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Customer Perception towards Online Banking Services: Empirical Evidence from Pakistan

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Abstract

The Promotion of online banking technology enabled the banks to enhance its operations with cost cutting effectively and efficiently in order to handle daily banking affairs via online banking channel. Customers are being facilitated by reducing their visits in banks and they can carryout their transactions via internet or ATM Machines instead of personally visiting the branches. The researches so far done reveal that mostly the customer of banks are unaware about online banking services and there is a lack of trust among customers on online banking services. Especially Pakistan is far behind the developing countries as a lot of services regarding online banking are not available in Pakistan. This study examines the customer perception, preferences, problems and suggestions about online banking in Pakistan. The study reveals that mostly customers prefer internet banking (IB) services over branch banking due to reliability, convenience, speed, safety and security, cost effectiveness, user-friendly, and error free system. In contrast the parallel finding shows that security problems, lack of trust and knowledge, ATM machine problems etc. affect the adoption decision of customers of internet banking services. The services which are not in Pakistan e.g. Cash depositing facility through ATM machines, "SMS/E-mail Alert" Service, Transfer funds through ATM machines, Payment of utility bills through internet are found most required / demanding services by the customers in this study. This study will helps the banks that how they can improve the level of online banking services in Pakistan and what are the potential issues or services that should be introduced in society to facilitate the customer in a better way and to compete their rivals in banking industry as a whole.

Keywords: **Internet Banking, Customers' perception, Quality, Satisfaction, Commercial Banks, Pakistan.**

INTRODUCTION

Online banking is a new phase in retail banking services. With the help of online banking several types of services through which customers can request information and carry out their banking transaction such as balance inquiry, inter account transfers, utility bills payment, request check book etc., via a telecommunication network or internet without physically visit the branches. (Daniel, 1999; Mols, 1998; Sathye, 1999). In future along with physical market competition the virtual market (market space) also going to take place (Rayport and Sviokla, 1994 a, b). Due to this fact more and more banking companies thinking about switching their businesses from the physical to virtual market (online technology). Today, the key success factor for the developing economies is "Information" (Kenny & Qiang, 2003, p. 14). As advancements in technology and information system are arising rapidly and different kinds of electronic banking systems are introducing by banks, where each system has a unique and systematic way that facilitate the user to interact with the bank in easiest way. The first online banking services based on the Internet were provided by Stanford Federal Credit Union (SFCU) in October 1994 (Business Wire, 1995).

In online business trust, security and safety are the most challenging issues for the banks. Beside them, to build and retain the customers' trust will also become a future challenge for banks especially in internet banking (Aladwani, 2001). Majority of the customers hesitate to use internet banking services because of security and privacy issues (Lee & Turban, 2001). The security problems have a large contribution to reduce customer satisfaction. The success of any new product and service is highly depending on customer acceptance and customer satisfaction. (Huang et al. 2004). In contrast the customer dissatisfaction and resistance is one of the major causes of market failure of innovation (Ram and Sheth, 1989). In online banking business the Automated Teller Machine (ATM) is the first popular system that was introduced to facilitate the users to access and carryout their banking transactions in minimum time. However, the evidences of various researches show that there is a high association between consumers' usage patterns of ATMs and their demographic profiles (Hood, 1979; Murphy, 1983). But in now a day's the relationship between ATM's usage patterns and consumer psychographic profiles is also found significant (Stevens et al., 1986).

Mobile banking has a great contribute in online banking revolution, which is giving a competitive edge to the banks against their rivals. Especially "Transaction Alert / Confirmation" is most demanding service by users. Customers feel that after monetary transaction the SMS should be received and they prefer the version of the IVR (Interactive Voice Response) banking service that provides (out-of-band) SMS confirmation over those one that does not (Peevers et al, 2010). Therefore, online banking helps banks to retain and enhance the loyalty of their existing customers, increase customer satisfaction, provide opportunity to the banks to increase market share, reduce administrative and operational cost and to improve banks' competitive positions against their rivals (Khalfan et al., 2006; Almogbil, 2005).

The current study focuses the bank's customers of Pakistan. We explore those major reasons due to which customers prefer, and satisfied or not satisfied with Internet banking services and those services which should be launched in Pakistan by the banks to compete global market. Today, quite a few banks operate solely via the Internet in Pakistan and other banks are trying to emerge their banking system with this

technological change. Allied bank is the pioneer in the field of online banking and introduce online banking system in 2004 in Pakistan. Allied bank has the biggest ATM network with 806 branches in the country. All branches are Online with each other with 674 ATM Machines. The top banks which are providing online and internet banking facilities are Habib Bank Limited (HBL), United Bank Limited (UBL) and National Bank of Pakistan (NBP) Allied Bank Ltd (ABL), Bank AlFalah, Standard Chartered Bank, Askari Commercial Bank Ltd.

1.1. Objective of the Study

The main objective of this study is to know about the customer perception regarding the usage of online banking in Pakistan. The study further explores either customer feels the Internet Banking as a valuable and useful step of technology in banking services or not. For this purpose to conduct the research in every city of Pakistan is very difficult because data collection is not an easy task at national level. For the ease of data collection and to save the time & cost, the present study conducted this research in Khyber PukhtoonKhawa (KPK) province of Pakistan. In order to know all about Internet Banking, the information which is gathered is split up into 3 parts. Initially, the study explored that why customers use internet banking (IB). Secondly, why customers do not use IB and in the last we took customer perceptions about improvements that should bring in IB services in Pakistan. This information will become very helpful for managers to determine the customer perceptions about those IB services which are still not available to them and help them to formulate strategies / policies about IB according to customer needs and wants.

