An empirical analysis of Customer satisfaction on adoption of internet Banking in Pakistan

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Abstract
This study was conducted to analyze the customer satisfaction on adoption of online banking in Pakistan. The major difference lies in the convenience offered by online banking particularly when it comes to making payments, obtaining updated information of the account, or integration account statements. A 36 item questionnaire grouped in 9 variables was developed on the basis of literature review to examine the customer satisfaction on adopting the internet banking in Pakistan. Data was collected from six banks i.e. Habib Bank LTD, Bank Alfalah, UBL(United Bank Limited) , Askari bank, First Women Bank, and National Bank of twin cities of Pakistan. Eight variables i.e. technology, ease to use, web designs, security, speed, information content, interaction with banking, quick response were studied as reason for adoption of internet banking and customer satisfaction was measured in terms of cost, access, customer experience and time against that adaption behavior. A descriptive analysis of variables along with regression and correlation was conducted for data analysis and to conclude results. Overall the study proves that in Pakistan (particularly in twin cities), customers are satisfied on adopting the internet banking and feel comfortable which processing their day to day business through the online banking facility.

Key words: Online banking, adoption, customer satisfaction

1. Introduction
Science and technology is eager to provide more facilities through their research and innovation in all fields of life. Internet is one of them that have become the integral part of life. Over the last few decades’ information technology and it use has been increased (Saffu et al., 2008) and it has effected the banking industry in a way that banks can differentiate their products and services from others. Internet banking is not the new emergent concept it has encouraged many banks to rethink their IT strategies in order to stay competitive, Eriksson et al., 2008. Internet banking is very useful and provides a
convenient and useful approach to manage one’s finances as it is easily accessible 24 hours a day, and seven days a week. Many developed and developing countries have adopted the internet banking. Pakistan is also developing country and trying to move towards internet banking. The major difference lies in the convenience offered by online banking particularly when it comes to making payments, obtaining updated information of the account, or integration account statements. Rather than personally visiting your local bank, you can now access your account and perform your bank transactions using your computer. At the comfort and privacy of your own home, you can now be able to complete various bank transactions with just a click of the mouse. But just like any other customer related services, traditional and online banking has its own shares of advantages and drawbacks which you should carefully consider. Customer choice between internet and land based banking service will depend on their priorities and the lifestyle they are familiar with. In Pakistan the trend towards adoption of internet banking is not as aggressive as it is in the rest part of the world. We can not say that in Pakistan we don’t have technology to implement the internet banking but there may be certain other reasons that could be the source of hindrance in adopting it, to identify those behavioral or technological reasons that decreases the customer satisfaction towards internet banking the researcher have conducted this study.

1.2. Objective of the study
The main aim of proposed research is to measure the customer satisfaction on adopting online banking in Pakistan. The study will first examine the technological and behavioral reasons for adopting online banking and then measure the customer satisfaction associated with it.

2. Literature Review
Internet banking is in practices from last decades, but the phase of adoption is not as fast as it was perceived. Lack of knowledge, inertia, inaccessibility, human touch, pricing and IT fatigue were found few of reasons in early 21st century, Philip et, al. (2006). Many researchers have studied the behavioral and technological reasons behind the resistance of adopting internet banking like Sara Naimi Baraghani (2008) in Iran and Georgia Marfo and Emma Anamauh-Mensah (2009) in Ghana concluded that Limited information and communication infrastructure, lack of applicability, unsuitability, cost factors, security and trust factors are barriers and low level of economic development and small per-capita incomes, limited skills, lack of familiarity, lack of knowledge, cost of implementation, security concerns, lack of technical and managerial skills are the main challenges are the factors in adopting e-business. Saadullah khan (2007) analyze the same in Pakistani’s firms intention towards internet banking service adoption and bring out security, reliability of transaction, perceived risk, slow response time and privacy were the issues of internet banking in Pakistani’s firms. Later on Salman Shamim and Kashif Sardar (2010) pointed out security and privacy, late access to the account, distrust factors, awareness, government policies, different banks infrastructure as hindrance in adopting electronic banking. As the internet bank depends on the technology other then the product and bank which is providing it and that technology use highly depends upon the customer awareness about technology and its use. As customers are not much aware of the technology they avoid the use of technology and associate it with risk, security and cost
of loss, Milind Sathye (1999) that perceived complexity has a negative relationship with adoption intentions, Margaret Tan and Thompson S. H. Teo’s (2000). As we know that world has now taken the shape of global village and it’s not possible to deny or avoid the use of internet banking. Youth that is now more aware with technology and its use therefore the adoption is very obvious on individual side rather corporate side Saadullah Khan (2007). Those customers who are frequent user of internet banking feel satisfied with the service on the basis of design, speed, security, information content, and customer support service, Cheolho Yoon (2010). As the internet banking mainly depends on the web side that is a basic interface between the customer and bank therefore customer identifies perceived risk, web content and service convenience that determine their level of satisfaction, Godwin et, al. (2010). Online banking is an alternate of land/face to face banking, and banks are with huge portfolio customers who believe that face to face contact and physical transactions are more secure then online transactions because there is no fear of security lap (cyber crime) in it, Irwin Brown and Michael (2005).

