provincial Banks (PB), Specialized Schedule Banks (SSB). Under the prevalent legislative structure the supervisory responsibilities in case of Banks, Development Finance Institutions (DFI), and Microfinance Banks (MFB) falls within legal range of State Bank of Pakistan while the rest of the financial institutions are monitored by other authorities such as Securities and Exchange Commission and Controller of Insurance.
At present there are 64 scheduled banks, 8 DFI, and 2 MFB operating in Pakistan whose activities are regulated and supervised by State Bank of Pakistan. The commercial banks comprise of 4 nationalized banks, 2 De-Nationalized Banks, 14 Investment Banks, 12 private sector banks, 16 foreign banks, 2 provincial scheduled banks, and 4 specialized banks. Beside this there are also 3 monetary agencies, International Finance Corporation (IFC), International Monetary Fund (IMF) and World Bank (WB) working in Pakistan (www.ibp.org.pk)

Modern history of the Pakistani’s banking industry goes back into the year 1985 when permission for the establishment of commercial banks was granted for the first time in Punjab. The liberalization effort was eagerly taken advantage of and by 1992 there were already 14 banks in Pakistan. The number of banks increased to 64 by end 2006.

Setting up a bank was extremely popular in the beginning of 1992s because there were basically no legislative restrictions to establishing a bank. The development of the financial sector has been supported by OIC adapted legal framework. The privatization of banks is completed and foreign ownership has brought influence into the management of the banks.

1.4 Internet banking

Internet banking can be defined as the use of technology to communicate instructions to and receive information from a financial institution where an account is held. Internet banking includes the systems that enable financial institution customers, individuals or businesses, to access accounts, transact business, or obtain information on financial products and services through a public or private network, including the Internet. When first introduced, Internet banking was used mainly as an information presentation medium in which banks marketed their products and services on their Web sites. With the development of asynchronous technologies and secured electronic transaction technologies, however, more banks have come forward to use Internet banking both as a transactional as well as an informational medium. As a result, registered Internet banking
users can now perform common banking transactions such as writing checks, paying bills, transferring funds, printing statements, and inquiring about account balances. Internet banking has evolved into a “one stop service and information unit” that promises great benefits to both banks and customer.

The term electronic banking is almost generic in its nature and therefore it is mostly used without any further explanation or definition. It should be reminded that electronic banking is not equal to the term Internet banking although the latter is undoubtedly the most widespread type of it. Electronic banking includes several traditional services like telephone banking, credit cards, debit cards, ATMs. The more recent additions are Internet banking, mobile banking and digital TV banking. Electronic banking is also known as electronic funds transfer (EFT) and basically is simply the use of electronic means to transfer funds directly from one account to another.

Table 1.1 below contrasts the various features and functions offered by the electronic banking.

**Table 1.1 Features and Functions**

<table>
<thead>
<tr>
<th>Features</th>
<th>Telephone banking</th>
<th>Self Service terminal</th>
<th>ATMs</th>
<th>Internet banking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawals</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Deposits</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Balance enquires</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Interim Statement</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Transfer funds</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cheque book orders</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change ATM card PIN</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Stop payment of cheques</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Rates</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stop orders</td>
<td>✓</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

*(FNB Brochure, 2001)*
Internet banking services are crucial for long-term survival of banks in the world of electronic commerce (Burnham 1996). Burnham found that the majority of banks with Web sites spent less than US$25,000 to create a Web presence, and less than US$25,000 a year maintaining it. He suggested that even if these figures were to rise as banks began to offer Internet banking services, they would still be less costly than the traditional way of banking.

From the consumers’ perspective, Internet banking provides a very convenient and effective approach to manage one’s finances as it is easily accessible 24 hours a day, and seven days a week. Besides, the information is current. For corporate customers, sophisticated cash management packages offered through Internet banking provide them with up to the minute information, allowing for timely funds management decisions (Kalakota and Whinston 1996).

1.4.1 Internet banking in Pakistan

The Internet banking is becoming an increasingly important channel for Pakistani’s banks to provide banking services to both individual customer and businesses. Internet banking refers to the use of the Internet as a remote delivery channel for banking services (Furst et al., 2002). Banks offer Internet banking in two main ways (Frust et al., 2000). An existing bank with physical offices can establish a Web site and offer Internet banking to its customers as an addition to its traditional delivery channels. A second alternative is to establish a virtual Internet-only bank. The computer server that lies at the heart of an Internet-only bank may be housed in an office that serves as the legal address of such a bank, or at some other location. Internet-only banks may offer their customers the ability to make deposits and withdraw funds via ATMs or other remote delivery channels owned by other institutions. Internet banking service is presently being offered to two sets of clients, i.e. personal clients and business clients.

Internet banking channel offers less waiting time, higher spatial convenience and significantly lower cost structure than traditional distribution channels. The relative
success of Internet banking to date can be gauged by identifying the number of current and anticipated registered users. It is reported that more than 35 million consumers in the USA used on-line PC banking by the end of 2004 (Barto, 2005), that some 9 percent of UK customers used PC based Internet banking and this was expected to rise to 42 per cent by 2006 (Gandy, 2004), these figures being similar to those of Sweden, Norway and Germany (Bons, 1999). The proportion of people in Finland who have adopted online banking is higher than anywhere else in the world. As early as 2000, almost 40 per cent of all retail banking transactions in Finland was made over the Internet. All Finish banks offer a full range of Internet banking services (Mattila et al. 2003).

Banks and Post office Dept. in Pakistan are working on several delivery channels to facilitate the citizen to deliver payment in minimum time frame with security.

Banks and Post offices across the country are facilitating Workers Remittance received from Overseas Pakistanis within 24 hours, without charges. There are 4 /million expatriates who send billions of dollars of foreign exchange to Pakistan.

Banks are also facilitating Cellular phone user to check their balance and make transactions. Statement through SMS is also available.

Internet banking is available with few of the banks; with payment options. Other banks are working on Internet banking solution. Digital Certificates availability and security issues are delaying the projects and decision making by the banks.

Utility bills are being accepted on ATMs, Internet, PC-banking, lock box and call center. Utility companies are closely working with the solution providers and banks to work out solution for the customers to pay utility bills in time.

With the development of IT, the internet banking has become the communication medium between customer and bank. Computer from locations that are geographically dispersed can talk with each other through the internet. The connectedness and rapidity of
internet process is revolutionizing the traditional model of our society from technology to academics to entertainment. Internet banking in Pakistan is less developed as compared to the west developed country. Following worldwide trends in implementing self-service technology via the Internet, Internet banking in Pakistan will become an established service for which growth is expected. Even more, Pakistan’s Internet is the fastest expanding market in south Asia. The number of Internet banking users in Pakistan is doubled every year in the last two years. Tremendous growth has been shown in use of Internet banking in Pakistan.

Rapid development of the Internet also has high demand of well developing Pakistani’s Internet banking. Such a research will help banks to formulate appropriate strategies to ensure rapid migration of customers to online banking and thus boom this self-service technology more efficiently.

1.5 Problem Area

The industry sector is one of the most important service sectors for the whole national economy. Modern, highly industrialized and technology driven economies are threatened by higher risks than ever, and individual need to protect themselves against private risk. From the banks’ viewpoint, use of Internet banking is expected to lead to cost reductions and improved competitiveness. This service delivery channel is seen as powerful because it can retain current Web-based customers who continue using banking services from any location. Moreover, Internet banking provides opportunities for the bank to develop its market by attracting a new customer base from existing Internet users (Suganithi et al., 2001; Dannenberg and Keller, 1998; Zineldin, 1995).

In the last five years financial analysts have assessed financial services websites as laggards behind other industries in overall innovation (Bruno-Britz, 2006). This trend is confirmed by the Internet Standards Assessment Report which shows that Internet banking sites currently score low in the categories of innovation and use of technology (ISAR, 2006) compared to other retail websites.
Current financial analysis indicates that bank customers “are most satisfied if they themselves are allowed to state where, when, and how they do their banking” (Silva, 2005). Survey results and industry research that concludes that banks need to spend time and increase investments in improving connections with customers and differentiating the customer experience is getting the attention of many banks (Eckenrode, 2006). Financial analysts suggest “banks can learn a thing or two from many non-bank industries that are exhibiting innovation in the way that they deal with self-service options for their customers” (Silva, 2005).

Internet technology have the potential to enable the banks to enhance their Internet offerings with features that will improve customer service interactions and allow them with options for increasing control of their Internet banking experience. However, due to the strong fact that financial transactions involve the transmission of highly sensitive personal data, a major factor influencing consumer use of Internet banking websites is trust (Suh & Han, 2002). Continuing instances of Internet banking security violation and reports “degrades customer trust in the bank and in online banking in general” by (Fox, 2005), and thus, issues related to adoption of internet banking must be factored in to any plans for adding customer satisfaction and security control features.

1.6 Research Problem and Research Question

A full consideration of future internet banking in Pakistan would demand investigation in different areas. This research has addressed the adoption issues of Internet banking in Pakistani’s firms. Prior studies frequently focus only on positive aspects of Internet banking, e.g. benefits (Suganthi et al., 2001), trust (Suh and Han, 2002), innovations (Gerrard and Cunningham, 2003). In addition, Internet banking research has tended to focus on the perspective of personal account customers (Gerrard and Cunningham, 2003). Internet banking technology in Asian countries especially in Pakistan is less developed as compared to Western world. The purpose of this research, aims to identify the issues that
preventing Pakistani Firms from adopting Internet banking services. This research leads to the following main question:

1. What are the major issues that influence Pakistani Firm intentions to adopt Internet Banking Services?

1.7 Delimitations of the study

As a background of my thesis topic “Adoption Issues of Internet banking in Pakistani’s Firm” generally represent all those issues which influence Internet banking adoption in Pakistani firm, but according to limited time an attempt was made to narrow down the research. The study would focus only on the “Trust of the System” issues which are associated with Internet banking services on customer’s (firm) perspective rather than banks prospective. As the aim was to explore all the issues which keeping away Pakistani’s firm from Internet banking services, I believe the result of this research can be generalized to all other issues designed for corporate customer especially big firms.

1.8 Outline of the Thesis

This thesis is divided in six chapters, as shown in figure 1.1 namely the Introduction and Background, Literature Review, Methodology, Data Collection, Data Analysis and Conclusion. Chapter one gave an introduction and background to the research topic, problem area and research questions are also outlined there. Second chapter presents the literature review followed by the research model in the same chapter. Third chapter deals with the methodological choices for the study and issues concerning the validity and reliability. Chapters four will present the empirical data gathered by questionnaire, survey and consult case study. Chapter five will analyze the collected data against research model. Chapter six will present the conclusion of the whole study.
Figure 1.1: Disposition of the Thesis

- Introduction and Background
- Literature review
- Methodology
- Data Collection
- Data Analysis
- Conclusions
CHAPTER 2: LITERATURE REVIEW

The previous chapter provided the background and the problem discussion of the study. In this chapter I will present literature review. The aim of this chapter is to provide the relevant literature in the field that I selected for research. The chapter is divided into two sections including detail overview of prior research and research model for this study.

2.1 Theoretical Background

To identify and describe the adoption issues that exist in Pakistani firms regarding Internet banking, I read and used many articles like, diffusion model by (Rogers’1983), analyzed consumers’ attitudes towards direct banking (Lockett and Littler, 1997). The main advantage that I found in these researches regarding Internet banking is that its availability 24 hours a day and 7 days a week. The main disadvantages associated with direct banking, however, included its complexity and the security risks involved in using it. The articles also showed that adopters of new technology generally earned higher incomes, worked longer hours, moved more frequently and also possessed more positive attitudes towards change than non-adopters. The main issues that preventing the adoption of internet banking included the convenience aspects of the service, ease of use and its compatibility with customer existing lifestyles.