The following objectives will be investigated from this research.

1. Reasons of using IB of customers and their satisfaction level in Khyber PukhtoonKhawa (KPK), province of Pakistan.
2. Determining the main reasons for not using IB.
3. Determine the customer perception about new IB product and services.

1.2. Importance of the Research Paper / Practical Implications

This study is of great importance specially for banking industry in Pakistan. This research will help the managers to cope the problems of customers about IB services which are indicated in the study. The customers views have also been taken in same study about those IB services which still not available in Pakistan whereas they are available in other developed countries. So in relation to that information it will help the managers to formulate strategies / policies about those IB services which are still unavailable to the users of IB services in Pakistan and also give the competitive advantage against other banks and also facilitate to compete global market. In result new banking strategies will fulfill the customer's requirements about IB services and increase customer loyalty as well.

1.3. Hypothesis Testing

Three objectives and hypothesis are generated which are given below. They are investigated and explained briefly in next sections.

Objective 1: To determine the importance of reliability, convenience, speed, safety etc in adoption of IB services by customers.

Hypothesis 1: Mostly customers prefer IB services over branch banking because it is reliable, convenient, faster, safe, cheap, user-friendly, and error free.

Objective 2: To investigate the Satisfaction level of Customers with IB services.
Hypothesis 2: Mostly customer are Satisfied with IB services in Pakistan.

Objective 3: To determine the customer perception about security, forged transaction, ATM services etc
Hypothesis 3: Security problems, lack of trust and knowledge, ATM machine problems etc. affect the adoption decision of customers of IB services.

Objective 4: To determine the potential uses of IB services and their importance.
Hypothesis 4: Cash depositing facility through ATM machines, "SMS/E-mail Alert" Service, Transfer funds through ATM machines, Payment of utility bills through internet are the most required / demanding services by the customers.

The paper is organized as follows: after introduction which is provided in Section 1 above, literature review is carried out in Section 2. Methodological framework is explained in Section 3. The estimation and interpretation of results is mentioned in Section 4. Section 5 concludes the paper.

2. LITERATURE REVIEW

Online banking is the emerging issue, which is expending rapidly in banking industry especially in Asian countries. Extant literature on E-banking or online banking normally focused on the customers' perception about IB services their advantages or flaws and the areas of further improvement. Some of them are given below.

Gikandi and Bloor, (2009) investigate the factors that influence the adoption and effectiveness of e-commerce in retail businesses in Kenya. Two surveys were carried out (Initial and follow-up) in the years 2005 and 2009, respectively, which involved banks controlling approximately 90% of formal retail banking in Kenya. The purpose of the follow-up surveys is to monitor the trends in 4 years (2005 – 2009). The result shows that there was a drastic shift in the importance attached to some e-banking drivers between years 2005 and 2009. They concludes that e-banking has matured in developed countries, it would be expected that banks in developing countries would learn some lessons from the developed countries and be spared some of the uncertainties undergone by their counterparts in technological development.
Akinci *at al.* (2004) conducted the study to develop an understanding of consumers' attitudes and adoption of Internet banking among sophisticated consumers. Users and non-users of Internet Banking (IB) were examined based on a random sample differ with respect to academicians, demographic, attitudinal, and behavioral characteristics. The analyses revealed significant differences between the demographic profiles and attitudes of users and non-users. They further investigated the IB users and three sub-segments were defined according to a set of bank selection criteria. Finally, based on the similarities between various Web-based bank services, four homogeneous categories of services were defined by the researcher.

Machauer and Morgner (2001) conclude four clusters of German bank consumers. These were “transaction oriented”, “generally interested”, “service oriented”, and “technology opposed” groups. In the USA, Barczak *et al.* (1997) underlined the consumer motives for use of technologically based banking services and distribution channels and found that customers could be clustered on their money management philosophies. Their results describing four motivational clusters including “security conscious”, “maximizers”, “instant gratification”, and “hassle avoiders” indicated that the four motivational segments had different attitudes and behaviors towards different banking technologies.

Malhotra and Singh (2010) conduct an exploratory study and make effort to present the current status of Internet banking in India and the extent of Internet banking services offered by Internet banks. In addition, it seeks to examine the factors affecting the extent of Internet banking services. The results reveals that the private and foreign Internet banks have performed well in offering a wider range and more advanced services of Internet banking in comparison with public sector banks. He also highlighted the determinants affecting the extent of Internet banking services, size of the bank, experience of the bank in offering Internet banking, financing pattern and ownership of the bank are found to be significant.

Rod. *at al*. (2009) examine the relationships among three dimensions of service quality that influence overall internet banking service quality and its subsequent effect on customer satisfaction in a New Zealand banking context. The results show significant relationships among online customer service quality, online information system quality, banking service product quality, overall internet banking service quality and customer satisfaction. Johnston (1997) illustrates that certain actions, such as increasing the speed of processing information and customers, are likely to have an important effect in terms of pleasing customers; however other activities, such as improving the reliability of equipment, will lessen dissatisfaction rather than delight customers and suggests that it is more important to ensure that the dissatisfiers are dealt with before the satisfiers.