On the basis of the literature review researcher has grouped the reasons of the adoption of internet banking for developing countries like Pakistan in to the 8 main groups i.e. Technology (TCH), Ease to Use (EU), Web Design (WD), Security (SEC), Speed (SP), Information Content (IC), Interaction with Internet Banking (IIB) and Quick response (QR). And satisfaction (SAF) associated with use of internet banking can be grouped as Cost (CS), Customer Experience (CE), Access (AC) and Time (TM).

3. Theoretical Framework

![Diagram of Theoretical Framework]

3. Research Methodology

Theoretical framework was developed on the basis of the literature review. Keeping in view the theoretical frame work the study requires the collection of primary and secondary data both.

3.1 Sample and Data collection

- A questionnaire is developed with two main variables that are customer satisfaction and adoption of internet banking which are further divided into four and eight sub variables respectively. Questionnaire comprises of two main sections i.e. adoption and customer satisfaction (CS), Customer Experience (CE), Access (AC) and Time (TM).
satisfaction. Questionnaire was then tested for reliability and cronbach’s alpha was 0.704, (annexure table 1).

A Random sampling method was adopted for data collection and 600 questionnaires were distributed and out of which 490 questionnaires were received duly filled. And analysis was carried out on the 81.7% response of distributed questionnaire. The sample size was considered to be all the customers of six banks of twin cities Islamabad and Rawalpindi i.e. Habib Bank LTD, Bank Alfalah, UBL(United Bank Limited), Askari bank, First Women Bank, and National Bank. For accomplishing aims and objectives of this study, permission from officials of selected banks was taken first and then acquired information on amount of data they were willing to provide.

3.2 Analysis Tool
SPSS 16 was used for testing questionnaire reliability and then for descriptive and regression and correlation analysis of the data collected.

4. Analysis
4.1 Demographics
Of the total 600 questionnaires, 490 were fully completed, response rate was 81.7%, the respondents were well represented between males and females. Males accounted for 51% of total respondents whilst females accounted for 49%. The age distribution of respondents ranged between 20 to 50+ years of age, with the largest group of respondents aged between 22 and 40 years old. From the users 54% were single hence 46% were married. Among the respondents 40% had Masters/PHD, 45% had Bachelors and only 5% had intermediate. From the respondents, 33% were single hence 67% were married. Among the respondents 40% had Masters/PHD, 45% had Bachelors and only 5% had intermediate. From the respondents, 33% had governmental job, 35% had private job, 9% were self employed and 23% had other occupation.

4.2 Adoption
On the basis of the literature review researcher has grouped the reasons of the adoption of internet banking for developing countries like Pakistan in to the 8 main groups i.e. Technology (TCH), Ease to Use (EU), Web Design (WD), Security (SEC), Speed (SP), Information Content (IC), Interaction with Internet Banking (IIB) and Quick response (QR).

4.2.1. Technology (TCH) 83% customers are very much interested to hear about new technologies and their use that makes their work easy, 56% were interested in taking advise from others and banks in use of new technology. 61% of the respondents found the system installed and used for internet banking are effective and don’t create problem while use. 69% of the candidate agreed that they prefer to adopt the use of those technology that can give them prompt reply and action on virtual basis.