A useful starting point in attempting to resolve theses issues is to obtain customer willingness towards new and emerging technology-based delivery channels. A significant body of research has identified the issues that affecting consumers’ attitudes and acceptance of new technology in the financial services industry and the sort of consumers most likely to use it. The early research on technology in financial services, which focused on the adoption of ATMs, revealed that a significant factor for non-use, especially amongst older consumers, was the preference for conducting financial affairs through a human teller (Zeithaml and Gilly, 1987). Studied comparisons between ATM usage in different European countries and found that the main concern of users included fears over its security, the possibility of machine breakdown and running out of money.
New technology sometimes requires complex understanding and mental capability, and thus the technology may be difficult to manipulate due to limited capability of firm employees. Finally technology readiness of firm plays a role in their attitudes towards technology. Technology readiness is conceptualized as a combination of positive and negative feelings towards technology, roughly people’s confidence that technology helps improve their lives, or simply makes things more difficult and less secure. Other research has similarly indicated that customer’s attitude and beliefs about technology are correlated with intentions to use it (Chircu and Kauffman 2002).

Organizational ability to utilize Web technology capabilities is one of the basic issues to electronic banking (Chircu and Kauffman, 2000) and may include management attitudes, resource constraints, and knowledge issues. Some researchers have mentioned negative attitudes among some managers as a major interference (Farhoomand, 2002). Negative attitudes cause resistance to change and lack of management commitment, reducing the company’s resource allocation and motivation to use the technology (Basu., 2002). Implementing Web technology as a business channel requires some additional investment and resources, such as hardware and software, awareness and willingness. Shortages of information technology infrastructure remain a critical issue in some cases to the continuing growth of online banking (Chircu and Kauffman, 2000).

Customers and Banks are concerned about Technical/Technological issues for commercial usage of the Internet. Zugelder (2000) mentioned that customer protection is the major technical issue associated with Internet marketing. Among other things, customer protection issues can cover unfair and deceptive trade practices by suppliers, unauthorized access and usage by others, such as hackers, or system failures. Customer protection is important for building online customer confidence because there is no face-to-face contact, and there is a great possibility (at least in customer perception) for having problems or making mistakes via the Web.

One factor that determines the level of demand for internet banking services is that of the number of people having access to Internet. Several other account security related issues
would affect the customer preference and loyalty towards adoption of internet banking. Social psychology and marketing research indicate the customers differ in the type of relationship they wish to maintain with service providers such as banks. This implies that customers who desire social and psychological benefits by establishing personal relationships with banks will prefer face to face interactions. Internet banking environment will thus have a detrimental effect on such customer. On the other hand, for those customers whose relationship is based on efficiency of the services, internet banking environment will be an ideal situation for them.

Another research suggests that customers differ in the type of relationships they intend to maintain will their service providers. Reynolds and Beating (1999) suggest that relationships have both functional and social benefits, while another study concluded that customers vary on the value they place on these benefits (Gremler and M.J. Bitner, 1998)

Several other theories related to customer satisfaction affect the rate of adoption and degree of acceptance of any innovative service like internet banking. Rogers and Shoemaker (1971) state that customer go through several stages in knowledge conviction and decision confirmation before they finally adopt a product of service. Guiltinand and Donnelly (1983), emphasized on the importance of awareness before adoption of any innovative products. Pakistani banks appear to have taken a cue from this, as the strategy of most of the banks have been to create wide spread awareness through its informational websites, before launching onto a full scale transactional websites.

More focused research in the area of customer satisfaction and Internet indicate that product information content on the web design and layout are major factors that affect customer satisfaction (W.J. Doll, 1995). Customer confidence on internet banking would also largely depend on how the banks would deal with any false transactional and security concerns that may occur during online banking. Stewart (1999) claimed that the failure of the Internet in retail banking is largely attributable due to the lack of trust consumers have in the electronic channels.
In addition, simple lack of experience and knowledge can hold back adoption; higher usage intensity of information technology in firms helps them adapt more than is possible in less experienced firms (Speece, 2000). Effective implementation of internet banking requires extensive adaptation of firm current business processes to enable them utilize the capability of new technology. New skills and new processes in a firm require employees to learn new things. New technology sometimes requires complex understanding and mental capability, and thus the technology may be difficult to use due to limited capability of firm employees (Chircu and Kauffman, 2000). Knowledge issues may come from a lack of diffusion capability, which is developed over time by gaining related knowledge and expertise in several areas, and the lack of investment in training for internal employees.

Finally, technology willingness of corporate customers plays an important role in their attitudes toward a new system. New technology adoption as a combination of positive and negative feelings/attitudes toward new system, roughly, people’s confidence that technology helps improve their lives, or simply makes things more difficult and less secure (Parasuraman, 2000). Other research has similarly indicated that customers’ attitudes and beliefs about technology are associated with intentions to use it (Dabholkar, 1996). In China, research among exporter firms shows that technology readiness influences customer satisfaction with the Internet as a transaction channel (Srijumpa, 2002). Thus, employees of customer firms have different levels of charity for innovation and organization changes, their personal characteristics may affect them to be reluctant adopters.

Opportunities from implementing web technology could be restricted if there is a lack of customer trust in the web system. They viewed trust as an expectation of ability to perform, reliability, and intentionality of a partner, and proposed that trust has to be viewed as a behavioral intention or behavior that reflects dependence on the other partner. In addition (Morgan and Hunt, 1994) defined trust as: “the perception of confidence in the exchange partner’s reliability and integrity.” Both definitions underline the importance of confidence and reliability in the conception of trust.
Barczak in 1997 mentioned in his research that consumer motives for the adoption of Internet banking services strongly concern on the following four consumer motivational clusters:

- Trust of the System
- Legal support issues
- Instant gratification
- Hassle avoiders

### 2.1.1 Trust of the system

Trust is basically a willingness to rely on an exchange partner in whom one has confidence. Thus trust as an expectation of ability to perform, reliability, and intentionality of a partner, and proposed that trust has to be viewed as a behavioral intention or behavior that reflects dependence on the other partner (Hunt, 1994). (Turban, 2001). In his theory mentioned that customers frequently do not trust Internet Banking for three reasons:

- Security of the system.
- Reliability
- worries about the reliability (perceived risk) of Internet services
- Responsiveness
- Distrust of service providers.

From a customer perspective the issue of trust can be ensured by having the following trust elements embedded within the trust model (Chellappa, 2001):

- **Protection**, Protection can be defined as the process through which customers are satisfied that their personal information is sufficiently preserved by the entity collecting the information.
• **Verification.** The inherent lack of implicit identity verification that can be linked with an electronic transaction means that a spurious Web site could easily be created. When relating with Internet banks customers may make the mistake in the domain name, "www.Citibank.net" instead of "www.Citibank.com" or may misspell Citibank with a "y" instead of an "i" as in Citybank (Chellappa and Pavlou, 2001). There have been many instances of sites that have gained advantage from such typographical errors (Sullivan, 2000). In this sense the consumer wants verification that the accuracy of the domain name can be ascertained, proving that they are transacting with the actual Internet bank.

• **Authentication.** Authentication is defined as the process through which an Internet merchant can be established via a trusted third party that guarantees that the merchant is indeed who they say they are.

• **Non-repudiation.** Mechanisms to ensure that the client (customer) can be certain they are communicating with the genuine server (bank) or vice versa, such that neither of the communicating parties can later falsely deny that the transaction took place.

2.1.1.1 Security of the System

Strong concern about security is one common issue related to unwillingness to use Internet banking services (Madu, 2002). Security violation can lead to various problems such as destruction of operating systems, or disruption of information access (Min and Galle, 1999). Most customers are not satisfied with the infrastructure of Web security systems (Black, 2000). In Internet banking, security is one of the most important future challenges, because customers fear higher risk in using the Web for financial transactions (Cunningham, 2003).
Australian banks have an excellent record concerning security of customer information. Research indicates that Internet users are very much concerned about privacy issues including transparency, collection, use and disclosure of their personal information. This concern primarily relates to authentication. The banking and finance industries report the highest incidence of misuse being 57 percent, which is directly related to these industries having one of the highest dependencies on computers in the workplace (Hutchinson, 2000).

The Citibank breach of security six years ago is still extensively recalled in banking and security circles, since it is one of the few successful electronic bank frauds on record (Barlotta, 1999). The incident exposes hackers who penetrated Citibank's security system and progressively wired money to banks around the world. When the crime was discovered in September 1994, $10 million was gone. All but $400,000 was eventually recovered.

One of the latest security threats is a computer program known as "Nmap" which is a network exploration tool and security scanner. On execution it causes a bank's intrusion-detection system to falsely believe it is being attacked by hundreds of hackers across the globe, when it is actually just one person (Barlotta, 1999).

The security protections offered by banks and which customers anticipate should include (NOIE et al., 1999):

- Careful reference to their authorized Web sites in their publications
- Verification via the use of a digital certificate
- Evidence of security protection displayed on the screen; e.g. Padlock icon;
- Protection of PINs and passwords;
- On-screen and mouse-operated keypads for sensitive information;
- Virus protection;
- At least 128-bit encryption;
- Firewall implementation;
• Stated limits to customer liability for unauthorized use of access codes.

2.1.1.2 Reliability

Reliability involves consistency of performance and dependability. It means that the firm performs the service right the first time. It also means the firm honors its promises. Especially it involves, accuracy in billing and information, keeping records correctly, performing the service at the designated time (Zeithaml et al., 2002, McKinney et al., 2002). Reliability is associated with the technical functioning of the e-banking site, particularly the extent to which it is available and functioning properly.

2.1.1.3 Perceived risk

Perceived risk can also cause Customer to reject new Internet banking services. Perceived risk is related to reliability and system failure. Customers are also worried that technology-based service delivery systems will not work as expected, and lack confidence that problems can be solved quickly (Walker, 2002). Westland (2002) found that transaction risk occurs when online markets fail to assure that service will be delivered with adequate quality. Frequently, slow response time after the Internet interaction leads to a delay of service delivery and causes customers to be unsure that the transaction was completed (Jun and Cai, 2001).

2.1.1.4 Responsiveness

Responsiveness means willingness to help customers and provide prompt service. It involves timeliness of services that means - mailing a transaction slip immediately, calling the customer back quickly and giving prompt service (Berry et al., 1985). It basically refer to the speed of the company’s response to the customers, and measures the ability of e-tailers to provide appropriate information to customers when a problem occurs, have mechanisms for handling returns, and provide online guarantees (Zeithaml et
al, 2002). Personalized service is related to the empathy refers to the caring, individualized attention the firm provides its customers (Parasuraman et al., 1985).

2.1.1.5 Distrust of Service Providers (Privacy)

According to (Zeithaml et al., 2002), privacy is one of the important elements of system trust. It means that the customer data not to be shared and misused by the organization. According to (Jun & Cai, 2001) security is the main dimensions in Internet banking service quality. Reputation is important, as distrust of the service provider is a related factor (Jarvenpaa, 1999). Reputation can be defined as the extent to which customers believe a supplier or service provider is honest and concerned about its customers (Doney, 1997). Firms must have experience in business functions, policy, and support personnel to build reputations as competent technology-based service providers to their customers. For banks, reputation is one of the major issue that affect customer adoption of new technology-based service delivery (Aladwani, 2001). Reputation depends on policy promises to customers, including privacy policy, as most customers do not like their personal information revealed in an inappropriate manner or misused by others over the Internet (Turban, 2002). Customers who adopt electronic financial services are more likely to perceive problems related to loss of privacy, as the Internet seemingly allows other people to access their information easily (Jones, 2000). Customers do not always believe privacy policies will keep customer information confident (Cunningham, 2003).

2.2 Research Model

Based on the research question and detail study of prior research in the same field in developed countries have been identified, a suitable research model was build to guide the data collection. The purpose of this research model is to build an appropriate conceptual framework for identifying and studying deeply the issues that prevent Pakistani firms from Internet banking service adoptions. Issues to Internet banking in general have been classified various ways. The organization’s ability to use Internet technology fully is one issue which I examine here, but a great issue is about trust on the
Internet banking service and the banks that implement it. Technical/Technological is a second big issue which creates firm distrust on Internet banking service. These issues are connected to each other and can also affect each other. The following figure depicts the general research model for this study.