In the light of technology acceptance model (TMA), Guriting (2006) examines the factors that determine intention to use online banking in Malaysia Borneo. In his study, the perceived ease of use and perceived usefulness factors are considered to be fundamental in determining the acceptance and use of various information technologies. However, these beliefs may not fully clarify behavioral intention towards newly emerging technologies, such as online banking. The results of the study indicate that perceived usefulness and perceived ease of use are strong determinants of behavioral intention to adopt online banking. There is also an indirect effect of computer self-efficacy and prior general computing experience on behavioral intention through perceived usefulness and perceived ease of use. His research is in the extension of Davis *(*1989) in which he investigated that perceived usefulness and perceived ease of use are the fundamental elements of perception in TAM. He clarify the meanings of Perceived usefulness is defined as the extent to which a person believes that using a particular technology would enhance her/his job performance while perceived ease of use is the degree to which using IT is free of effort for the user.

The influence of internet trust on risk perception and consumer attitudes towards internet

banking is very high. Propensity to trust is a determinant not only for interpersonal relationships but also for trust in technological systems. (Grabner-Krauter, 2008). He adds both to technology adoption research and to trust research in marketing by examining the role that different types of online trust play in the adoption of internet banking. He focuses on the concept of internet trust, analyzing if it is a distinct type of trust that influences the consumer's perceived risk of internet banking and the consumer's attitude toward internet banking. On the basis of a focus group interview with banking professionals, TAM literature and e-banking studies, Pikkarainen, *et al.* (2004) develop a model indicating online banking acceptance among private banking customers in Finland. The model was tested with a survey sample (n = 268). The findings of this study indicate that perceived usefulness and information on online banking on the Web site were the main factors influencing online-banking acceptance.

The results showed Chinese online and mobile banking users were predominantly males, not necessarily young and highly educated, in contrast with the electronic bank users in the West. The issue of security was found to be the most important factor that motivated Chinese consumer adoption of online banking. (Laforet & Li, 2005). They turn the intention towards main barriers to online banking that were the perception of risks, computer and technological skills and Chinese traditional cash-carry banking culture. The barriers to mobile banking adoption were also highlighted in their study which is lack of awareness and understanding of the benefits provided by mobile banking. The internet bank use increases insofar as customers perceive it as useful. The perceived usefulness is central because it determines whether the perceived ease of internet bank use will lead to increased use of the internet bank. Put differently, a well-designed and easy to use internet bank may not be used if it is not perceived as useful. (Eriksson, et al. 2004) concluded in their research that the perceived usefulness of internet banking is, for banks, a key construct for promoting customer use. They also suggest that models of technology acceptance should be re-formulated to focus more on the key role of the perceived usefulness of the service embedded in the technology. Trust as another belief that has an impact on the acceptance of Internet banking. (Suh & Han, 2002) collected 845 cases on the Web to survey users' behavior towards Internet banks. The results of statistical analyses using structural equation modeling indicate that trust has a significant impact on the acceptance of Internet banking.

Generally, the behavior of Polish internet users and that of consumers in more developed countries exhibit similar traits. One of the dominant relationships that have been observed in Polasik and Wisniewski (2008) study is the link between the decision to open an online account and the perceived level of security of internet transactions. The findings of his research prove that the experience with the medium of internet and certain demographic variables are robust predictors of the adoption status. Moreover, this inquiry documents that advertising appears to be efficacious and that online banking interacts with consumption of other products offered by banks. The researcher suggests that financial institutions can encourage customers to use this cost-effective distribution channel (online banking) through carefully-planned actions.

The emergence of self-service banking technology and customers' perceptions of internet banking self-service within the Irish financial services sector was investigated by Loonam and O'Loughlin (2008). This qualitative study of the Irish retail banking sector explored consumers' e-banking interactions and experiences in addition to assessing the

dimensions critical to e-banking service quality. Many traditional service quality attributes were found to be redundant in the study and instead e-dimensions such as web usability, trust, access and information quality service recovery and flexibility emerged as important to e-banking service provision.

Another study was conducted by Hasim & salman (2009), to determine the factors that affect sustainability of internet usage by Malay youth in Kota Bharu, a rural town in the north east of peninsular Malaysia. The researchers study and concluded that there is sustainability of internet usage among Malay youth. As far as factors that have positive effects on sustainability of internet usage is concerned, the results of the study showed that interpersonal and social network and perceived and realized benefits have significant positive effects on sustainability of internet usage by Malay youth. The results also showed that issues relating to security concerns and interruptions have significant negative effect on the sustainability of internet usage by Malay youth.

The present situation of online banking in Romania, and the appropriate strategies for the successful implementation and development of online banking services in Romania context was investigated and analyzed by Gurau (2002). The study revealed the complexity and the challenges of introducing online baking services in Romania. The analysis of the data conclude that the successful implementation and development of online banking are influenced by many inter-related factors and institutions, including the quality and security of internet network, the level of internet knowledge of the population, the government support, as well as the quality/reliability of online banking services.

Chong, et al. (2010) empirically examines the factors that affect the adoption decision of online banking in Vietnam. Perceived usefulness, perceived ease of use, trust and government support was examined to determine if these factors are affecting online banking adoption. The results showed that perceived usefulness, trust and government support all positively associated with the intention to use online banking in Vietnam. Contrary to the technology acceptance model, perceived ease of use was found to be not significant in this study. The impact of online banking intensity on the financial performance of community banks were examined by Acharya and Lingam (2008). Study results indicate that the increasing use of internet as an additional channel of marketing banking services has significantly improved the financial performance of community banks.

