Why banks and financial institutions in Pakistan are turning towards Internet banking?

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ABSTRACT

Internet Banking has become widespread in most developed countries, while the Financial Services Sectors in most developing countries are lagging behind with this technology. Despite the benefits afforded by such online activity, Pakistani financial institutions, in particular, have not yet experienced the full potential of this form of electronic commerce, due in part to the weakness and instability of the country's financial system. This is coupled with the fact that the citizens have lost confidence in the Pakistan Financial Services Sector in 1990s.

The objectives of this research are two-fold. The first aim is to investigate the feasibility of adopting Internet Banking within the Pakistan Financial Services Sector. The second objective is to demonstrate how Internet Banking may serve as a dual solution in restoring the viability of the Pakistan institutions and restoring investor financial confidence. From the literature review and surveys undertaken, the research examines the various benefits, which Internet Banking offers as well as its drawbacks. A comparative study reveals few reasons why financial institutions in most developing countries might not be able to embark on Internet Banking; whilst their counterparts in most developed countries are able to capitalize fully on such ecommerce venture.

The paper employs survey data to measure the extent to which financial institutions in Pakistan use ecommerce and to investigate the opportunities for further growth (that is, the likelihood of Internet Banking) within the overall Financial Sector. The research highlights a number of obstacles that must be overcome if the Pakistan financial institutions decide to actively use the Internet to provide banking services. Possible solutions that may be inaugurated to overcome the respective barriers are proposed.

Finally, a summary and conclusion with recommendations are presented.

Key words: Internet Banking, E-Banking, Developing countries, Pakistan

1. Introduction:

It is widely acknowledged that Internet has permeated all types of commercial transaction in our contemporary world. The area of banking is no exception. Although the provision of banking services via the Internet is popular among developed (Cunningham and Froschl 1999; countries Jasimuddin, 2001), there exists a favourable environment for rapid development of Internet Banking to take place among developing countries as well. Internet Banking is seen to offer far- reaching potentials (Bauer, 1999), not only to the financial institutions but also to their clients and the wider society. It can enhance the institutions 'strategic initiatives and simultaneously empower customers, by enabling them to monitor their accounts 24-hoursa-day, seven-days-a-week, through the borderless environment.

Currently, it is evident that most of the financial institutions in Pakistan are employing e-commerce technologies on a wide-scale basis. They provide a combination of Automated Banking/Teller Machine (ABM/ATM) facilities, automatic funds transfer, electronic bill payment and call centre services, and with telephone banking being the latest e-commerce trend. Most of the institutions also have built websites to keep customers informed about their existing financial products and services as well as new ones that are being offered. In some cases the applications of e-commerce technologies goes beyond merely creating a presence on the Web. At least 28 commercial banks and 3 another financial institutions are now offering financial transactions Internet. This responsiveness



technological innovation may prove to be a prudent course of action, considering the fragility of the Pakistan Financial Sector over the Past decade.

In the early 1990s, Pakistan began to experience a breakdown in its financial system chiefly within the Insurance and Banking sectors. By the late 1996, some of the indigenous financial institutions had collapsed. 46 of the Banks that now exist in Pakistan, almost 30 are indigenous banks; the other 16 banks are the foreign-banks. These facts, along with intermittent rumours for further closure of some of the financial institutions have raised valid concerns among the Pakistani Citizens, causing them to lose confidence in our own home-based banks and the local Financial Services Sector in general. But after 1999 the Pakistan Financial sector starts booming and the lot of foreign financial institutions started investment in banking sector.

2. REVIEW OF THE RELEVANT LITERATURE

2.1 E-COMMERCE: The Concept of Internet Banking.

Electronic Commerce (E-Commerce) is "the application of information technology to facilitate the buying and selling of products, services and information over public standards based net works" (Price Waterhouse Coopers (PWC), 1999). Put another way, e-commerce enables the execution of transactions between two or more parties using interconnected network. These interconnected networks can be a combination of telephone systems, Cable TV, leased lines, or wireless. E-Commerce also includes consumers making electronic payments and funds transfers (Kalakota and Robinson, 2000).