**Figure 2.1: General Research Model**

(Derived from prior researches done in the developed countries by Saad, 2007)

The above research model is very broad and covering all issues and factors which are associated with Internet banking services. So here I tried to make my research topic more narrow down and I discussed only those issues which are interlinked with system trust and user perception about it.
Figure 2.2: Trust of the System Research Model

Issues influence Internet banking adoption in Pakistani’s Firm

Trust of the system

Security  Reliability of transactions  Perceived risk  Slow response time  Privacy

Internet banking Services adoption and Satisfaction

(Developed for Trust of the System Issues by Saad, 2007)
2.2.1 Security

Strong concern about security is one common issue related to unwillingness to use Internet banking services (Madu, 2002). Security violation can lead to various problems such as destruction of operating systems, or disruption of information access (Min and Galle, 1999). Most customers are not satisfied with the infrastructure of Web security systems (Black, 2000). In Internet banking, security is one of the most important future challenges, because customers fear higher risk in using the Web for financial transactions (Cunningham, 2003). These security concepts vary from the respondent data which is collected through questionnaires.

2.2.2 Reliability of Transaction

Reliability concerned the consistency of performance and proper functionality of the services, technical functioning of the sites, specially the means at which the services are available and working, ability to perform the promised service dependably and accurately, accuracy in billing and information, keeping records correctly, performing the service at the designated time (Zeithaml et al., 2002, McKinney et al., 2002).

2.2.3 Perceived Risk

Perceived risk can also cause Customer to reject new Internet banking services. Perceived risk is related to reliability and system failure. Customers are also worried that technology-based service delivery systems will not work as expected, and lack confidence that problems can be solved quickly (Walker, 2002). Westland (2002) found that transaction risk occurs when online markets fail to assure that service will be delivered with adequate quality. Frequently, slow response time after the Internet interaction leads to a delay of service delivery and causes customers to be unsure that the transaction was completed (Jun and Cai, 2001).
2.2.4 Slow Response Time

Slow response time means willingness to help customers and provide prompt service. It involves timeliness of services that means - mailing a transaction slip immediately, calling the customer back quickly and giving prompt service (Berry et al., 1985). It basically refers to the speed of the company’s response to the customers, and measures the ability of e-tailers to provide appropriate information to customers when a problem occurs, have mechanisms for handling returns, and provide online guarantees (Zeithaml et al, 2002).

2.2.5 Privacy

According to (Zeithaml et al., 2002), privacy is one of the important elements of system trust. It means that the customer data not to be shared and misused by the organization. According to (Jun & Cai, 2001) security is the main dimensions in Internet banking service quality. Customers who adopt electronic financial services are more likely to perceive problems related to loss of privacy, as the Internet seemingly allows other people to access their information easily (Jones, 2000). Customers do not always believe privacy policies will keep customer information confident (Cunningham, 2003).
CHAPTER 3: METHODOLOGY

The following chapter on Methodology will describe different research methods used in this study and explain the chosen methods. It will further describe the research purpose, research approach, research strategy and data collection methods and analysis approach. Furthermore, this chapter describes the chosen sampling technique, the way the data for the study has been collected and techniques used to analyze the data. In addition, the issue of the reliability and validity of the presented study is discussed.

3.1 Research Purpose

There are several techniques which could be used to carry out the research based on research problem area. When dealing with research problem, one can use any of the three classification of research (Yin, 1994).

- Exploratory
- Explanatory
- Descriptive

3.1.1 Exploratory

Exploratory research is often conducted when problem is not well known or it has not been clearly defined as yet, or its real scope is as yet unclear. It allows the researcher to gather the information as much as possible concerning a specific problem. Exploratory research helps determine the best research design, data collection method and selection of subjects, and sometimes it even concludes that the problem does not exist. Exploratory research is quite informal, when it relying on secondary research such as reviewing available literature, data, or qualitative approaches such as informal discussions with consumers, employees, management or competitors, and more formal approaches through in-depth interviews, focus groups, projective methods, case studies or pilot studies (Yin, 1994).
3.1.2 Explanatory

This is a research type in which the primary goal is to understand the nature or mechanisms of the relationship between the independent and dependent variable. This approach is used when it’s necessary to show that one variable causes or determines the value of other variable. This research is good to use when there is no clear apprehension about what model that should be used and what qualities and relations that is important (Zikmund, 1994).

3.1.3 Descriptive

Descriptive research is used to obtain information concerning the current status of the phenomena to describe "what exists" with respect to variables or conditions in a situation. Descriptive research is used when the objective is to provide a systematic description that is as factual and accurate as possible or when the problem is well structured and there is no intention to investigate cause/effect relation. It provides the number of times something occurs, or frequency, lends itself to statistical calculations such as determining the average number of occurrences or central tendencies (Yin, 1994). One of its major limitations is that it cannot help determine what causes a specific behavior, motivation or occurrence. In other words, it cannot establish a causal research relationship between variables.

My research purpose and research question reveal that this study is mainly exploratory. It is exploratory because the data has been collected through questionnaires and conducted case study to explore the system trust issues that influence Pakistani’ firms intentions to adopt Internet banking services.

3.2 Research Approach

There are two basic types of research approaches, qualitative and quantitative. In the quantitative approach, results are based on numbers and statistics that are presented in
figures, whereas in the qualitative approach where focus lies on describing an event with the use of words.

Although research on Internet banking services adoption among Pakistani firms is not very extensive compared to discussion of the benefits, most of the concepts in this study have been occasionally examined before, but mostly in the western context. Only a little research covers usually Singapore, Hong Kong or China, which are very developed economies and not representative of all Asian countries. Thus to gain deeper understanding of the issues in the Pakistani context, this research is conducted as a qualitative study to explore the perception of internet banking among Pakistani firms. Using this approach provides richer and forensic details for exploring viewpoints in the early stage of research. Hence the aim is not to make any simplification, but instead establish a closer contact with the objectives of prior research, which intend to provide us a deeper understanding of the participants’ attitudes and perceptions. Finally my intention with this research is to describe and explore, and find complete and detailed information about the issues of Internet banking adoption among Pakistani firms, so qualitative approach is the most suitable method for my research.

3.3 Research Strategy

Research strategy is a general plan which shows that how this research will go on, and how researcher will answers the question that has been set by the researcher. It will contain clear objectives, derived from research question specify the source from which researcher intend to collect data and consider the constraints that researchers will inevitably have such as access to data, time, location and money, ethical issues (saunders, 2000).

Qualitative research can be conducted using several strategies including: case study, experiments, surveys, histories, and analysis of archival information (Yin, 1994). Following are the short description of above five research strategies:
3.3.1 Case Study

Case study refers to the collection and presentation of detailed information about a particular participant or small group. A case study is a written description of a problem or situation and typically examines the interplay of all variables in order to provide as complete an understanding of an event or situation as possible. Case study is preferred when the researcher has little control over the events, and when there is a contemporary focus within a real life context. The purpose of a case study is to place participants in the role of decision-makers, asking them to distinguish relevant from unimportant facts, to identify central alternatives among several issues competing for attention, and to formulate strategies and policy recommendations (Yin, 1994).

3.3.2 Experiments

The experimental method involves manipulating one variable to determine if changes in one variable cause changes in another variable. This method relies on controlled methods, random assignment, and the manipulation of variables to test a hypothesis. This strategy is used when the researcher need to compare two variables and examine their cause and effect relationships (Malhorta, 1996).

3.3.3 Survey

It’s a research technique in which information is collecting by interviews with a large number of respondents using a pre-designed questionnaire (Zikmund, 1994). This research technique has three important characteristics:

1. **Purpose:** The purpose of survey research is to produce quantitative descriptions of some aspects of the study population. Survey analysis may be primarily concerned either with relationships between variables, or with projecting findings descriptively to a predefined population (Yin, 1994). Survey research is a quantitative method, requiring standardized information
from and/or about the subjects being studied. The subjects studied might be individuals, groups, organizations or communities; they also might be projects, applications, or systems.

II. Procedure: The main way of collecting information is by asking people structured and predefined questions. Their answers, which might refer to themselves or some other unit of analysis, constitute the data to be analyzed (Yin, 1994).

III. Analyses: Information is generally collected about only a fraction of the study population, but it is collected in such a way as to be able to take a broad view the whole population. Usually, the sample is large enough to allow extensive statistical analyses.

3.3.4 History

This method is deals with past, and is used when no relevant persons are alive to interview or report (Yin, 1994). This method is specifically used to describe the content, structure and function of the data which collected for research.

3.3.5 Analysis of Archival Information

The purpose of this technique is to describe the incidence or prevalence of a phenomenon (Zikmund, 1994). The use of the archival information is difficult when this topic is coming research area.

The following table displays the conditions that need to be addressed when determining on a strategy.
Table 3.1: Relevant situation for different research strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Form of Research Question</th>
<th>Requires Control Over behavioral events?</th>
<th>Focus on Contemporary Events?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment</td>
<td>How, Why</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Survey</td>
<td>Who, what, where, how many, how much</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Archival analysis</td>
<td>Who, what, where, how many, how much</td>
<td>No</td>
<td>Yes/no</td>
</tr>
<tr>
<td>History</td>
<td>How, why</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Case Study</td>
<td>How, why</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

(Yin, 1994)

Most important condition for selecting research strategy is to identify the type of research question being asked. Based on the research question “what” that I set for this research, I have chosen to follow case study and survey research strategy, because this research is not dependent on a single critical, extreme, unique or revelatory case.

3.4 Sample Selection

Sampling is a survey-based research where researcher needs to analyze the sample about a population to answer the research questions or meet the research objectives (Saunders, 2000). Once the problem has been carefully defined, the researcher needs to establish the sample that will outline the investigation to be carried out. It is necessary for researcher to clearly define the target population from whom sample will be taken. Sampling is important if budget and time constraints prevent research from surveying the entire population. Sample gives higher accuracy and fast result.
Sometimes, the entire population will be sufficiently small, and the researcher can include the entire population in the study. This type of research is called a census study because data is gathered on every member of the population.

Usually, the population is too large for the researcher to attempt to survey all of its members. A small, but carefully chosen sample can be used to represent the population. The sample reflects the characteristics of the population from which it is drawn.

Sampling technique can be classified into two types (Saunders, 2000):

- Probability Sampling
- Non-Probability Sampling

### 3.4.1 Probability sampling

In probability sampling, the sample is selected in such a way that each unit within the population has a known chance of being selected. It is this concept of "known chance" that allows for the statistical projection of characteristics based on the sample to the population (Saunders, 2000). The advantage of probability sampling is that sampling error can be calculated. Sampling error is the degree to which a sample might differ from the population. Probability method includes:

- Random sampling
- Systematic sampling
- Stratified sampling

### 3.4.2 Non-Probability Sampling

In non-probability sampling, the sample is selected in such a way that the chance of being selected of each unit within the population is unknown. Indeed, the selection of the
subjects is random or subjective, since the researcher relies on his/her experience and judgment. As a result, there are no statistical techniques that allow for the measurement of sampling error, and the degree to which the sample differs from the population remains unknown and therefore it is not appropriate to project the sample characteristics to the population (Saunders, 2000). Non-probability includes:

- Convenience sampling
- Judgment sampling
- Quota sampling
- Snowball sampling

### 3.4.2.1 Convenience sampling

Convenience sampling is used in exploratory research where the researcher is interested in getting an inexpensive approximation of the truth. As the name implies, the sample is selected because they are convenient. This non-probability method is often used during preliminary research efforts to get a gross estimate of the results, without incurring the cost or time required to select a random sample (Saunders, 2000).