Another valuable contribution in this context is by Lassar, et al. (2004), they highlighted the relationships between consumer innovativeness, self-efficacy on the internet, internet attitudes and online banking adoption, while controlling for personal characteristics. While results confirm the positive relationship between internets related innovativeness and online banking, they also surprisingly show that general innovativeness is negatively related to online banking. Daniel (1999) quantifies the current provision of electronic services by major retail banking organizations in the UK and the Republic of Ireland. Additional insight into the banks' adoption of this new channel is gained by exploring two areas important in the analysis of new offerings, that is: an organization’s approach to innovation; and their view of the current and future markets. By use of a mailed questionnaire in his study, it was found that 25 per cent of the banks in the UK and the Republic of Ireland which responded to this survey are already offering online transactional services to consumers in their homes. The largest group of respondents (50 per cent) is those that are currently testing or developing such

services, while just 25 per cent of the respondents were in organizations not providing or developing such services. It is also found that the organization's vision of the future, their prediction of customer acceptance, which tends to be very low, and their organizational culture of innovation are the most important of the suggested factors in their adoption of electronic delivery.

Broderick's and vachirapornpuk's (2002) study proposes and tests a service quality model of internet banking. Their research uses participant observation and narrative analysis of a UK internet banking website community to explore how internet banking customers perceive and interpret the elements of the model. Findings of the study show that the level and nature of customer's participation had the greatest impact on the quality of the service experience and issues such as customers' zone of tolerance, the degree of role understanding by customers and emotional response potentially determined, expected and perceived service quality. Although research into the adoption and use of online banking services has grown in many parts of the world, the centre of attention has been largely on determinants of online banking adoption, not on users' satisfaction with use Pikkarainen *et al.* (2006). They investigate online banking users' satisfaction with the service by testing and validating the End-User Computing Satisfaction (EUCS) model. The survey results support three constructs (content, ease of use, accuracy) from the original model, indicating that the modified EUCS model labeled EUCS2 can be utilized in analyzing user satisfaction with online banking among private customers. Another study is conducted by Manzano *et al.* (2008) to analyze how consumer innovativeness can be used as a variable to positively influence internet banking adoption both directly and reducing consumer perceived risk. Results of the study reveal that consumer innovativeness as a key construct to improve e-banking adoption both directly and by its effective role in reducing consumer risk perception of using internet channel in the financial services context.

The influence of perceived web site security and privacy, usability and reputation on consumer trust in the context of online banking is analyzed by Casalo *et al.* (2007). Moreover, the paper also aims to analyze the trust-commitment relationship since commitment is a key variable for establishing successful long-term relationships with customers. The data showed that web site security and privacy, usability and reputation have a direct and significant effect on consumer trust in a financial services web site. Besides this, consumer trust is positively related to relationship commitment. Finally, it is observed that trust is a key mediating factor in the development of relationship commitment in the online banking context.

Internet banking has been increasing in Pakistan, hence there is a pressing need to evaluate and analyze the usage of internet banking and its impact on customer satisfaction in Pakistan.

3. RESEARCH METHODOLOGY

To measure these objectives, empirical data is used for analyzing and finding the proper result. For this purpose, questionnaires are designed which are explained in detail below:

3.1. Questionnaire Design

Main objective of this study is to observe the behavior of customers towards internet banking. In order to achieve this purpose, empirical data is collected from the samples of Khyber PukhtoonKhawa, province of Pakistan. To know customers perception whether they like or dislike internet banking and their recommendations about internet banking, a sample questionnaire was designed in which 5-Point Likert style scale is used and was developed to ensure that quality of questioners were not complicated and confusing and also to avoid any bias answers. After all that we have developed final questionnaire. To collect the information and data about the potential of bank customers for which forty eight questions are used. Personal information such as name, mobile number, address etc is avoided in questionnaire.

3.2. Data Collection

The study is based on primary data collected from one hundred banks' customers in KPK province of Pakistan. All questionnaires were completed one by one and properly reviewed. During the data gathering the respondents were asked to fill first section of the questionnaire if they are satisfied with online banking services or to fill second section if they are not satisfied. The third portion of questionnaire is for all respondents either they are satisfied or not.

4. DATA ANALYSIS

4.1. Sample Distribution

Table 1 shows the demographical characteristics of the respondents whereas each respondent is selected randomly in the different cities of Khyber PukhtoonKhawa (KPK) province of Pakistan. As earlier stated that, out of 127 questionnaires only 100 questionnaires were received from the respondents. The respondent frequencies are mentioned in second column of the Table 1.

Table 1: Demographical Characteristics of the Respondents

Frequencies	
GENDER	
Males	88
Females	12
AGE	
19 or Under	3
20 - 29 years old	27
30 - 39 years old	37
40 - 49 years old	20
50 - 59 years old	7
60 or Above	6
EDUCATION	
Less than High School	5
High School	22
University	52
Higher Education	21

OCCUPATION	
Professionals	53
Students	47
SALARY	
Rs 10,000 or below	13
10,001 - 19,999	48
20,000 or above	39
CITY	
Abbottabad	17
Peshawar	22
Mansehra	37
Bannu	12
D. I. Khan	12

The results show that out of 100 respondents 88 were male and 12 were female. 64% of the respondents were in between age of 20 – 39. The respondents who belong to University and High Education level are of 73%. Majority are professionals whereas 47% are students, 87% lies in the salary range of 10,000 to 20,000 or above. 59% are from Mansehra and Peshawar cities of Pakistan, whereas rest of the respondents belongs from Abbottabad, Bannu and D. I. Khan. 63% of the customers are quite satisfied with IB services and rest of them shows their dissatisfied.