According to Howcroft (2001) "many would claims that e-commerce is reshaping almost all industries" (p. 195). This claim is true to a great extent, especially with the advent of the Internet, which has set in motion an electronic revolution in the global banking sector since 1995 (Jasimuddin, 2001). According to Bauer (1999), the financial services industry in general, and retail banking institutions in particular, were amongst the first business that realised that tremendous opportunities of the Internet and started to offer (information) services on the World Wide Web. In a similar vein, Cunningham and Froschl (1999) claim that banks are among the most

intense users of technology and that the retail financial service industry deserves a special place in any discussion of electronic business.

In 1979, Hosemann predicted that by the year 2000, electronic delivery of banking services would be as commonplace as the paper cheque was in that period. Hosemann's (1979) words seem to have now come to pass. Today, Internet Banking, a form of Online Banking (Sherrod, 2000), has become a major distribution channel of banking products and services in developed world (Jasimuddin, 2001). Many Europeans banks as well as banks in the United State have been quick to embrace Electronic Business as a competitive weapon (Cunningham and Froschl, 1999). What banks are attempting to do by going online is primarily to retrain customers by reaching them more efficiently, and to increase market share (Fallenstein and Wood, 2000; Bauer, 1999; Cunningham and Froschl, 1999; Hosemann, 1979).

Online banking is broad sector that covers checking/savings/deposits, balance information, fund transfer, bill payments and credit card services (Banks, 2001). According to Banks (2001), while online banking does not possesses the 'glamour' and excitement of online trading, it is a business function that lends itself to the tools and technologies of the Internet. Internet Banking particularly allows a customer to take care of business- perform various banking tasks - using any computer that has an Internet connection and a high- speed browser (Sherrod, 2000). Another type of online banking, known as personal Computer (PC). Banking is aimed to retail customers (Banks, 2001), allowing them to use personal financial-management software, such as Quicken or Microsoft Mone, to bank from their personal computers (Fellenstein and Wood, 2000; Sherrod, 2000).

Sindell (2000) briefly points out three ways in which consumers can access their personal banking data, namely: bank-owned software using a direct dial-up, Internet access, and personal finance software. However, PC Banking remained a rather limited and cumbersome process until the commercial introduction of the Internet (Banks, 2000). Young, et al (1999) advice that a novice can go through one of the test-drive programmes which participating banks provide on their web site, in order to understand how Internet Banking works.



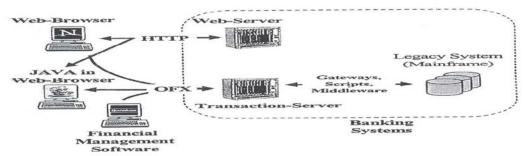


Figure 6.4. Scenario of a flexible Internet banking infrastructure integrating Web Information Systems, consumer client software, transaction services, and core banking systems.

Network Connection between Clients and Financial Institutions (Bauer, 1999; p. 72)

The benefits and the opportunities of Internet Banking coincide with the ones that e-commerce in general and the Internet in particular, bring. These benefits and opportunities are discussed in the following sections.

2.2 Benefits of Internet Banking:

The benefits of the Internet Banking are borne in the convenience it offers coupled with its enabling features. These benefits are discussed from the standpoint of the financial institutions and the consumers.

2.3 Benefits to the Financial Institutions

From an institutional perspective, many authors concur that Internet Banking is an alternative delivery channel. Strategically, banks will be continually challenged for distribution to retain their customers and market share (Fellenstein and Wood, 2000). To this end, Internet Banking offers a viable delivery channel, allowing banks to retain current customers and attract new ones, while providing improved customer service and convenience, without increasing operating costs (Humphrey's, 2000).