### 3.4.2.2 Judgment sampling

Judgment sampling is a common non-probability method. The researcher selects the sample based on judgment. This is usually and extension of convenience sampling. For example, a researcher may decide to draw the entire sample from one "representative" city, even though the population includes all cities. When using this method, the researcher must be confident that the chosen sample is truly representative of the entire population (Saunders, 2000).
3.4.2.3 Quota sampling

Quota sampling is the non-probability equivalent of stratified sampling. Like stratified sampling, the researcher first identifies the strata and their proportions as they are represented in the population. Then convenience or judgment sampling is used to select the required number of subjects from each stratum. This differs from stratified sampling, where the strata are filled by random sampling (Saunders, 2000).

3.4.2.4 Snowball sampling

Snowball sampling is a special non-probability method used when the desired sample characteristic is exceptional. It may be extremely difficult or unaffordable to locate respondents in these situations. Snowball sampling relies on referrals from initial subjects to generate additional subjects. While this technique can dramatically lower search costs, it comes at the expense of introducing bias because the technique itself reduces the likelihood that the sample will represent a good cross section from the population (Saunders, 2000).

Sampling in qualitative research involves two actions; (Miles and Huberman 1994):

- **Setting of boundaries**: “To define aspects of cases that we can study and connecting it directly to the research question”.
- **Creation of frame**: “to help us uncover, confirm, or qualify the basic process or constructs that strengthen our study”

Non-probability (convenience) sampling has been chosen for this research because I targeted three groups of firms:

- Private firms
- Public firms
- Government firms
In this research all Pakistani firms (companies) are the total population, and three of them have been chosen as case studies, they are Indus Media Group (private), Unilever Pakistan (public), and Pakistan International Airlines (government). These firms are chosen based on research question and are situated in the same city Karachi. Furthermore, they have similar goals while selling their products and services.

3.5 Data Collection Methods

As data collection method is highly influenced by the methodology, which is chosen (Saunders and Thornhill, 2000), case-studies and questionnaire are used to collect the empirical data for this research in order to identify the issues that affect the adoption of Internet banking services in Pakistani firms.

As this research’s main concern is examining the issues that have influence on the adoption process of Internet banking by Pakistani firms, the questionnaire are designed based on the requirements for adopting such a service.

After consulting with Indus Media Group, Unilever Pakistan and Pakistan International Airlines some modifications and adjustments were done. A pilot test was conducted among 63 employees (CEO, President, Director, Branch Officer, Manager and Supervisor etc.) of these firms to ensure that the questionnaires were appropriate and the statements were generally understandable for each firm administration.

3.6 Questionnaire

The questionnaire consists of seven pages and three sections (Appendix A). The first section gathers company information such as introduction, business, interaction with banks and etc.
The second section is about the bank services which the company is currently using it. Section three asks the respondents attitudes toward the internet banking services and theirs satisfaction level regarding traditional banking system.

### 3.7 Validity and Reliability

In order to reduce the possibility of getting incorrect answers, attention needs to be paid to validity and reliability (Saunders et al., 2003).

#### 3.7.1 Validity

Validity is concerned with whether the findings are really about what they appear to be about (Saunders et al., 2003). Validity defined as the extent to which data collection method or methods accurately measure what they were intended to measure (Saunders et al., 2003). Yin (1994) states, “no single source has a complete advantage over all others” (P.85). The different sources are highly complementary, and a good case study should use as many sources as possible. The validity of a scientific study increases by using various sources of evidence (Yin, 1994).

The following steps were taken to ensure the validity of this research:

1. The needed data was collected in the format of a structured questionnaire that had been designed based on the literature related to adoption of innovation.

2. After translating the questionnaire into Urdu language, in order to make sure that the measurement scales were adapted appropriately, company administration and experts had given their views about Internet banking services.

The questionnaires were pre-tested. A pilot test was conducted with the questionnaire then sent to the head offices of selected three different firms.
3.7.2 Reliability

According to Saunders et al. (2003), reliability refers to the degree to which data collection method or methods will yield consistent findings, similar observations would be made or conclusions reached by other researchers or there is transparency in how sense was made from the raw data. Reliability can be assessed by the following three questions:

1. Will the measure yield the same results on other occasions?
2. Will other observers reach similar observation?
3. Is there transparency in how sense was made from the raw data?

The role of reliability is to minimize the errors and biases in a study (Yin (1994). This means that reliability is to demonstrate that the operations of the study, such as the data collection procedures, can be repeated with the same result. Saunders et al. (2003) asserts that there may be four threats to reliability. The first of these is subject of participant error, which means that a questionnaire may generate a different result at different times of the week. The second threat to reliability is subject or participant bias, which is when interviewees may have been saying what they thought their bosses, wanted them to say. Third, there may have been observer error that different interviewer may approach the questions in different ways. Finally, there may have been observer bias, which means that there may have been different approaches to interpreting the replies.

The work with this thesis started with a considerable literature study. The literature I came across (mainly articles) was from several authors and often had Internet banking and adoption of e-banking topics, which meant that I covered the area of Internet banking surroundings. This would suggest that bias, form reading only one author and reading only about one topic, be held at a minimum level. Widersheim-Paul and Eriksson (1997) describe some other erroneous belief that is to be avoided in order to attain high reliability. One of these is measuring error, which in turn consists of respondent errors,
gauging errors and errors that are effect of interplay between the interviewer and the respondent. As I used a questionnaire, this latter error was avoided in advance.

The respondent errors are such errors that are due to the fact that respondents sometimes are unable or unwilling to provide truthful answers. In order to minimize effects of this kind of errors, I found it necessary to be careful about the language and the wording.

Furthermore, the use of wording in the questionnaire was of major concern to avoid ambiguous or emotional charged formulations. The chosen wording and language was simple, direct and as far as possible without technical terms.

The gauging errors arise when a questionnaire entails erroneously formulated question, wrong order of question etceteras (Widersheim-Paul and Eriksson, 1997). The order of the questions was also subject to analysis and it was found to be suitable to have a disposition where the initial questioning concerned facts that the respondents easily could give an answer to.

Numbers of different steps were taken to ensure the reliability of the study:

- Case studies were used during the data collection.
- The same type of questions were asked from company’s respondent in order to increase the reliability
- Since the generalization is not the purpose of the study, multiple cases have been used to increase the degree to which the findings can be the same. It might be possible to get the same result on the findings to a larger number of similar cases.
- The theories that have been selected for the study were clearly described and research questions have been formulated based on the previous theory. Data has been collected based on the research model that was drawn from the discussed theories. The objective is to make sure that if another investigator will follow the same procedures and used the same case study objects, the same conclusions would be made.
3.7.3 Study

A pilot test of the questionnaire was carried out. All the test respondents filled in the questionnaire and their opinions how they felt about filling in the questionnaire. The test was followed by many revisions, before it was sent to respondents. However, once came up with the first draft of questionnaire, I sent out 6 questionnaires to the administration of PIA, and asked them whether all questions made sense and easy to understand. After refining some questions and items within the questions, the second pilot study was run with 12 staff’s member of IMG and UPL, and asked them to check for the wording, coverage, relevancy of the items listed within the questions. Finally, at this stage little modifications were needed and finally, the well-improved questionnaire was developed. By using these tools (reliability, validity and pilot study) I can further analyze the data that the respondents provided me in a more accurate way.

3.8 Data Analysis

Data analysis can be defined “as consisting of three concurrent flows of activity: data reduction, data display and conclusion drawing/verification” (p.10) by Miles & Huberman (1994). Data reduction should not be considered to be separate from analysis, but a part of it. Data reduction stage of the analysis helps the researcher to make the data sharpen, sorted, focused, discarded, and organized in order to be able to draw and verify conclusion (ibid.).

The data reduction stage of the analysis helps the researcher to make the data sharp, sorted, focused, discarded, and organized in order to be able to draw and verify conclusions. The data display is a way to organize and compress the reduced data so that it will make it easier to draw conclusions. This phase is useful when the researcher studies more than one case, a so-called multiple case. In the conclusion drawing and verification the researcher notes regularities, patterns, explanations, possible configurations, casual flows and propositions.
Data analysis involves examining, categorizing, tabulating or otherwise recombining the collected data (Yin, 1994). Every investigation should have a general analytical strategy in order to determine what to analyze and why. Two general strategies are suggested. The researcher can either follow the theoretical propositions that led to the case study or develop a descriptive framework to organize the case study. Within these strategies, there are four different techniques for analyzing the collected data. The first is pattern matching, which means to compare an empirical based pattern with a predictable one. The second technique is explanation building, which refers to a kind of pattern matching where the goal is to analyze the case study data by building an explanation about the case. The third is time-series analysis that refers to repeated measures of the dependent variable/variables in order to look at changes over time. The last technique is to use program logic models, which is a combination of pattern-matching and time-series analysis where the analysis specifies a complex chain of patterns over time.

Data analysis of this thesis is based on the three steps defined by Miles & Huberman (1994) i.e., data reduction, data display and conclusion. After completing the data collection I have organized the data for every case study based on the issues that has been selected from research model according to the research question and literature review. Within-case analysis I compared the findings of each case based on my research question and issues that selected from research model. Furthermore, I conducted a cross-case analysis to compare the different case study in order to find the resemblance and variation between the cases.
CHAPTER 4: DATA COLLECTION

In this chapter I will present the data collected from the questionnaire and documents on three selected case studies. The companies are Pakistan International Airline (PIA), Indus Media Group and Unilever Pakistan Ltd located in Karachi, Pakistan. PIA is a Government company, IMG is private company and UPL is public company, and all of them offer their products and services in Pakistani market. The data presentation follows the research model and the questionnaires used during the telephonic conversation with these companies.

4.1 General Overview

To fulfill the objectives of this research, I conducted a survey (or field study) on the Pakistani’s Firm. As I discussed in Chapter 3 that questionnaires were designed for data collection, or in other words as a data collection instrument. The questionnaires were printed and distributed in 18 copies by registered mail to the head offices of the three companies (PIA, IMG and UPL) and fifteen branch offices. The chief (CEO, vice-president, directors, head and supervisors) and experts in the central office (head office) were targeted to fill in the questionnaire. The time for investigation was 1st to 25th February 2007. I got five complete answers and seven incomplete answers, so the total response rate of this survey remains 12 answers, which is almost 75 per cent. A response rate of 75% is high for this kind of investigation, which creates a foundation of getting reliable answers. As I mentioned before that my target is to get data from the higher management, so in this study I am presenting only the three respondents data. These three respondents belong to the top management of the firms and answered all the questions with in-depth detail and specifications.
4.2 Case 1: Pakistan International Airline (PIA).

Business concept

Pakistan International Airlines, as a symbol of National pride, should be a choice airline operating profitably on modern commercial concepts, capable of competing with the best in its entire International and Domestic markets consistently exceeding customer expectations. It should be a choice employer deploying modern technology in all spheres of its activities.

Brief history of the Firm

Pakistan International Airlines (also referred to as PIA), is the national flag carrier of Pakistan and the national airline operating passenger and cargo services around the world whose government owns 85 percent of its shares. Its main head office is in Karachi and branch offices in Lahore, Islamabad, Peshawar and Quatta. PIA's route network stretches to Asia, the Middle East, Africa, Europe, and North America. It connects 35 cities within Pakistan. Six million people flew the airline in 2000, when passenger traffic accounted for 85 percent of revenues. Engineering and charter services accounted for nine percent. PIA also conducts some contract work for aerospace manufacturers.

Pakistan International Airlines (PIA) has several firsts to its credit. It is the first Asian airline to operate a pure jet aircraft; first non-communist airline to fly to the People’s Republic of China; first airline in Asia to induct Boeing 737-300 aircraft in its fleet; first airline in the world to operate scheduled helicopter services; first airline in the world to fly to Tashkent; and the first airline in the world to start Air Safari with Jet Aircraft.