The first research objective is to determine the importance of reliability, convenience, speed, safety etc in adoption of IB services by customers in Pakistan. For this purpose questionnaires are provided to the respondents. The first section comprises of 11 questions. Out of 11 questions the first 10 questions are designed in such a way through which we can achieve our first objective. The respondents were asked to express their degree of agreement against each question. In each section of the questionnaire, 5-Point Likert scale is used for each statement ranging from “Strongly disagree” to “Strongly agree”. The results are shown in Table 2.

Table2: Reasons of Using IB Services

Q#	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	IB is more Convenient than Branch Banking.	1	0	0	22	40
2	IB is more Reliable and Safe than branch banking.	2	3	3	25	30
3	IB transactions can be done faster than branch banking.	0	7	8	6	42
4	IB allows Easier Maintenance of transaction activities.	0	7	8	23	25
5	I use IB for better rates offered and charges only.	1	5	14	40	3
6	I Use IB to meet my cash requirement after the banks have closed.	6	7	3	4	43

7	I feel hesitation to wait in a queue for depositing / withdrawing the cash.	0	8	13	20	22
8	I am Well Conversant with IB and I found it a User-friendly system.	6	7	7	31	12
9	I Use IB as a Status Symbol.	1	26	12	19	5
10	I have a strong faith that machine cannot make any mistake.	8	14	13	26	2
11	I am quite satisfied with the Transaction system of IB.	3	6	5	20	29

Majority of customers shows their intention that they are satisfied with Internet banking (IB) services. They feel that IB is more reliable and safe than branch banking. It also provides easier maintenance of transaction activities. Customers express in Q#5 that benefits / facilities which they are enjoying from internet banking are more than its cost which they are paying. From Q#7 we can conclude that mostly customer prefer internet banking because they are very busy & they do not want to waste their time by standing in queues and wait their turn for depositing / withdrawing cash.

The frequencies of Q#1, Q#3, and Q#6 are found that the customers who are satisfied with IB shows their extreme level of satisfaction (Strongly Agree) with Convenience, Speed, and Banking services after the banking business hours. Many customers take the procedure of branch banking as a hectic or bore job and feel convenient in IB system. It means that these are the critical factors which have a major contribution and important role in success of internet banking (IB) and are on top priorities of the customers. This result gives the message to the top level management of Banking sector of Pakistan that in order to retain and increase the number of users of IB services they should not compromise on above mentioned critical factors. Overall the customers who are satisfied with IB system also gave high rate of satisfaction (Agree & Strongly Agree) to reliability, convenience, speed, safety, low cost, user-friendliness etc. which proves our first study hypothesis true.

Question # 11 is used to find out the satisfaction level of the customers with IB services in which the respondents were asked to mention at what extent they are satisfied with IB services and 5-Point Likert Scale was also used ranging from “Strongly Disagree” to “Strongly Agree” in same question. The obtained results are given in Table 3.

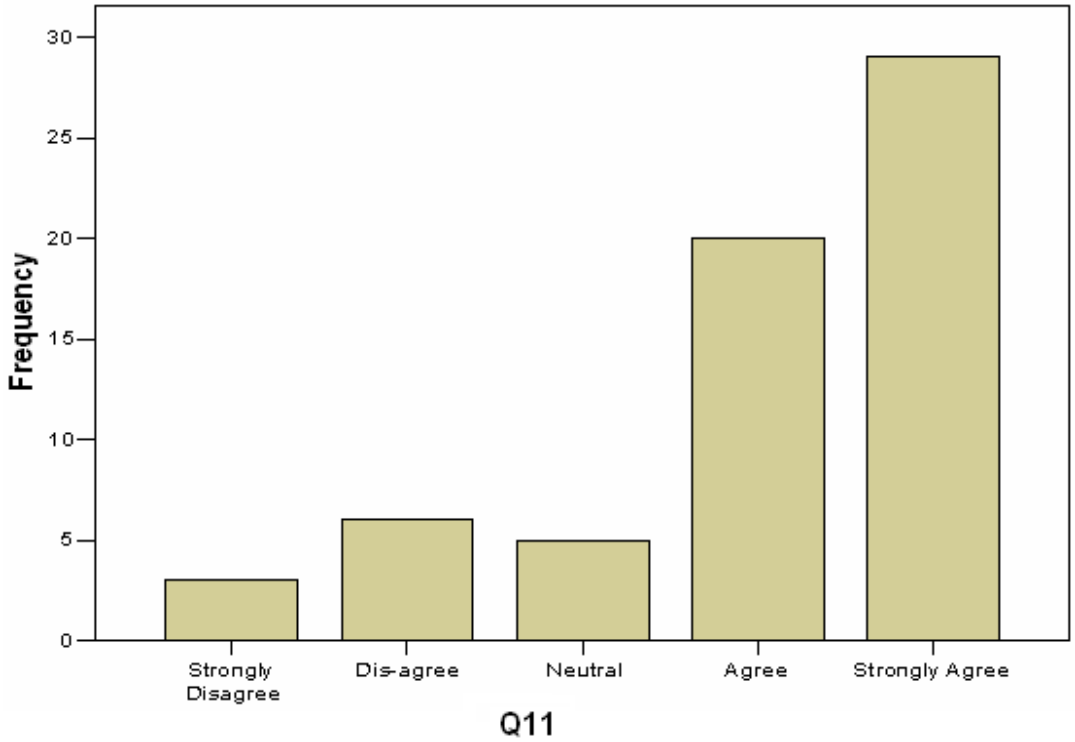
Table 3: Level of Satisfaction of the users with IB services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	3.0	4.8	4.8
	Disagree	6	6.0	9.5	14.3
	Neutral	5	5.0	7.9	22.2
	Agree	20	20.0	31.7	54.0
	Strongly Agree	29	29.0	46.0	100.0