In addition to offering an alternative delivery channel, Internet Banking offers economic efficiencies to the institution, including "low –cost customer service alternatives to expensive retail bank branches and telephone call centres" (Kalakota and Robinson, 2000; p. 629). According to Humphrey's (2000), savings are realised by the bank when customers use an Internet branch to access account information and to open new accounts, minimising reliance upon personal bankers and customer service representatives for the most basic transactions.

It has been argued that the Internet presents the opportunity to level the playing field for banks of all sizes (Humphrey's, 2000), as it represents relatively low entry costs in terms of both skills and money to markets, information, contacts and culture (Miller and Slater, 2000). Therefore deregulation of financial markets lowers traditionally high entry barriers for new competitors (Bauer, 1999).

2.4 Benefits to the consumers:

From a client perspective, Internet Banking offers convenience, flexibility and significant time saving. "Customers know that convenience and transaction simplicity count and that time is money" (Heard, 1993; p. 23). Financial institutions recognise that customers are looking for easier ways to access information and conduct transactions; as such they see the Internet as a major commercial opportunity (Cunningham and Froschl, 1999). Internet Banking allows quick delivery of products and services. In addition, it provides control and empowerment to customers. According to Young, et al (1999), many bank allow customers to control their bank accounts online; customers can get up-to-the-minute balances on all their accounts, transfer funds from one account to another, pay recurring bills (like mortgages) automatically, or schedule transfers or payment ahead of time.

With Online Banking, commuting is reduced thus significantly saving the client's time. According to Sindell (2000) Internet Banking facilities home banking, in that it provides customers who have computer, modern, and appropriate software with the ability to download their personal bank data and conduct online activities. It is implied here that this eliminates the need for a customers to go physically to the bank and wait in a queue to conduct financial transactions. Therefore, a customer can have an

instant access to financial services and perform various banking tasks from the convenience of his computer (Sherrod, 2000). This empowerment can further lead to increased customer trust and confidence. According to Banks (2001), as customers gain greater confidence with the Internet and its delivery mechanisms, they will likely be willing to move more of their personal financial transactions to a web setting. Bauer's (1999)

2.5 Drawbacks of Internet Banking:

Doing business online has received attention for its potential, as well as for its shortcomings (Kalakota and Robbins, 2000). While the Internet may present the opportunity to level the playing fields for banks of all sizes as well as for other non-bank competitors (Humphreys, 2000), the internet at some points, will start impacting negatively on the profit margins in retail banking. According to banks (2001), the finance industry has historically been protected by high barriers to entry. However, ad financial services gravitate to the Internet some of the barberries to entry have already been eroded, thereby reducing the institutions' market share. Fellenstein and Wood (2000) point out that the biggest threat to banks from a competitive perspective is coming from the nonbanking business community, typically online brokerages and software companies (e.g. Microsoft, Intuit).

On the matter of security, Baker (2000) points out that there remains fear in many places around the world about the security of the Internet transactions Hoffman (1994) explains that because the Internet is so decentralised, each computer is responsible for its own security. Therefore, there is no real intercomputer security on the Internet. As such, "this makes it very easy for someone on the Internet to spy on transmissions undetected" (p. 12). Assuring the privacy and preventing 'digital' fraud is a prerequisite for Internet Banking and is one of the most important factors for customer acceptance (Bauer, 1999). Huff et al (2000) use the case of Advance Bank (the first direct bank in Germany) to depict how security measures may be executed during an Internet Banking transaction. Advance Bank relies on a complex security system, where in:

"Upon opening an account with the bank, the customer receives a Personal Identification Number (PIN) and the computer generated six-digit secret code. Every time the customer accesses his/her account by telephone or Internet, he/she is first requested to provide his/her PIN; then the bank's computer system randomly ask for 3 number from the

customer's secret six digit code (e.g. the first, fourth and the fifth digits)" (p.43).