Presently, PIA flies to 70 destinations around the world. In India, Pakistan International Airlines flies to Delhi and Mumbai.
4.2.1 Respondent A
The first case study was conducted through a detail questionnaire with the respondent Nasim Ejaz who is working as Manager Finance in the finance division of PIA at Karachi. Here Mr. Ejaz is identified as respondent A. He is 38 years old. He has been working in Pakistan International Airline more than eight years. He is responsible for all kind of transaction and interaction regarding finance with other branch offices and with the banks.

4.2.1.1 Adoption issues of Internet banking services in Pakistani’ Firms.

Data will be presented here according to the research questions and the variables identified in the Research Model.

4.2.1.1.1 Security

Regarding the issue of security in Internet banking, he mentioned that transaction security is the most important element in Internet banking. Furthermore, he explained that proper completion of the transaction from the beginning to end is the most important service quality for Internet banking users. Unfortunately respondent faced problem so many times during a payment process and he has to start the whole process from the beginning which is inconvenient. This kind of problem creates a lot of tension whether the incomplete transaction has any effect on the account balance. So he has to check again if the account balance is ok or not. It wastes a lot of time and create mental uncertainty.

He is less satisfied about the security feature of Internet bank services that he is getting from his bank regarding Internet-transaction. According to respondent, “Internet-transactions are not instantaneous, and I have to wait up to a day for transaction to complete, which is inconvenient”. Due to this insecurity reason he cannot use other services such as investment, buying stock over the Internet.
4.2.1.1.2 Reliability of Transaction

Regarding the *reliability* issue, he thinks banking service over the Internet is quite unreliable in Pakistan. He found the bank site were down for a couple of hours and some time whole day too. He mentioned that one can’t rely on the appropriate functioning of the website. The banks sites mostly remain down due to low internet speed and software problems. He also experienced so many time with banks sites freezes when he put all the information in. Most of the time he has to scratch several one time codes for single transaction, which have a very negative effect on him. All the links within the banks sites are not working properly and he can’t download pages in a very short time. He mentioned that some of the information provided on the banks sites is not accurate for serving his purpose. Since the whole sites are in English and some of the firm employee are not able to brows for much additional information. So he is not satisfied with the proper functioning of the bank’s site.

He thinks proper functioning of the bank’s site is very important to increase the reputation of the bank. From his point of view the website should not freeze or have any problem connecting to database once all the information has been put in. putting in the same information twice creates a lot of annoyance and confusion.

4.2.1.1.3 Perceived Risk

Regarding the risk issue, respondent mentioned that risk perception in Internet banking services is high. He mentioned that many senior banks’ managers do not fully understand the strategic and technical aspects of Internet banking services, so very few banks administration have the skills to manage Internet banking services. Furthermore, there is high level of transaction risk exist with Internet banking service in Pakistan, due to lack of sophisticated internal controls and constant availability. He said that there is lack of consummate transactions (straight-through processing) in Pakistani banks which increase compliance risk. He said that there are a lot of other risks associated with Internet
banking services, but it vary from user to user like credit risk, interest rate risk, liquidity risk, price risk, foreign exchange risk etc.

### 4.2.1.1.4 Slow Response Time

Regarding the issue of *responsiveness* of the banks sites, respondent faced many problems while using service (bill payment and money transfer) over the Internet. Very few times he did successful transaction of bill payment over internet, and then he contacted the bank support team by e-mail and phone to confirm the transaction. Once he talked to the bank’s employee in person about the stock investment but the employee was not much interested in providing him advice. He just gives him some brochures instead of taking the effort to explain, which created a negative impression on him as a customer. According to him “personal services is somewhat lacking and they are not willing to give advice to all the people”.

From his point of view regarding increasing responsiveness of the bank over the Internet, he suggested the bank should provide live support over the Internet instead of e-mails and phone calls. The e-mail responses are not fast enough and phone calls are expensive. So chatting with the personnel over the Internet may be easier to solve the problem.

### 4.2.1.1.5 Privacy

Regarding the *privacy* issue, he mentioned bank’s site use cookies to collect information over the Internet, due to which people don’t feel comfortable with the Internet banking technology. He is worry about misuse of his personal information and afraid to use his credit card number. He thinks the bank’s sites are not fully secure for him and he can’t rely on the bank. From his point of view a section for assuring customers about privacy measures taken rather than just a privacy statement would be appreciated.
4.3 Case 2: Indus Media Group (IMG).

Business concept

Indus media group (IMG) owns and operates Indus TV network (private) limited and the Indus brand of television channels in various global markets. IMG prides itself with launching Pakistan’s first independent satellite channel pioneering the new face of Pakistani electronic media.

Brief history of the Firm

INDUS MEDIA GROUP (IMG) owns and operates INDUS TV NETWORK (PRIVATE) LIMITED and the INDUS brand of television channels in various global markets. IMG prides itself with launching Pakistan’s first independent satellite channel pioneering the new face of Pakistani electronic media. IMG entered the Pakistani market in 2000 with the launch of its flagship channel and have four famous brands.

- INDUS VISION
- INDUS MUSIC
- INDUS
- CHANNEL

IMG’s in-house production teams continue to take bold initiatives by identifying niches and developing programming for underserved broadcast market segments. INDUS FOODS and INDUS CHOTU (KIDS), daily programming segments of INDUS VISION, are such initiatives that have had a terrific response from viewers and advertisers.

Over the years IMG has partnered with the best distributors to expand reach to major markets in Asia, Africa, Australia, Europe, Middle East, and North America. In the future, IMG plans to leverage evolving distribution platforms to expand distribution and reach to Urdu language viewers the world over.
4.3.1 Respondent B

This case study was conducted through questionnaire with Mr. Ghazanfar Ali who is working as a CEO in Indus TV network at Karachi, Pakistan. He is 41 years old and serving Indus Media group from the last 5 years. Here I have identified Mr. Ghazanfar Ali as a respondent B.

4.3.1.1 Adoption issues of Internet banking services in Pakistani’ Firms.

Here I am presenting the data according to my research questions and the factors that I identified in the research model.

4.3.1.1 Security

Regarding the issue of security of Internet bank service, the respondent mentioned that login time and logout time in some bank’s sites take couple of minutes, which increase the opportunity for hackers to theft the user ID and PIN code. He is unhappy with that, because some time it creates a serious problem which is a mental tension for him. So he thinks that this kind of drawback makes the security feature weak in Internet banking services. In that case he thinks that traditional banking is more secure that Internet banking.

4.3.1.2 Reliability of Transactions

Regarding the matter of reliability, Mr. Ghazanfar Ali thinks that Internet banking service is not reliable. He can rarely rely on the appropriate functioning of the web pages of banks. The bank’s sites are always down and running very slow. Mostly whenever he pays bill or performs some other work the bank sites creates problems during transaction. He also pointed that some time when he put all the information for transaction purpose the bank site become froze which is very frustrated for him. Every link of the web page
not works properly. Information that is provided by the bank’s site is appropriate but not sufficient. He is not happy with downloading time of the page.

4.3.1.1.3 Perceived Risk

Regarding the issue of perceived risk in Internet banking service, the respondent mentioned that risk factor is very important while doing Internet banking, because it need bank’s management high attention to overcome on this issue. So risk issue is most important issue for him and he is not fully satisfied with that, because couple of times some thing happened wrong with him, while he was making transaction over Internet. He mentioned that this kind of fluctuation increase the degree of risk in Internet banking service.

4.3.1.1.4 Slow Response Time

Regarding response time of the bank’s site he is unhappy with the unhelpful behavior of the bank personnel, because sometimes he has to take some advice regarding stock investment, loans and selling his stock shares. He faced problems so many times while doing Internet banking, and then he need to talk the bank’s management to confirm the transaction. When he needs to borrow some money or need to do insurance, he must talks to an employee of the bank, since in that case he prefers that there should be a direct link in the web page to facilitate a user rather than to contact with the employee. He mentioned that there is a lack of an online customer service representative in the bank’s site.

4.3.1.1.5 Privacy

Regarding the privacy of the bank he hopes that the bank will not misuse his personal information and credit card number. He is very careful about the banks whenever they need to collect his personal information, because once he has a bad experience in traditional banking system. He has been using Internet banking service from last one
year, but he doesn’t have a good image about it. So he has not a full trust on the activity of the banks.

4.4 Case 3: Unilever Pakistan Ltd (UPL).

Business concept

Unilever is one of the world's leading oldest and largest multinationals companies doing business all over the world by providing quality products and superior service to their customers, while learning from customer’s feedback to set even higher standards for Unilever products

Brief history of the Firm

Unilever was created in 1930 by the merger of British soapmaker Lever Brothers and Dutch margarine producer Margarine Unie, a logical merger as palm oil was a major raw material for both margarines and soaps and could be imported more efficiently in larger quantities.

The Unilever Pakistan Limited (UPL), formerly Lever Brothers Pakistan Limited was established in Pakistan in 1958. The town of Rahimyar Khan was the site chosen for setting up a vegetable oil factory. Unilever Pakistan is the largest FMCG company in Pakistan, as well as one of the largest multinationals operating in the country. The company operates through 4 regional offices, as well as 4 wholly owned and 6 third party manufacturing sites across Pakistan. Now operating six factories at different locations around the country. The Unilever's Head Office was shifted to Karachi from the Rahimyar Khan site in the mid 60's.

Since the time Unilever Pakistan began its operations in 1948, the Company has been closely connected to the Pakistani people and its brands have been an integral feature in
their daily lives. In fact, the nature of our business enables our brands to be the pulse and heartbeat of the 155 million people in Pakistan.

Today, Unilever Pakistan is a force to reckon with. Its contribution to Pakistan's economic development cannot be overestimated. Now operating six factories at different locations around the country, the company contributes a significant proportion of the country's taxes. It employs a large number of local managers and workers. It provides a pool of well-trained and highly motivated manpower to other segments and has introduced new and innovative technologies into the country.

The company had a turnover of Rs. 18.2 bn (Euro 329 mn) in 2004, and enjoys a leading position in most of its core Home and Personal Care and Foods categories, e.g. Personal Wash, Personal Care, Laundry, Beverages (Tea) and Ice Cream.

4.4.1 Respondent C

The third case study was conducted through a detail questionnaire with Mr. Shakeel Ahmed Durrani, who is working as a financial advisor in Unilever Pakistan Ltd at Karachi head office, Pakistan. He is 47 years old and associated with UPL from last 12 years. Here I have identified Mr. Shakeel as a respondent C.

4.4.1.1 Adoption issues of Internet banking services in Pakistani’ Firms.

Here I will be present the data according to the research question and the issues identified in the research model.

4.4.1.1.1 Security

Regarding the security issue in Internet banking services, respondent mentioned that security is the utmost concern for him because the insecure web sites or transactions some time pose serious problems. Additionally, the respondent thinks that rapid change
in Internet banking sites and slow running weak the bank’s user security. He mentioned that some bank’s sites just need user ID number and one-time password. No further confirmation is employed, which make the payment not so safety. He added that these bank’s sites should take second time password confirmation to make the payment reliable and in safe way. Finally the respondent added that one thing is inconvenient in some Internet banking sites to keep all the one time used code in safe till next transaction which is the main drawback of security feature in Internet banking service.

4.4.1.1.2 Reliability of Transaction

Regarding the reliability of transaction issue he mentioned he is not getting services according to his expectations. He is not satisfied with the Internet banking services. He can’t rely on bank’s website because some time its malfunctioning. He said that if any mistakes happen when he makes transactions, then he is not sure that bank’s staff will respond him on time and will take care of his secure transaction. He doesn’t have a good image about Internet banking. He said that Internet banking is not that much trustworthy as compared to traditional banking. According to respondent proper delivery of the services and keeping their promises is important to measure reliability.