	Total	63	63.0	100.0	
Missing	System	37	37.0		
Total		100	100.0		

This table shows that 63 respondents (out of 100) fill this question in which 46% users are strongly satisfied with IB services and 31.7% users mark on "Agree" point which also shows that they are satisfied. Collectively 77.7% users of IB services are satisfied (Agree & Strongly Agree) with IB services. So this result also proves our second Hypothesis True. Figure 1 of Question # 11 gives a quick view of the results.

Figure 1: Bar Diagram chart for Question # 11.



In contrast to the first objective, the third objective relates to know about the customer's perception about security, forged transaction, ATM services etc. For this purpose the respondents who were not satisfied with IB services and system were asked to fill the second section of the questionnaire in which 11 questions addresses all those possible reasons which affect customer decision about adoption of IB services whereas 12th question in Section 2 is used to know the extent of dissatisfaction with Internet Banking services. Same procedure is opted here about 5-Point Likert Scale and degree of agreement with statements. The frequency detail against each Likert point is presented in Table 4.

Table 4: Reasons of NOT using IB Services

Q#	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

12	Neither I have a PC (at home / office) nor do I have Internet Connection.	10	17	1	8	1
13	ATM Machine records incorrect Debit & Credit amounts.	5	13	0	15	4
14	I am not satisfied with the Security system of IB services especially of ATM Machines.	9	3	2	8	15
15	Quality of Internet Banking services is bad.	7	5	4	19	2
16	It takes a long time to finalize the transactions.	4	3	2	14	14
17	I do not know how to use Internet Banking.	12	13	2	8	2
18	I do not trust the internet as a channel for banking as it is not safe.	10	6	1	15	5
19	I like meeting people and prefer face-to-face banking.	19	10	0	3	5
20	There are chances of Fraud and forged transactions in Internet Banking services.	2	7	13	9	6
21	Whenever I need money I experienced problems with IB services. E.g. ATM machine	6	4	2	13	12
22	I feel helpless (after business hours) when my card is stuck up by ATM Machine.	5	4	2	12	14
23	I am NOT Satisfied with IB Services.	6	9	1	10	11

The Table 4 shows that 37 respondents provide their comments against IB services and they prefer in-branch banking rather online banking. If we analyze the results collectively it will not give us valuable information until we analyze each statement in isolation. According to our third hypothesis, the customers who fill the second section show their dissatisfaction in Question # 13, 14, 18, 21, and 22 which address the problems about security, safety and ATM Machines.

In Pakistan although banks have introduced an adequate level of security in IB services, but still these are inadequate and requires extra security measures. The trend in Forged transactions and fraud in online banking requires further improvement in security system in order to protect and retain customer interest regarding payment, transfer or depositing of funds. Particularly the results of Question # 13, 21, and 22 related with ATM problems having great significance which is rated by 51.4%, 73%, and 73% respectively in “Agree” and “Strongly Agree”, which shows that mostly respondents / users are facing problem in ATM system. These customers’ comments also used to prove third Hypothesis true. Security and Safety problems are also high ranked “Agree” and “Strongly Agree” by

users as 62.2% and 54% in Question # 14 and 18 respectively which also assist in third Hypothesis to be true. Moreover, PC and Internet Connection have no strong influence on customer decision. Similarly result shows that time, lack of knowledge and face to face banking are not having negative impact on customer decision about using IB services.

In context of objective 4, which is "To determine the potential uses of IB services and their importance", third Section in the questionnaire was added to achieve this objective. This section comprises of 19 questions which address the potential IB services (which yet not available in the market) and their importance, improvement of ATM Machine system and possible solution for major problems. The respondents were asked to fill this section either they are satisfied or not with IB system and indicate their perceived importance against each statement. 100 respondents fill this section. A 5-Point Likert Scale is used for these questions ranging from "Strongly Disagree" to "Strongly Agree". The frequency along each question is presented in Table 5.