2.6 Why Internet Banking in Pakistan?

Based on the evidence revealed in the preceding literature review, one of the most consistent arguments advanced in several Internet Banking literature is that Internet Banking is seen as a key route in increasing the financial institution's market shares and to retain their customers (see Banks, 2001); Fellestein and Wood (2000); Humphreys (2000); Bauer (1999); Cunningham and Froschl (1999). This medium of product delivery provides convenience, ease of use, low-cost transactions, and the detailed account information to both the institutions and its customers. We have seen that Internet Banking offers overall empowerment to the customer, which in turn may lead to increased customer trust, confidence and satisfaction, thereby reducing attrition. Internet Banking should enable the banks to not only provide improved service to existing clients but also to attract new customers whilst operating at a low cost. As a small, open economy, e-commerce can enable the Pakistan Financial Institutions to capture niche markets and compete effectively with larger and more developed economies to take full advantage of globalisation and free trade (PCOP, 2009).

Further justification comes from Richards (2000) who claims that when engaging in Internet business, it is an important that the business must offer products that people already desire, and that these products need to be easily transferable to and accessible on the Internet. One of the questions that must be asked is "Does the world need your product or service?" (p.22). According to Brigham and Gapenski (1997), commercial banks are the traditional "department store of finance" which serve a wide variety of savers and those with needs for funds (p.93).

One important fact is that the Pakistan Citizens and the world at large desire the Pakistan commercial banks, which comprises the largest share of the Financial Services Sector, offers both retail and commercial products and services that. Also, these products and services can be easily transferred to the Internet. In addition, even in its injured region, the overall Financial Sector plays a critical role in the Pakistan economy, accounting for approximately 15-25% of GDP (PCOP; 2010) and providing employment. Altogether, these elements may render the Pakistan Financial Sector a prime candidate for conducting its services via the Internet.

With Richards' (2000) affirmation, coupled with arguments advanced in the literature review. Internet Banking is therefore proposed as a means of strengthening the Pakistan Financial Services Sector and restoring investor confidence. However, it is carefully noted that, "even if a company has a clear e-commerce strategy, it is not guaranteed to succeed" (Walsham, 2001; p. 167) on the other hand, while a company is not guaranteed to succeed even if it has a clear e-commerce strategy, if the Pakistan banks choose not to face the challenges associated with these technological opportunities, "they risk losing customers and business to faster competitors" (Bauer, 1999; p.65).

3. Research Methodology.

The population of 106 branches of different financial institutions within the Pakistan Financial Services Sector has been identified based on information provided by the State Bank of Pakistan (SBP, 2010). The Internet Banking Survey took the form of a questionnaire along with semi-structured interviews, which consisted of a list of preset questions. This method was used for capturing in written form, a considerable amount of data from the financial institutions over a relatively short period of time. Following Haralambos and Holborn's (1990) example of administering questionnaires, the researcher gave the same questions in the same order to the respondents so that the same information can be collected from every member of the sample. The rationale here was to offer each subject approximately the same stimulus so that responses to the questions, ideally, will be comparable (Babbie, 1995 - see Berg, 2001; p. 68).

The Sector is comprised of five categorical institutions, namely: Commercial Banks, Investment Institutions, Micro finance, Islamic banks, and Development Banks.

4. Internet Banking Survey and Findings

The sample of 106 branches of different financial institutions was selected to be the subjects to whom the survey questionnaire was sent. This figure was arrived at after the author initiated telephone calls to several institutions within the Financial Sector to introduce the Internet Banking survey and to encourage their participation. However, some institutions had declined to participate due to various reasons. For instance, one of the Financial Institutions advised the author that the institution is in its preliminary planning stage for Internet Banking and does not wish to divulge any information at this tentative stage. Another instance was with the development banks. All but one advised the author that due to the nature of their business, Internet Banking is not in their future plans; hence it would make no sense for them to participate in the survey. Other financial institutions forwarded various reasons for non-participation. Nonetheless, after receiving positive responses from the other institutions, the author discovered that those institutions that wished to participate in the survey represented diverse categories of the Financial Sector, thereby providing sufficient coverage. They all ranged widely in size.