4.2.2. Ease to Use (EU), 80% of the candidate agreed that ease of use is the main feature which encourages the customer in adopting new technology. Availability of resource is the main issue to get connected to the e-world. 66% of the people have adopted it because it saves time. According to respondents of different banks, 77% think that online banking has should have easy navigation because it will make e-banking more convenient because one can use e-banking for tracking money in bank without going to bank. 70% respondents said that they prefer to opt the service of such a bank which is user friendly and can shift their account on this basis form one bank to another bank. 73% people rated efficiency and convenience as integral part of internet banking because in internet banking, customers are able to pay their bills, move, deposit, or withdraw money to
another account, and can enjoy a lot more related services customers can enjoy in order to
advance their bank transactions even when they are just at home.
4.2.3 Web Design (WD), web design for online banking is also find out as an important
variable, 66% respondents who are using online banking services think that online
banking application has neat and tidy web design. 61% think that internet banking has a
web design which everyone can easily use it 62% think that attractive web design can not
only attract but can also help to retain their customers.
4.2.4 Security (SEC), In online banking the prime most important element is security.
48% said that they can believe their banks on the security where as 62% of them accepted
security as main reason that they don’t often use online banking. 52% respondents are
satisfied with security application of traditional banking because now there are
monitoring cameras in every branch of a bank. 46% respondents think that security
devices protect the data that is sent by them. 54% thinks that banks deduct fraud case by
monitoring the activities through these surveillance cameras and now traditional banking
has improved and there is minimum change of fraud. Another factor that measures the
security of data that online banking is denying facts 49% think that security devices of
online banking should not deny the facts of data that is sent by the customers. 51% think
that now traditional banking has less chances of fraud and do not deny the facts of data.
4.2.5Speed (SP), 59% believes that good connection speed is required for online banking.
48% respondents have raised the issue of transaction processing speed like they may
faced problems while using services (bill payments and money transfer) over the internet.
48% think that page loading speed of this online banking application should be fast, so it
should meet the basic concept of virtual and quick transaction processed.
4.2.6 Information Content (IC), Regarding the information content that is provided by
banks 65% agreed with the standardized online banking application which provides the
useful and relevant information content. 66% respondents agreed that website uploads up
to date information on regular basis so customers have no problem finding the most
recent and required information on their sites. The information content available on net is
easily understood by the customers and they are highly satisfied. 76% think that
application available on the banks is quite easy and they have no major difficulty in
handling it.
4.2.7 Interaction with Internet Banking (IIB): 52% respondents think that using the
internet banking can improve their performance of banking activities. 48% think that
traditional banking is best because they are less aware of the internet banking
applications. Internet banking is a new technology which is an modern advancement and
69% people think that by using internet banking would increase the quality or output.
67% respondents think that interaction with internet banking does not require a lot of
mental effort. 72% respondent’s think that online banking service allows customers to
pay for goods and services over the Internet using funds directly from their bank accounts
and internet banking is flexible to interact with.
4.2.8 Quick response (QR): 53% respondents think that online banking application
replies to customers inquiries. 48% respondents think that online banking application
provides feedback promptly on problems. 49% respondents think that online banking
application is ready to address and solve customer problems and 51% prefer traditional
banking because they not even advise you the solution but tries to solve that problem and they feel more comfortable to deal with human in case of response rather a machine.

4.3 Customer Satisfaction (SAF)
Customer satisfaction associated with use of internet banking was grouped as cost (CS), Customer Experience (CE), Time (TM) and Access (AC)

4.3.1 Cost (CS): 63% of the responded don’t find the internet banking as an expensive service for them, 57% also agrees that there are no hidden charges for online banking all the rates and charges are clearly and honestly communicated to the users.

4.3.2 Customer Experience (CE): 63% of the candidate agreed and find the internet transaction is accurate and provide the record of transaction in terms of on the spot mini reports of transaction confirmation. 58% think that internet banking keeps its promises and commitments. 68% are found satisfied in terms of their experience with ease of use of technology. 73% people who are using online banking are agree and satisfied with the online processing of different banks because efficiency and convenience is what sets apart online banking from traditional banking because in internet banking, customers are able to pay their bills, move, deposit, or withdraw money to another account, and can enjoy a lot more related services customers can enjoy in order to advance their bank transactions even when they are just at home. Online banking procedure has easy enquiry procedures because its percentage is 50%. 68% Customers were overall satisfied with online banking in Pakistan. 69% don’t find it as difficult as it is perceived before use as most of the service are available is dual languages i.e. English and Urdu (National language of Pakistan).