Table 5: Possible Solution of Existing Problems & Potential Services in Internet Banking (IB) and their Perceived Importance

Q#	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
24	Ensure high safety and security for using IB services especially in ATM machine.	5	6	13	27	49
25	Cash Depositing facility should be available through ATM machines.	14	12	6	35	33
26	The facility of viewing own account details through Internet should be available in all bank accounts.	9	3	3	32	53
27	Make Internet Banking (IB) should be more User-Friendly.	14	15	11	31	29
28	Speed up the time required to finalize transactions, especially in ATM machine.	13	10	17	28	32
29	I want to listen the text (in whole transaction process) which shows on ATM screen in same language which was selected at start	9	0	9	28	54
30	Remind me by SMS or E-mail when my installment (of any loan) become due.	0	9	22	23	46
31	In case of any problem in ATM machine, there should be a helpline facility (available round the clock) to which I easily access and	15	14	9	34	28

	communicate.					
32	I should receive message on my mobile or mail at my e-mail address having complete detail as specific amount either Debited or Credited from my account.	4	10	13	23	50
33	Facility of transfer funds to other person's accounts should be available through ATM machine.	14	5	9	33	39
34	Order cheque books through Internet Banking (IB).	9	8	36	22	25
35	Transfer funds to other accounts outside the country.	12	6	7	35	40
36	I should receive message when any new policy is introduced by State Bank, regarding Consumer Banking.	9	10	39	21	21
37	IB services should be available round the clock (24 hours a day).	18	1	2	38	41
38	The facility to operate IB transactions through mobile should by provided by all banks.	0	1	16	11	72
39	Facility of payment of Utility Bills, by using the balance of user's account, through Internet and ATM machine should be provided by all banks	0	0	4	43	53
40	The maximum limit of withdrawal cash amount from ATM should be increased from Rs. 50,000.	0	21	22	22	35
41	Internet Banking should be useful for Issuance / Stoppage of ATM or Credit Cards.	9	8	28	37	18
42	Internet Banking should be used for application of fresh loans.	9	21	8	26	36

The results reveal the following:

1. The frequency of Question # 25 *(Cash Depositing facility should be available through ATM machines)* is having great importance, because in Pakistan either

bank is not providing the facility to deposit cash through ATM machines, so that 68% respondents are in favor of provision of this facility and they may feel the traditional cash deposit procedure through cheque is lengthy procedure. In contrast, if we see on other side, 26 respondents are also against of it. This is may be because of lack of trust on ATM machine. If any person, for example, insert cash in ATM machine and cash is wrongly counted by machine, or its account is not credited then it would become a cause of cash loss of the user and bank will suffer customer loyalty. So opposite results in this case are also considerable.

2. Analysis of frequency of Question # 32 reveals that 73% of the respondents want to receive short message or E-mail at their mobile number or E-mail addresses when any transaction occur in their account. This may be because the users of IB services want to keep themselves up-to-date with the changes that occur in their account. Some professionals have laptop or Personal computer at office at which they connect with internet and feel more convenient to get aware about their account transactions rather to call or visit the office. Till now Askari commercial Bank, Bank Alfalah, and Meezan Banks are providing this facility of SMS alert. In contrary, 14% respondents are neutral. This may because that a person don't use internet frequently, or mostly students have not internet facility every time, so that's why they have responded negatively.

3. ATM machine is providing the facility of only withdrawing cash and view account information but transfer of funds from other person's account is not yet available by all bank's ATM machines. This service is asked in Question # 33 and 72% respondents show their willingness in favor of this service.

4. Another IB facility is highly ranked in "Agree" & "Strongly Agree" box by the respondents which was asked in Question # 39 *(Facility of payment of Utility Bills, by using the balance of user's account, through Internet and ATM machine should be provided by all banks)*. In Pakistan only few banks are providing this facility but only from ATM machine not through internet. The result shows that 96% of the respondents want this facility. Because in Pakistan, the consumers of utility services deposit their bills in Banks, Post offices etc. Usually on due date of the bills a huge crowd is found outside the bank premises of the consumers. It is very painful to stand in queue and wait their turn for deposit the utility bills. This is the reason that respondents show their high willingness for the provision of this service.

5. "The facility of viewing own account detail by Internet" which is asked in questionnaire in Question #26 is positively ranked by respondents. 85% respondents are in this favor that they feel easy to view transaction details of their account through internet. This time in Pakistan ABL, HBL, STANDARD CHARTERED BANK, ABN AMRO are providing this service, but not rest of the banks. Similarly the frequency result of variable Question # 29 (I want to listen the text, in whole transaction process, which shows on ATM screen in same language which was selected at start) indicates that the users of ATM machine are very much awaiting for this feature as it is marked by 82 respondents in "Agree" and "Strongly Agree" box. This feature will assist those users of ATM

machine very much who cannot read or understand “Urdu & English Language” in a better way due to illiteracy or any other reason.

The frequency results 68%, 73%, 72%, and 96% of question # 25, 32, 33, and 39 assist in making our fifth hypothesis to be true. As mentioned earlier that in Hypothesis 4, four major services in IB are assumed to most potential services as they are not still available in the market. The frequency results are proving that forth hypothesis is true.

4.2. Correlation Analysis

It is to be found that some questions in the questionnaire are closely related with other questions which are measured with Spearman Coefficient of Correlation because the data is non-parametric. The detail of these relations amongst some questions and their interpretations are given below:

1. There is a Strong positive relationship between variable Q14 (*I am not satisfied with the Security system of IB services especially of ATM Machines*) and Q24 (*Ensure high safety and security for using IB services especially in ATM machine)* which is measured by SPSS software. The people who are not satisfied with the security system of IB services they also want that further security measures should be introduced by the banks in order to make system more secure and safe to prevent the frauds. The results also tell that the people who show their dissatisfaction with the security system of online banking they are risk averse and don’t want to take risk during using online baking. The relationship that is measured through SPSS software is also presented in Table 6.