Table 1

Electronic Means of Product/Service Delivery by the Financial Institutions

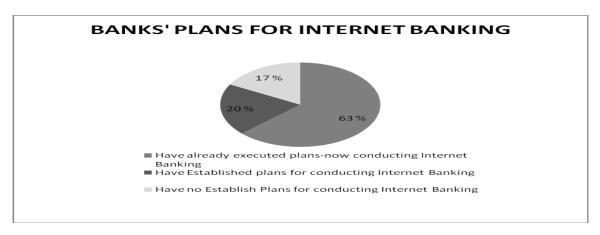
Electronic Medium	Commercial Banks Total 46	Other Categorical Financial Institutions
Internet Banking	28	3
Telephone/Mobile Banking	16	2
Other*	35	2

*ATM/Debit/Credit Card/Business Card Facilities

The above illustrates that more than 63% (28) of the commercial banks now offers Internet Banking services. Only 16 of the banks offer Telephone Banking services. 35 of the banks offer services via "Other" electronic means. "Other" primarily includes ATM/Debit, Credit card and Business card facilities. The above table also illustrates that 3-4 of the other categorical financial institutions offer product and services via the Internet, 2 Telephone/Mobile banking and 2 "Other" electronic means.



Figure: 2



The Financial Institutions' Available Technological Infrastructures, Employee Awareness and Customers' Interest in Internet Banking.

Questions asked of the Financial Institutions (Commercial Banks & Other Categorical Institutions)	Yes	%	No	%
Are there available technological infrastructures?	37	80	9	20
Have employees been informed about the potential internet Banking Venture?	19	40	27	60
Has a customer/client survey been done to solicit customers' personal views on Internet Banking?	31	66.66	15	33.33

Table: 2

Eighty percent (80%) of the financial institutions have the basic technological infrastructure in place. Forty percent (40%) of the institutions have informed employees about the potential Internet Banking venture. Sixty-seven percent (67%) have already conducted customer/client survey to solicit customers' personal views on Internet Banking. Those financial institutions, which have conducted their customer/client survey, stated that the general consensus of the findings is that customers view Internet Banking as a good facility and as a vital banking channel. One of the commercial banks MCB (Muslim Commercial Bank) that is currently engaged in Internet Banking activities has pointed out that it received positive responses on all client surveys. The bank boasts that its electronic banking products are far superior in the local and even in global markets. Another bank has pointed out that its customer/client survey revealed that a high percentage of customers within the business/corporate sector require this service.

4.1 How will Internet Banking restore customer confidence in Pakistan?

In addressing the above question, the researcher first tried to identify the benefits of Internet Banking to clients and customers in Pakistan, and then tried to examine how these benefits may restore customer confidence. The survey findings show that the benefits listed by the respondents in response to the open-ended question 'How will your clients/customers benefit from Internet Banking services? Concur with those identified in the literature review.

Table: 3

Benefits of Internet Banking to Clients/Customers

Convenience	Single access point for all financial products and services.	
	•	Banking at customers' own convenience.



	Ensures better monitoring.
	Portability.
Accessibility (Easy Access)	 Global access to accounts; clients can access account information anywhere and at anytime (24-hours-a-day; seven-days-a-week). Higher availability of bank data.
Increase Competition	Give local merchants a chance to compete on international markets.
Increase Profitability and Savings	 Merchants/corporate clients get funds of varying currencies. Deposited to their local accounts.
	 Ordinary citizens can reap similar benefits.
	 Less time required for bank business.
Saves Time	 Quick delivery of products and services.
	Reduces commute.
More Choices	Can select from many financial institutions and from more products and
	Services
Possibility of Cost-savings	Using "cheaper" delivery channels.