4.4.1.1.3 Perceived Risk

Regarding perceived risk issue, respondent mentioned that there is high degree risk is associated with Internet banking services. He said that bank’s software is not working properly which increase the risk factor. He also mentioned that there is a time delay between login time and user main page display which create uncertainty. He said that Perceived risk can also cause customers to reject new technology-based service delivery because perceived risk is related to reliability and system failure. Furthermore, he said that new Internet banking service delivery systems is not working according to his expectation. He said that in Internet banking system if unauthorized personnel successes in theft of your ID and password by chance, then there are great financial risk. He said
that he prefer to use traditional systems, because Internet banking is not secure enough for financial functions that need elaborate procedures.

4.4.1.4 Slow Response Time

Regarding how responsive is the bank in delivering its services to the respondent; he mentioned that responsiveness is more significant for him. He never got a proper and satisfactory response on phones from the bank’s customer representative, so he must go to the branch of bank which is time consuming for him. He mentioned that I prefer solve to problems by phone calls or email in friendly environment to remove my dissatisfaction instead of visiting bank branch office. In his point of view, personal contacts with a live person were important only in traditional banking system. He said that if we need to follow the same procedure in Internet banking environment then I think electronic banking lose its meaning and aim.

4.4.1.5 Privacy

Regarding privacy issues, the respondent began by saying he trusted on traditional banking system rather than Intent banking, because in traditional system at least you don’t need to worry that bank will disclose your privacy. But in Internet banking environment you always remain conscience about banner ads with cookies that may be collect your personal information. Furthermore he added privacy is most significant for him. He mentioned that: “I don’t want my personal information misused by other people or organization.” He added that bank’s sites are not secure for credit card information.
CHAPTER 5: DATA ANALYSIS

In this chapter data will be analyzed and presented according to the mentioned methodology. At first, within-case analysis of three cases will be presented, in which each of the three cases will be compared with theories. Secondly, across-case analysis will be executed to compare and analyze the three cases together to find the resemblances and variations.

5.1 Within Case Analysis: Pakistan International Airline (PIA)

In this part, the data collected from Respondent A which is presented in chapter four will be analyzed and compared with the previous researches in literature chapter two. The analysis will be presented in the order of the research questions.

5.1.1 Respondent A

The first case study was conducted with the respondent A (Mr. Nasim Ejaz) who is working as Manager Finance in the finance division of PIA at Karachi.

5.1.1.1 Security

Strong concern about security is one common issue related to unwillingness to use Internet banking services (Madu, 2002). Security violation can lead to various problems such as destruction of operating systems, or disruption of information access (Min and Galle, 1999). Most customers are not satisfied with the infrastructure of Web security systems (Black, 2000). In Internet banking, security is one of the most important future challenges, because customers fear higher risk in using the Web for financial transactions (Cunningham, 2003). These concepts of security fluctuate with the empirical data collected from respondent A.

According to respondent A, security is most important for him in Internet banking system. He mentioned that proper completion of the transaction from the beginning to end is the most important service quality for Internet banking users. Respondent faced
problem so many times during a payment process and he has to start the whole process from the beginning which is inconvenient and creates a lot of tension for him that whether the incomplete transaction has any effect on the account balance or not. He is less satisfied about the security feature of Internet bank services that he is getting from his bank regarding Internet-transaction. According to respondent, Internet-transactions are not instantaneous, and he has to wait up to a day for transaction to complete, which is inconvenient. Due to this insecurity reason he cannot use other services such as investment, buying stock over the Internet.

5.1.1.2 Reliability of Transaction

Reliability concerned the consistency of performance and proper functionality of the services, technical functioning of the sites, specially the means at which the services are available and working, ability to perform the promised service dependably and accurately, accuracy in billing and information, keeping records correctly, performing the service at the designated time (Zeithaml et al., 2002, McKinney et al., 2002). These concepts of reliability fluctuate with the collected data from respondent A.

According to the respondent A as Manager Finance of PIA, Internet banking service in Pakistan is totally unreliable, bank’s websites always remain down and mostly it’s malfunctioning. He also experienced so many time with banks sites freezes when he put all the information in for transaction purpose. He mentioned that all the links within the banks sites are not working properly and he can’t download pages easily. He mentioned that some of the information provided on the banks sites is not accurate for serving his purpose. Since the whole sites are in English and some of the firm employee are not able to brows for much additional information. So he is not satisfied with the proper functioning of the bank’s site.
5.1.1.3 Perceived risk

Perceived risk can also cause Customer to reject new Internet banking services. Perceived risk is related to reliability and system failure. Customers are also worried that technology-based service delivery systems will not work as expected, and lack confidence that problems can be solved quickly (Walker, 2002). Westland (2002) found that transaction risk occurs when online markets fail to assure that service will be delivered with adequate quality. Frequently, slow response time after the Internet interaction leads to a delay of service delivery and causes customers to be unsure that the transaction was completed (Jun and Cai, 2001). These theories of perceived risk are differing from the data collected from respondent A.

According to respondent A, the risk perception in Internet banking services is high. He mentioned that many senior banks’ managers do not fully understand the strategic and technical aspects of Internet banking services, so very few banks administration have the skills to manage Internet banking services. Furthermore, there is high level of transaction risk exist with Internet banking service in Pakistan, due to lack of sophisticated internal controls and constant availability. He said that there is lack of consummate transactions (straight-through processing) in Pakistani banks which increase compliance risk. He said that there are a lot of other risks associated with Internet banking services, but it vary from user to user like credit risk, interest rate risk, liquidity risk, price risk, foreign exchange risk etc.

5.1.1.4 Slow Response Time

Responsiveness means willingness to help customers and provide prompt service. It involves timeliness of services that means - mailing a transaction slip immediately, calling the customer back quickly and giving prompt service (Berry et al., 1985). it basically refer to the speed of the company’s response to the customers, and measures the ability of e-tailers to provide appropriate information to customers when a problem occurs, have mechanisms for handling returns, and provide online guarantees (Zethaml et
al, 2002). These theories of responsiveness differ from the data that I collected through questionnaire from respondent A.

According to respondent A there is a big gap of communication between bank’s customer representative and users. He mentioned that so many times he got technical problem during bills payment over internet, and then he tried to contact the bank’s customer support team for help, but he didn’t get satisfactory guidelines on time. There is no live customer support. He mentioned that bank’s personal services is somewhat lacking and they are not willing to give advice to all the people. Personalized service is related to the empathy refers to the caring, individualized attention the firm provides its customers (Parasuraman et al., 1985). From respondent point of view bank should increase the means of response and build a strong communication network over Internet, he suggested the bank should provide live support over the Internet instead of e-mails and phone calls. The e-mail responses are not fast enough and phone calls are expensive. So chatting with the personnel over the Internet may be easier to solve the problem.

5.1.1.5 Privacy

According to (Zeithaml et al., 2002), privacy is one of the important elements of system trust. It means that the customer data not to be shared and misused by the organization. According to (Jun & Cai, 2001) security is the main dimensions in Internet banking service quality. Customers who adopt electronic financial services are more likely to perceive problems related to loss of privacy, as the Internet seemingly allows other people to access their information easily (Jones, 2000). Customers do not always believe privacy policies will keep customer information confident (Cunningham, 2003).

According to respondent A, privacy and information transaction safety are the two criteria to measure the service security of Internet banking. He mentioned that the bank’s use cookies to collect customer personal information over internet due to which people don’t feel comfortable with the Internet banking technology. He is worry about misuse of his personal information and afraid to use his credit card number. He thinks the bank’s
sites are not fully secure for him and he can’t rely on the bank. From his point of view a section for assuring customers about privacy measures taken rather than just a privacy statement would be appreciated.

5.2 Within Case Analysis: Indus Media Group (IMG)

In this part, the data collected from Respondent B which is presented in chapter four will be analyzed and compared with the previous researches in literature chapter two. The analysis will be presented in the order of the research questions.

5.2.1 Respondent B

This case study was conducted with the respondent B (Mr. Ghazanfar Ali) who is working as a CEO in Indus TV network at Karachi, Pakistan.

5.2.1.1 Security

Strong concern about security is one common issue related to unwillingness to use Internet banking services (Madu, 2002). Security violation can lead to various problems such as destruction of operating systems, or disruption of information access (Min and Galle, 1999). Most customers are not satisfied with the infrastructure of Web security systems (Black, 2000). In Internet banking, security is one of the most important future challenges, because customers fear higher risk in using the Web for financial transactions (Cunningham, 2003). These theories of security differ from the data which is collected from respondent B.

According to respondent B, security is the main thing in Internet banking system. He mentioned that login time and logout time in some bank’s sites take couple of minutes, which increase the opportunity for hackers to theft the user ID and PIN code. He is unhappy with that, because some time it creates a serious problem which is a mental tension for him. So he thinks that this kind of drawback makes the security feature weak in Internet banking services. In that case he thinks that traditional banking is more secure that Internet banking.
5.2.1.2 Reliability of Transaction

Reliability concerned the consistency of performance and proper functionality of the services, technical functioning of the sites, specially the means at which the services are available and working, ability to perform the promised service dependably and accurately, accuracy in billing and information, keeping records correctly, performing the service at the designated time (Zeithaml et al., 2002, McKinney et al., 2002). These concepts of reliability fluctuate with the collected data from respondent B.

According to respondent B, Internet banking service is not reliable. He can rarely rely on the appropriate functioning of the web pages of banks. The bank’s sites are always down and running very slow. Mostly whenever he pays bill or performs some other work the bank sites creates problems during transaction. He also pointed that some time when he put all the information for transaction purpose the bank site become froze which is very frustrated for him. Every link of the web page not works properly. Information that is provided by the bank’s site is appropriate but not sufficient. He is not happy with downloading time of the page.

5.2.1.3 Perceived Risk

Perceived risk can also cause Customer to reject new Internet banking services. Perceived risk is related to reliability and system failure. Customers are also worried that technology-based service delivery systems will not work as expected, and lack confidence that problems can be solved quickly (Walker, 2002). Westland (2002) found that transaction risk occurs when online markets fail to assure that service will be delivered with adequate quality. Frequently, slow response time after the Internet interaction leads to a delay of service delivery and causes customers to be unsure that the transaction was completed (Jun and Cai, 2001). The above concepts of perceived risk are differing from the empirical data collected from respondent B.
According to respondent B, the risk issue is high in Pakistan’s e-banking sector due to lack of management and experience, because it’s totally a new technology implementers and adopters. He mentioned that risk issue is most important issue for him and he is not fully satisfied with that, because couple of times some thing happened wrong with him, while he was making transaction over Internet. He mentioned that this kind of fluctuation increase the degree of risk in Internet banking service.

5.2.1.4 Slow Response Time

Responsiveness means willingness to help customers and provide prompt service. It involves timeliness of services that means - mailing a transaction slip immediately, calling the customer back quickly and giving prompt service (Berry et al., 1985). it basically refer to the speed of the company’s response to the customers, and measures the ability of e-tailers to provide appropriate information to customers when a problem occurs, have mechanisms for handling returns, and provide online guarantees (Zethaml et al, 2002). These theories of responsiveness differ from the data that I collected through questionnaire from respondent B

According to respondent B, he is unhappy with the response time of bank’s sites and bank customer support team, because sometimes he has to take some advice regarding stock investment, loans and selling his stock shares, but he never got a prompt response from bank management. He faced problems so many times while doing Internet banking, and then he need to talk the bank’s management to confirm the transaction. When he needs to borrow some money or need to do insurance, he must talks to an employee of the bank, since in that case he prefers that there should be a direct link in the web page to facilitate a user rather than to contact with the employee. He mentioned that there is a lack of an online customer service representative in the bank’s site.
5.2.1.5 Privacy

According to (Zeithaml et al., 2002), privacy is one of the important elements of system
trust. It means that the customer data not to be shared and misused by the organization.
According to (Jun & Cai, 2001) security is the main dimensions in Internet banking
service quality. Customers who adopt electronic financial services are more likely to
perceive problems related to loss of privacy, as the Internet seemingly allows other
people to access their information easily (Jones, 2000). Customers do not always believe
privacy policies will keep customer information confident (Cunningham, 2003). The
empirical data that I collected from respondent B collapse with the above concept of
privacy.