Table 6: Relationship between Questions #14 & 24

CORRELATIONS			Q14	Q24
Spearman's rho	Q14	Correlation Coefficient	1.000	.418(*)
		Sig. (2-tailed)	.	.010
		N	37	37
	Q24	Correlation Coefficient	.418(*)	1.000
		Sig. (2-tailed)	.010	.
		N	37	100
*Correlation is significant at the 0.05 level (2-tailed).				

2. Another positive correlation is found between two questions i.e., Q16 (*It takes a long time to finalize the transactions*) & Q28 (*Speed up the time required to finalize transactions, especially in ATM machine*). Spearman Coefficient of Correlation gives result of 0.295 which shows positive relationship as shown in Table 7. The respondents who are busy and time conscious and want to safe time they feel that current transaction process is slow and time consuming and they also suggest to further increase the transaction speed of online banking services. The relationship is only positive but not too much strong which may because of difference of total number of observations. In Question#16, only 37 respondents answer this question, whereas the respondents of Question#28 are

100. Even though relationship is positive and results are significant which is shown in Table 7.

Table 7: Relationship between Questions # 16 & 28

CORRELATIONS			Q16	Q28
Spearman's rho	Q16	Correlation Coefficient	1.000	.295
		Sig. (2-tailed)	.	.076
		N	37	37
	Q28	Correlation Coefficient	.295	1.000
		Sig. (2-tailed)	.076	.
		N	37	100

3. In between questions # 6 (*I Use Internet banking to meet my cash requirement after the banks have closed*) and Q37 (*IB services should be available round the clock, 24 hours a day*) a strong positive relation is found. The results shows that the consumers of IB services who need cash after the banking hours they also want the same IB services should be available round the clock. The result which is obtained from SPSS by applying Spearman Coefficient of Correlation is shown in Table 8.

Table 8: Relationship between Variable Q6 & Q37

CORRELATIONS			Q37	Q6
Spearman's rho	Q37	Correlation Coefficient	1.000	.330(**)
		Sig. (2-tailed)	.	.008
		N	100	63
	Q6	Correlation Coefficient	.330(**)	1.000
		Sig. (2-tailed)	.008	.
		N	63	63

** Correlation is significant at the 0.01 level (2-tailed).

4. Another positive strong relation is found between questions # 2 (*Internet Banking is more Reliable and Safe than branch banking*) and Q # 35 (*Transfer funds to other accounts outside the country*). The result indicates that the persons who perceive that the Internet Banking (IB) is a safe and secure channel of transaction they also have trust and agree to carry out transactions outside the country. Because in transferring cash abroad more risk is involve than in-land transaction. So high level of trust is required on online banking services in order to carryout transaction outside the country. For this purpose the same test is applied (Spearman's Coefficient of Correlation) to find out the intensity of relationship. The results are shown in Table 9.

Table 9: Relationship between Question # 2 & 35

CORRELATIONS			Q2	Q35
Spearman's rho	Q2	Correlation Coefficient	1.000	.284(*)
		Sig. (2-tailed)	.	.024
		N	63	63
	Q35	Correlation Coefficient	.284(*)	1.000
		Sig. (2-tailed)	.024	.
		N	63	100
* Correlation is significant at the 0.05 level (2-tailed)				

5. CONCLUSION AND RECOMMENDATIONS

The quick services in Pakistani banking sector, make obtainable a proposal to use modern technologies to improve operational competence and fineness of services to obtain and grasp the consumers. The use of online banking in Pakistani banking services provides the probabilities to banks to operate consumers' zeal to assume the services having much planned benefit. In Banking Industry the Internet Banking is a new era which explores the new horizons of success and development to facilitate and for the betterment of society and open the door of development for banking industry to enhance businesses operations. But unluckily the evidences of the research show that mostly services are not available in Pakistan, which have been introduced many years before in other developed countries.

This study reveals that the major issues in the IB services are security, safety and the lack of trust especially on ATM machines. Fraudulent transactions, robbery, bad and unreliable ATM services (e.g. stuck-up the ATM card, incorrect Dr or Cr amount in the account etc) are the reasons which playing a vital role in reducing the trust of consumers on IB. The results also show that reliability, convenience, speed, safety and security have the major contribution to retain and attract the customers. Finally the services which are not available in Pakistan by all banks e.g. Cash depositing facility through ATM machines, "SMS/E-mail Alert" Service, Payment of utility bills through internet etc are the most desirable services by the customers.

5.1. Recommendations

In order to create and rebuilt the trust of customer banks should take further strong security measures from every aspect in IB services. Banks should also improve and enlarge their contribution through ATM to establish a long-lasting and continuous relationship with consumers. They should focus on significant aspects of confidence and time alone as well as reliable procedures of ATMs and other services.

Mostly customers in Pakistan are still unaware from IB services. So banks should take reasonable steps, for example, advertising campaign, seminars etc in order to get aware the society from the uses and benefits of IB services. Many IB services are still not offered by all banks in Pakistan is needs to be introduced in market. So commercial bank should spend large amount on launching these services effectively. They should more enthusiastically observe consumers' preferences for triumphant reaction.

Government should also play its role in the development of IB. Government / State Bank should reduce service charges on the transactions. He should introduce new policies which assist the commercial banks to promote IB business. State Bank of Pakistan should support the banking industry and also protect the customer against any fraud or loss to build customer trust on IB services.

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