From the above, we can construe that the benefits of Internet Banking in themselves are ideal factors for restoring and maintaining investor trust and confidence in Pakistan.

An evidence from MCB Bank that people tend to use technology, as it is convenient to them. They use this facility given that they don't have time to address personal affairs during weekdays - by the time they get home from work the banks are closed. In addition to this, while putting credit card details over the Internet may involve a few risks, the transaction convenience far outweighs these risks.

Taken altogether, it can be construed that Internet Banking promotes quick response, convenience, and improved quality which give rise to other benefits such as time saving, cost-savings, easy access, wider choices and customer empowerment. All these benefits in turn are geared toward satisfying the customers and clients. Customer satisfaction invokes feelings of gratification, thereby replacing fear and mistrust with confidence and trust. According to Gibson et al (1997), a satisfied customer will continue to repeat business with a particular

organization. Therefore, if the financial institution' products and services adequately meet customers' needs then this can restore, boost and maintain their confidence in doing transactions with the respective institutions. In addition, the current reliance on technology within the Pakistan society indicates that there will be some amount of commitment by investors and the citizens in general, to participate in Internet Banking.

4.2 How will Internet Banking strengthen the Pakistan Banking Industry and the Local Financial Services Sector in general?

Another observation made from *table*, which is in accordance with Richards' (2000) claim, is that most of the products and services offered by the Pakistan financial institutions could be easily transferred to the Internet. For example, customers may apply for loans, credit cards and may make loan, credit card repayments online. Some of the potential benefits of Internet Banking to the financial institutions as stated on the returned questionnaires are summarized in Table 4.

Table: 4 Benefits of Internet Banking to the Financial Institutions

Benefits of Internet Banking to the Financial Institutions

- Increased relationship with customers, giving rise to greater loyalty and share of wallet
- More cost-effective mechanism for communicating with customers
- > Improved banking services
- Less staff (e.g. tellers and customer service officers) and less office space
- Able to reach a wider cross-section of customers. Reach more offshore customers as they would be able to view account information from anywhere in the world.
- > Provides revenue and increases profitability
- Provides real-time banking information to customers
- > Reduces the need for branch expansion, more reach and availability without an investment in property
- Decreases downtime if access workstation is affected

If the Pakistan financial institutions are to conduct their services via the Internet then this could mean immediate expansion of their marketplace to national and international markets. It will also provide them with the opportunity to reach their customers more efficiently. As mentioned earlier, quick response and improved quality promote customer satisfaction. Customer satisfaction, as affirmed by Gibson et al (1997), is the key to organizational success "for it is the satisfied customer who accounts for the repeat business that the organizations need to survive and thrive" (p. 214). Therefore the Internet as a medium of product delivery would enable the institutions to not only provides improved services to existing clients and customers, but also to retain them and attract new ones whilst operating at a low cost. This, along with customer reliance upon the institutions' products and services may help to restore the viability of the financial institutions and strengthen their business, as success in e-commerce will have an immediate impact on the institutions' productivity and profits.

4.3 The Future of Internet Banking in Pakistan

One of the main conclusions that can be drawn from the survey is that Internet Banking in Pakistan is highly feasible. It has been revealed that financial institutions (commercial banks and other financial institutions from diverse categories) have already begun the Internet Banking venture, whilst the others seem to be making extensive preparation for this type of e-commerce business.

This responsiveness to technological innovations can enhance the financial institutions' strategic initiatives and simultaneously re-establish some amount of confidence among the Pakistan citizens by allowing clients and customers to monitor their own financial accounts 24-hours-a-day, 7-days-a-week through a borderless environment.