According to respondent B, that he can only hopes that the bank will not misuse his
personal information and credit card number. He is very careful about the banks
whenever they need to collect his personal information, because once he has a bad
experience in traditional banking system. He has been using Internet banking service
from last one year, but he doesn’t have a good image about it. So he has not a full trust on
the activity of the banks.

5.3 Within Case Analysis: Unilever Pakistan Ltd (UPL)

In this part, the data collected from Respondent C which is presented in chapter four will
be analyzed and compared with the previous researches in literature chapter two. The
analysis will be presented in the order of the research questions.

5.3.1 Respondent C

This case study was conducted with respondent C (Mr. Shakeel Ahmed Durrani), who is
working as a financial advisor in Unilever Pakistan Ltd at Karachi head office, Pakistan.
5.3.1.1 Security

Strong concern about security is one common issue related to unwillingness to use Internet banking services (Madu, 2002). Security violation can lead to various problems such as destruction of operating systems, or disruption of information access (Min and Galle, 1999). Most customers are not satisfied with the infrastructure of Web security systems (Black, 2000). In Internet banking, security is one of the most important future challenges, because customers fear higher risk in using the Web for financial transactions (Cunningham, 2003). These security concepts vary from the respondent data which is collected through questionnaires.

According to respondent C, security is the utmost concern for him because the insecure web sites or transactions some time pose serious problems. Respondent mentioned that every day change in the bank’s sites and slow internet speed weak the e-transaction security. He mentioned that some bank’s sites just need user ID number and one-time password. No further confirmation is employed, which make the payment not so safety. He added that these bank’s sites should take second time password confirmation to make the payment reliable and in safe way. He also mentioned that one thing is inconvenient in some bank’s sites, that user must keep all the one time used code in safe till next successful transaction which is the main drawback of security feature in Internet banking service.

5.3.1.2 Reliability of Transaction

Reliability concerned the consistency of performance and proper functionality of the services, technical functioning of the sites, specially the means at which the services are available and working, ability to perform the promised service dependably and accurately, accuracy in billing and information, keeping records correctly, performing the service at the designated time (Zeithaml et al., 2002, McKinney et al., 2002). These concepts of reliability fluctuate with the collected data from respondent C.
According to respondent C, the services that he is getting from banks, it’s not reliable and not according to his expectation. He mentioned that he is not satisfied with the Internet banking services nor he can rely on bank’s website because most of the time its malfunctioning. He said that if any mistakes happen when he makes transactions, then he is not sure that bank’s staff will respond him on time and will take care of his secure transaction. He doesn’t have a good image about Internet banking. He added that Internet banking is not that much trustworthy as compared to traditional banking. According to respondent proper delivery of the services and keeping their promises is important to measure reliability.

5.3.1.3 Perceived Risk

Perceived risk can also cause Customer to reject new Internet banking services. Perceived risk is related to reliability and system failure. Customers are also worried that technology-based service delivery systems will not work as expected, and lack confidence that problems can be solved quickly (Walker, 2002). Westland (2002) found that transaction risk occurs when online markets fail to assure that service will be delivered with adequate quality. Frequently, slow response time after the Internet interaction leads to a delay of service delivery and causes customers to be unsure that the transaction was completed (Jun and Cai, 2001). The above concepts of perceived risk are differing from the empirical data collected from respondent C.

Respondent C mentioned that high degree risk is associated with Internet banking services. He said that bank’s software is not working properly which increase the risk factor. He also mentioned that there is a time delay between login time and user main page display which create uncertainty. He said that Perceived risk can also cause customers to reject new technology-based service delivery because perceived risk is related to reliability and system failure. Furthermore, he said that new Internet banking service delivery systems is not working according to his expectation. He said that in Internet banking system if unauthorized personnel successes in theft of your ID and password by chance, then there are great financial risk. He said that he prefer to use
traditional systems, because Internet banking is not secure enough for financial functions that need elaborate procedures.

5.3.1.4 Slow Response Time

Responsiveness means willingness to help customers and provide prompt service. It involves timeliness of services that means - mailing a transaction slip immediately, calling the customer back quickly and giving prompt service (Berry et al., 1985). It basically refer to the speed of the company’s response to the customers, and measures the ability of e-tailers to provide appropriate information to customers when a problem occurs, have mechanisms for handling returns, and provide online guarantees (Zeithaml et al, 2002). The collected data from respondent C violate the above theories.

According to respondent C, he never got a proper and satisfactory response on phones from the bank’s customer representative, so he must go to the bank which is time consuming for him. He mentioned that I prefer to solve problems by phone calls or email in friendly environment to remove my dissatisfaction instead of visiting bank branch office. In his point of view, personal contacts with a live person were important only in traditional banking system. He said that if we need to follow the same procedure in Internet banking environment then I think electronic banking lose its meaning and aim.

5.3.1.5 Privacy

According to (Zeithaml et al., 2002), privacy is one of the important elements of system trust. It means that the customer data not to be shared and misused by the organization. According to (Jun & Cai, 2001) security is the main dimensions in Internet banking service quality. Customers who adopt electronic financial services are more likely to perceive problems related to loss of privacy, as the Internet seemingly allows other people to access their information easily (Jones, 2000). Customers do not always believe privacy policies will keep customer information confident (Cunningham, 2003). The empirical data that I collected from respondent C breach the above concept of privacy.
According to respondent C, traditional banking system is more trustworthy than Internet banking, because in traditional system at least you don’t need to worry that bank will disclose your privacy. But in Internet banking environment you always remain conscience about banner ads with cookies that may be collect your personal information. He also mentioned that privacy is most significant element for him in e-banking system. He added that I don’t want my personal information misused by other people or organization. He thinks that bank’s sites are not secure for credit card information.

5.4 Cross Case Analysis

The cross-case analysis has been done based on the within-case analysis and in the order of research model variables. Both similarities and differences were detected by comparing the three cases with one another. The similarities and differences that were found from these cases comparison are presented in tables and discussed in detail.

5.4.1 Security

Regarding the security issue, all the respondents mentioned that security is very important element in e-banking system. According to respondent A that proper completion of the transaction from the beginning to end is the most important service quality for Internet banking users. Respondent B mentioned that there is a chance in Internet banking system that hackers can hack your ID and password and misuse it. Respondent C mentioned that e-transaction is not secure and difficult to trace the fraud. Respondents mentioned that Internet transactions are not instantaneous and take long time in completion. Respondent C mentioned that some in some banks’ sites only ID number is required for making transaction which create insecurity. These points fluctuate with the security definitions presented in literature chapter. Strong concern about security is one common issue related to unwillingness to use Internet banking services (Madu, 2002). Security violation can lead to various problems such as destruction of operating systems, or disruption of information access (Min and Galle, 1999). Most customers are not satisfied with the infrastructure of Web security systems (Black, 2000). In Internet
banking, security is one of the most important future challenges, because customers fear higher risk in using the Web for financial transactions (Cunningham, 2003). The difference found from the above study is given below:

TABLE 5.1: The Similarities and Differences about Security issue

<table>
<thead>
<tr>
<th>Variable</th>
<th>Theory</th>
<th>Respondent A</th>
<th>Respondent B</th>
<th>Respondent C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security</td>
<td>Transaction and bank sites security (Madu, 2002, Min and Galle, 1999, Black, 2000, Cunningham, 2003).</td>
<td>Transaction process repetition, dissatisfaction, time delay in transaction completion, inconvenient and insecurity.</td>
<td>Long time of interval in login time and logout time, great chance of ID and PIN code hacking, and weak security.</td>
<td>Slow internet speed, very day change in the bank’s sites, transaction confirmation delay, and extra care of one-time used code.</td>
</tr>
</tbody>
</table>

5.4.2 Reliability of Transaction

Regarding the reliability of transaction issue all the respondents unhappy with the functionality of banks’ sites. They mentioned that banks’ sites always remain down and some time become freeze during e-transaction. All of them mentioned that sites interlinked pages not working properly, and downloading time is high. They also mentioned that transaction take long time in completion. All these problems violate the reliability of transaction issue which is defined in the literature part of this thesis. Reliability concerned the consistency of performance and proper functionality of the services, technical functioning of the sites, specially the means at which the services are available and working, ability to perform the promised service dependably and accurately, accuracy in billing and information, keeping records correctly, performing the service at the designated time (Zeithaml et al., 2002, McKinney et al., 2002). The differences that I found from the respondent case and theory is given below:
**TABLE 5.2: The Similarities and Differences about Reliability of Transaction issue.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Theory</th>
<th>Respondent A</th>
<th>Respondent B</th>
<th>Respondent C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reliability of Transaction</strong></td>
<td>Technical functionality of the sites, (Zeithaml et al., 2002, McKinney et al., 2002)</td>
<td>Bank’s websites always remain down and mostly it’s malfunctioning, banks sites become freeze when some time put the information, all the links within the banks sites not working properly, pages take long time to download.</td>
<td>Bank’s sites are not reliable, running slow, mostly remain down, create problems during transaction, become freeze, not very well interlink every page, page downloading time is high.</td>
<td>Bank’s website not reliable, mostly malfunctioning, running slow.</td>
</tr>
<tr>
<td>Information accuracy (Zeithaml et al., 2002, McKinney et al., 2002)</td>
<td>Provided information is not enough, whole sites are in English while Pakistan’s national language is Urdu.</td>
<td>Information is accurate but not sufficient. He is not happy with downloading time of the page.</td>
<td>Information is not accurate.</td>
<td></td>
</tr>
</tbody>
</table>
5.4.3 Perceived Risk

Regarding the perceived risk issue, all the respondents agreed on it that there is high risk of perception in Internet banking system. They mentioned that bank management is untrained and have less experienced about this new e-banking technology. Respondent C mentioned that banks software are complicated and not working properly. According to Respondent A, there is lack of consummate transaction which creates compliance risk. Respondent B mentioned that due to lack of management control risk factor is high in Pakistani’s e-banking sector. All these points that I found from the data of respondents differ from the criteria of perceived issue defined in the literature chapter. Perceived risk can cause Customer to reject new Internet banking services. Perceived risk is related to reliability and system failure. Customers are also worried that technology-based service delivery systems will not work as expected, and lack confidence that problems can be solved quickly (Walker, 2002). Westland (2002) found that transaction risk occurs when online markets fail to assure that service will be delivered with adequate quality. Frequently, slow response time after the Internet interaction leads to a delay of service delivery and causes customers to be unsure that the transaction was completed (Jun and Cai, 2001). The difference found in this comparison is summarized in the following table:

**TABLE 5.3: The Similarities and Differences about Perceived Risk issue.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Theory</th>
<th>Respondent A</th>
<th>Respondent B</th>
<th>Respondent C</th>
</tr>
</thead>
</table>
5.4.4 Slow Response Time

Regarding the slow response time issue all the respondents agreed that there is a communication gap between banks’ customer support team and users. They mentioned that they never got a reliable and prompt response from banks’ management on email. For quick and prompt response they need to keep personal contacts with banks’ employees. Respondents mentioned that banks should provide live supports to their customers instead of emails. All these points goes against to slow response time issue wish is defined by zeithaml et al., 2002 i.e. response time measure the ability of the e-tailers to provide appropriate information to customers when problem occurs. Responsiveness means willingness to help customers and provide prompt service. It involves timeliness of services that means - mailing a transaction slip immediately, calling the customer back quickly and giving prompt service (Berry et al., 1985). Differences found a slow response time issue is given below in table:
TABLE 5.4: The Similarities and Differences about Slow Response Time issue.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Theory</th>
<th>Respondent A</th>
<th>Respondent B</th>
<th>Respondent C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slow Response</td>
<td>Ability of e-tailers to provide appropriate information during problem conception, (Zethaml et al, 2002).</td>
<td>Communications gap between bank’s customer representative and users, no live guidelines, lack of active customer support</td>
<td>Unhappy with the response time of bank’s sites and bank customer support team, always got late response, always make call for transaction confirmation, faced problem e-banking service.</td>
<td>Never got a proper and satisfactory response on phones, always visit bank in case of problem occurring, lack of communication.</td>
</tr>
<tr>
<td>Time</td>
<td>Willingness prompt service (Berry et al., 1985)</td>
<td>Management unwillingness of proper guidelines, delay in email replies, expensive phone calls.</td>
<td>Lack of online customer support service.</td>
<td>Always keep personal contacts with bank live management</td>
</tr>
</tbody>
</table>