4.3.3 Access (AC): 66% of the respondents were fond with adequate facility to access the internet. 70% respondents feel that internet banking is user friendly. 66% respondents think that website uploads up to date information on regular basis so customers have no problem finding the most recent and required information on their sites

4.3.4 Time (TM): 51% respondents are satisfied with the transaction processing in the online banking application and 49% are satisfied with traditional banking application because they feel comfortable when they actually see the money change hands as compared to online banking wherein all the proof that they get about their transactions is the receipt provided to them by the site after completion of a certain transaction.

4.4 Regression and Correlation
After conducting a descriptive analysis of the data the regression and correlation of the data set was also calculated by keeping customer satisfaction as a dependent variable and adoption of internet banking as an independent variable. Regression shows $R = 0.715$ and R Square as 0.511. It shows that customer satisfaction depend on the adoption of internet banking. Correlation i.e. $\gamma = 0.715$ shows a positive correlation between the customer satisfaction and adoption of internet banking table -3 in annexure. It shows that reasons of adoption of internet banking influence the customer satisfaction as well.

5. Conclusion
The study was carried out to analyze the empirical relationship between customer satisfaction and adoption of online banking in Pakistan. It was a questionnaire based study in which questionnaire was mainly based on two variables along with eight sub variables of adoption and four variables of customer satisfaction. Different variables like
technology, ease to use, web design, security, speed, information content, interaction with online banking, quick response and satisfaction were taken. It is found that security is the main problem in online banking because there is a chance of being hacked and due to cyber thieves and there is no privacy. Another factor is Speed, since some customers have problems in connection, page loading speed, login and logout time. Quick response and personal contact are also significant for establishing good relationship and gaining trust and loyal customers. This dimension also implies that internet banks should pay more attention to customer’s email, phone calls and personal contact face to face when problems occur. Banks should reply to customer’s email as soon as possible and provide proper information when customers need some advice. In transaction processing people usually satisfied with traditional banking application because they feel comfortable when they actually see the money change hands as compared to online banking wherein all the proof that they get about their transactions is the receipt provided to them by the site after completion of a certain transaction. A part from descriptive analysis, regression and correlation analysis of the data was also conducted. This revealed that there is a positive relationship between the variables and customer satisfaction is effected by the change in the adoption behavior.

Over all the study proves that in Pakistan (particularly in twin cities), customers are satisfied on adopting the internet banking and feel comfortable which processing their day to day business through the online banking facility.

6. Recommendations

- Bank management should build strong system security to attract customers and develop their trust.
- Since quick response can increase customer satisfaction, personal contact can establish good relationship and trust with customer. It is recommended that the banks can provide live support over the internet instead of support through emails.
- Banks should build customers recognition of internet banking emphasize the advantages of internet banking services, i.e. time saving, low cost services, and convenience and information availability.
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Yahyapour Nima (2008), "Determining factors affecting intention to adopt banking recommender system- case of Iran" Lulea University of Technology.


Annexure

Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>Cronbach’s Alpha Based on Standardized Items</th>
<th>N of Items</th>
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<td>0.704</td>
<td>0.711</td>
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Table 1

Model Summary

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<th>Model</th>
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<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
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<tr>
<td>1</td>
<td>0.715*</td>
<td>0.511</td>
<td>0.506</td>
<td>0.2014657</td>
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</table>

*Predictors: (Constant), ASF

Table 2

Correlations

<table>
<thead>
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<th>AADP</th>
<th>ASF</th>
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</thead>
<tbody>
<tr>
<td>AADP</td>
<td><strong>Person Correlation</strong></td>
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</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>0.715</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>490</td>
<td>490</td>
</tr>
<tr>
<td>ASF</td>
<td><strong>Person Correlation</strong></td>
<td>0.715</td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>N</td>
<td>490</td>
<td>490</td>
</tr>
</tbody>
</table>

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

Table 3