The author has also seen from the findings that the benefits of Internet Banking in themselves are ideal factors for restoring and maintaining customer trust and confidence in Pakistan. For example, beneficial factors such as quick response, convenience, and improved quality give rise to other benefits such as time saving, cost-savings, easy access, wider choices and customer empowerment. All these benefits in turn lead to customer satisfaction. Customer satisfaction invokes feelings of gratification, which will motivate customers to repeat business with a particular financial institution, thereby replacing fear and mistrust with confidence and trust. Customer satisfaction is the key to organizational success, as it is the satisfied customer who accounts for the repeat business that the organizations need to survive and thrive. We may therefore conclude that Internet Banking can serve as a dual solution in restoring the viability of the Pakistan Banking Industry and restoring customer confidence.

Other factors, which support this conclusion, are the emphasis that Pakistani's are now placing on technology and the citizens' desire for maintaining financial products and services. It can be speculated that as the Pakistan financial institutions continue to

upgrade and refine their e-commerce strategies, this will encourage and provide opportunities for other institutions within the Financial Sector to embark on these e-commerce ventures as well. This in turn will strengthen the overall Pakistan Financial System.

5. Potential Benefits to Pakistan

Internet Banking will not only benefit the Pakistan financial institutions and their respective

customers but will impact positively on the entire country as well. For example, it may help to provide new jobs, employment and livelihoods for the Pakistan citizens. The survey findings show that most of the benefits listed by the respondents in response to the open ended question 'How can Pakistan benefit from Internet Banking? These are summed up in Table 5 below.

Table: 5

	Benefits of Internet Banking to Pakistan
International Reach	 Providing a new way for local entities to do business overseas and fulfilling cross-border banking needs. Potential for more investments locally by citizens living outside of Policies.
Sophistication of Basic Infrastructure.	 Pakistan. Increased technology exposure for citizens generally adds to the sophistication of basic infrastructure of the country thereby increasing its appeal to the investment community.
	• Better image for Pakistan, particularly as a technology destination with superior financial services.
Increased Competition	• Gives local merchants a chance to compete on international markets as well as provide a more competitive industry to global clients.
Additional area for Resource Development	 Generation of new jobs/employment, new job skills, and livelihoods.
Increased Productivity and	• More production time as less people will need to leave work to go to the bank.
Reduced Pollution	• Less commuting would reduce the pollution from the motor vehicles, as there will be less traffic on the road.
E-commerce Growth	• Enabling/paving the way for further development of e-commerce and merchant commerce (m-commerce) activity.
Convenience and Possibility of Cost Savings	• Provide another (less expensive) alternative for consumers and business to conduct their business.

6. Conclusions.

Internet Banking is a very marginal activity in Pakistan, as most of the financial institutions have not yet experienced the full potential of this form of e-commerce. Only 28 commercial banks and 3 other categorical financial institutions have already embarked on the Internet Banking venture. Furthermore, this type of service is currently being offered predominantly to merchants and corporate clients (business-to-business more than businessto-consumer). The other institutions within the Pakistan Financial Sector generally use the Internet to create an electronic presence and to keep their customers informed about the institutions' existing as well as new products and services. However, the possibility of rendering transactional banking services via the Internet in Pakistan remains quite high, as the research findings revealed that most of the financial institutions are interested in this venture and have begun extensive planning.

Whilst Internet Banking is still a novelty among the Pakistan mass, most the consumers have been experiencing the benefits of telephone banking services. These benefits are similar to those derived from Internet Banking. For example, access to accounts information, bill payment, and fund transfer are available 24 hours and can be done at the customers' convenience from anywhere in the world, using a standard telephone.

Internet Banking as a possible e-commerce solution will create possibilities for local financial institutions by marketing their products and services, thereby attracting new clients and customers. The prescribed databases will link to international information sources, and online



information will be provided to the institutions' clients and customers. This not only may meet the needs of the customers but also restore confidence and improve the quality of life for all citizens.

While Internet Banking is not without its drawbacks and challenges, this research recommends that the Pakistan Financial Sector should move contiguously towards an e-commerce solution by conducting its transactional banking services through the Internet.

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