5.4.5 Privacy

According to the all respondents, a privacy issue is the most things in Internet banking system. They mentioned that most banks’ sites are not secure for customer personal information and credit card number. They showed uncertainty about misuse of their personal information. These uncertainty points violate privacy criteria defined in the literature part of the thesis i.e. customer data not to be shared and misused by the
organization (Zeithaml et al., 2002), customers do not always believe privacy policies will keep customer information confident (Cunningham, 2003). These differences regarding privacy issue between discussed literature and respondent data are summarized as:

**TABLE 5.5: The Similarities and Differences about Privacy issue.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Theory</th>
<th>Respondent A</th>
<th>Respondent B</th>
<th>Respondent C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privacy</td>
<td>Customer information not to be shared and misuse (Zeithaml et al., 2002)</td>
<td>Bank’s sites have cookies to confine customer personal information, always worry about misuse of personal information.</td>
<td>Don’t have good image about bank privacy policy, only can hope that bank will not misuse his information.</td>
<td>Traditional banking system is more trustworthy than Intent banking regarding customer privacy, always remain conscience about banner ads cookies that may collect personal information.</td>
</tr>
<tr>
<td></td>
<td>Customers do not always believe privacy policies will keep customer information confident (Cunningham, 2003).</td>
<td>Anxious about credit card number misuse.</td>
<td>Bank’s sites not secure for credit card number.</td>
<td>Bank’s sites are not secure for credit card information</td>
</tr>
</tbody>
</table>
CHAPTER 6: CONCLUSIONS

In this chapter I have presented finding and conclusions based upon the empirical qualitative data analysis derived in the previous chapter. Findings are presented in a general discussion, dealing with research question. Then I tried to answer the issues posed in the research model. At the end of this chapter I drawn conclusion, future research and given some suggestions.

6.1 General Discussion

Almost 75% banks in Pakistan are online. They launched their websites and giving e-services to theirs’ customer from last 3 years. Unfortunately the Internet banking services in Pakistan are not fulfilling the customers’ expectations. Most of the banks’ websites are static and have very little information in customer point of view. There is no live support for their’ customer. There is a big communication gape between banks’ management and theirs’ customer, only few of them offer email contact facility to their customers. Internet banking implementation in Pakistan is not spontaneous; it is the result of finance ministry decision. Hence, if the banks’ want to understand the customers’ requirements and expectations then they has to make theirs’ services more secure and fast in operation. In other words they should keep in mind that what kind of services they are presenting in the market and how much they are secured and controlled? Doing banking over internet and attracting customers, needs to considering all aspects of e-banking security.

As I stated in the first chapter of this thesis, that the main purpose of this study was "Adoption issues of Internet banking in Pakistani’ Firms", so I tried to explore the perceived potential issues which resist Pakistani’s Firms from adopting e-banking services. In order to fulfill the purpose of this study, as well discussed in the pervious chapter, the research question only covered those issues which were related to system trust. Based on the questionnaires done in this research work, overall answers to these system trust issues are given in this chapter. Additionally I examined whether there are any resemblance and variation in the perceptions and feelings between the three
respondents regarding Internet banking services. In order to achieve this objective, I used within-case and cross-case analysis to explore and find out any similarity and differences about each issue between the three respondents from different firms.

6.2 Research Question

As a background of my thesis topic “Adoption Issues of Internet banking in Pakistani’s Firm” generally represent all those issues which influence Internet banking adoption in Pakistani firm, but according to my research “What are the major issues that influence Pakistani’ Firms attentions to adopt Internet Banking Services?” and research model only focus on those issues which are associated with “Trust of the System”. Total five issues were selected for research in this study. They are Security, Reliability of Transaction, Slow Response Time, Perceived Risk and Privacy.

6.2.1 Security

The findings reveal that security as the most important issue for customers when deciding to adopt Internet banking services. The results of respondent data obey the prior research done on Internet banking security that efforts must be taken by banks to ensure a more secured online environment to their’ customers. In addition, efforts should be taken to illustrate the authenticity, confidentiality and integrity of online transactions so that the customers feel it is safe to transact over internet. Insecurity issue makes it difficult for customers to developed their’ trust on Internet banking system.

6.2.2 Reliability of Transaction

The results from respondents data reveal that the bank’s site should provide proper functioning to customers and should be up and running all the time. In addition, it is also significant for customer that the bank’s site never freezes after putting in all information; otherwise it could create irritation and confusion. It should be noted that problem free of links, accurate links and pages download times are also concern by online banking
customers. More specially, transaction should be secured and pay more attention by Internet banking services providers. Finally, accurate and updated information, understandable websites text in national language are more important thing, especially for those customers who don’t know English language. Banks’ sites also provide information about investment, stock and foreign exchange.

6.2.3 Perceived Risk

The development and use of Internet banking in Pakistan is still in the early stage. Like any technology, Internet banking comes with a lot of perceived risks. To overcome the risk issue bank management should take steps to manage and control of all its aspects. They should implement new security policies, improve the internal communication coordination, evaluate and upgrade their’ services according to customer expectation, and develop contingency plans. Banks increase their ability to control and manage the various risks inherent from e-transaction activity. Banks should implement more security to minimize risk and increase customer authentication such as personal identification number, audit trial for transaction.

6.2.4 Slow Response Time

The result shows that personal contacts were important only in traditional system, because whenever any problem occurred or any advice needed then customer can solved by using his personal references just to visit the bank branch. In Internet banking system customers prefer and expect fast live customer support. The main reason might be the response time for e-mails slowly. Therefore, quick response to customers’ emails is the most concern by customers. The results also show that quick response is one of the key drivers of customer satisfaction or dissatisfaction, which consists with the prior study. Some customers expect and need personalized services from the banks. Personalized services could build good relationship with customers; simultaneously develop customer trust and security. The respondents suggest that the bank should provide live support over Internet instead of e-mails. The e-mail response is not fast enough. So chatting with the
personnel over the Internet may be easier to solve a problem and it would mean more convenient service for the customer.

6.2.5 Privacy

The results shows that privacy is a customer issue need more attention in Internet banking system. The results also imply that the privacy issue is the utmost concern by online banking customer. Therefore, Internet bank should not misuse customer’s personal information and keep their credit card information secure in order to gain trust and loyal customer. Otherwise customer will leave and never trust and use Internet banking services.

6.3 Research Problem

After answering all the issues which were selected for research, I summarize the conclusions to my research problem. In my study there were five main findings. Firstly, banks enhance the security level of virtual environment. Secondly, banks have to implement such policies which create secure environment for reliable transactions. Thirdly, banks have to developed fast communication service with their’ customers. Fourthly, the banks should minimize the level of perceived risk in e-transaction environment. Fifth and finally the banks should ensure their’ customer that the customer data is secured and will not be shared or misused

6.4 Conclusion

The objective of this study was to analyze the issues preventing adoption of Internet banking in Pakistani firms. The findings from respondents’ data identify lack of system security concerns as the prime reasons for slow adoption of Internet banking in Pakistani firms. Bank managements should build a strong system security to attract customers and develop their’ trust. Trust is one of the most critical issues, including worries about
security of the system, low reliability of transactions, and distrust of the service provider. The findings show that all respondents have greater level of worry regarding trust, do not have confidence to make any big financial transactions over internet, and have no satisfaction from Internet banking services. Further, the delivery of financial services over the Internet should be treated as a part of overall customer service and distribution strategy. The relationships developed could then be used as a gateway for delivery of product information. These measures could help in rapid movement of customers to Internet banking environment, resulting in considerable savings in operating costs for banks.

6.5 Future Research

Internet banking is totally a new technology in Pakistan. There are plenty of issues, which influence the customer intentions to adopt Internet banking services. In this study I tried to explore only those issues which are related to trust of the system. As such, there is still room for further investigation into the adoption of Internet banking.

Interesting is also do individuals see Internet banking in a very different way, depending on if they are doing transactions for themselves, or for the employer. A comparison between ones thoughts regarding private Internet banking and Internet banking for work purposes as a corporate user could reveal something interesting. A deeper analysis related to the demographics and background of the users would be beneficial in order to discover how they influence corporate customers decision-making and use of Internet banking.

6.6 Suggestions

My suggestion is to conduct a research with corporate customers and trade finance to investigate all external and internal issues of Internet banking system and customer adoption intention towards these issues.
First, Banks should install hardened operating systems – systems software and firewalls should be configured to the highest security settings consistent with the level of protection according to customer requirement, conduct regular system and data integrity checks, implement a multi-tier application architecture which differentiates session control, presentation logic, server side input validation, business logic and database access and deploy stringent user authentication in wireless local area networks and protect sensitive data with strong encryption and integrity controls.

Second, Banks should increase their ability to control and manage the various risks inherent from e-transaction activity. Banks should implement more security to minimize risk and increase customer authentication such as personal identification number, audit trial for transaction.
REFERENCES


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APPENDIX A:

QUESTIONNAIRE

Dear Respondent,

The following questionnaire is for my Master’s thesis entitled, “Internet banking adoption issues in Pakistani’s Firm”. Thanks in advance for your cooperation and valuable time that you are dedicating. (*In case of more detail u can use a separate sheet*)

**Personal Information**

*Firm name:* …………………………………………………………………………………………………………

*Name of the respondent:* ………………………………………………………………………………………

*The respondent’s position:* ……………………………………………………………………………………
General Questions

**Brief Introduction of yours firm?**

How can you describe yours firm business?

How can you describe your relationship with banks?
1. Are you familiar with Internet banking?
   - Yes       - No

2. Does this firm currently use/have ever used Internet banking?
   - Yes       - No
   If no, please indicate your reason for non-usage
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3. At which of the following bank(s) the firm holds an account?
   - Government       - Private
   - Public           - Foreign

4. For which kind of transactions the firm holds an account?
   - Monthly Bills Payment       - Employees Salary Transfer
   - Business Transactions       - Other
   If other, please indicate and describe
   ... ... ... ...
   ... ... ... ...
   ... ... ... ...
   ... ... ... ...
   ... ... ... ...
   ... ... ... ...

Traditional / Internet banking Services
5. Which of the following banking services are you using mostly?
   - Branch counter
   - Automatic Teller Machine (ATM)
   - Email bank
   - Telephone bank
   - Fax bank
   - Internet banking with personal computers

6. Do you feel that traditional banking system is better than Internet banking?
   - Yes
   - No
   If yes, please describe:
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7. Do you think that Internet banking provides accurate record of all transactions?
   - Yes
   - No
   Please give explanation of your answer:
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8. Do you feel Internet banking is easy to use?
   - Yes
   - No
   If yes, please explain:
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9. Do you feel that Internet banking is user friendly?

☑ Yes ☐ No

If not, why

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1. What are the channels/means the firm is using for its business transaction?

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2. Who coordinates the firm entire account system?

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3. Who is interacting with the bank? And who take the final decision while adopting new service?

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Trustworthiness
4. Do you think Internet bank service access is easy for the firm?

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5. What do you think about the security issue in Internet banking service?

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6. What do you think about the reliability of transaction over internet?

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7. Do you think any risk associated with internet banking money transaction? If yes, please give explain, if not, how you are secure?

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99
8. How Responsive is the bank in delivering its services to you?


9. How do you consider the privacy issues in Internet banking service?


10. Do you think firm privacy will be affected by using Internet baking services?


11. Is there any thing you would like to add on this topic?


