E-BANKING: A CASE STUDY OF ASKARI COMMERCIAL BANK PAKISTAN

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Abstract:
This paper has covered the operational issues related to e-banking as well as customer's perception on usage of e-banking a case study of Askari Bank, Pakistan. 40 staff members and four customers are selected as sample for this study. Both qualitative and quantitative methods are used to present the results. Descriptive statistics is applied to describe the demographic variables while for operational problems correlation was used. Finally cross case analysis present customers’ perception about e-banking practices. Analysis shows that customer is not ready to adopt new technology that why their satisfaction level with e-banking is low. Internet speed and government policies are not supportive for e-banking in Pakistan. Due to lack of trust on technology and low computer literacy rate, customer hesitates to adopt new technology. In order to promote IT culture in Pakistan, government has to reduce the internet rate. to promote the benefits of e-banking on media so that more user get facilitated from e-banking services.

Keywords: E-banking, Internet, ATM, Online transaction, E-readiness, Technology Acceptance Models.

Introduction
The world is changing at a staggering rate and technology is considered to be the key driver for these changes around us (Papers4you.com, 2006). An analysis of technology and its uses show that it has permeated in almost every aspect of our life. According to Tero et al (2004) many activities are handled electronically due the acceptance of information technology at home as well as at workplace. Internet can be seen as a truly global phenomenon that has made time and distance irrelevant to many transactions. According to Heikki et al. (2002), the transformation from the traditional banking towards e-banking has been a ‘leap’ change.

The evolution of electronic banking started from the use of automatic teller machines (ATM) and has passed through telephone banking, direct bill payment, electronic fund transfer and the revolutionary online banking (Alter, 2002). The future of electronic banking according to some is the acceptance of WAP enabled banking and interactive-TV banking (Petrus & Nelson, 2006). But it has been forecasted that among
all the categories, online banking is the future of electronic financial transactions.

The fundamental shift towards the involvement of the customer in the financial service provision with the help of technology especially internet has helped in reduce costs of financial institutions as well as helped client to use the service at anytime and from virtually anywhere with access to an internet connection. According to theorists (Walfried et al., 2005) customer evaluation of the electronic services is influenced by attributions of success and failure in interpersonal service situations.

The use of electronic banking has removed the banking personnel that facilitate the transactions and has placed additional responsibilities on the customers to transact with the service. Although the use of E-banking is provided for the benefit of the customers but these changes require increased work or involvement on the part of customers. These and other factors might be seen as lesser service provided in terms of customer service. But these assumptions would be wrong if the customer knows the value of using the electronic service.

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Current e-banking in Pakistan

Currently in Pakistan, the listed numbers of banks under governmental documents are 41. The number of three nationalised commercial banks is 3. There are 15 private banks, almost 15 foreign banks. While other 6 comes under specialized banking category. The major portion of population still believes on cash tradition rather than online banking. Utility bills are still sent to houses and people wait in longs queues outside banks to pay those bills. Lack of customer trust keeps them away from adopting electronic service resulting lack of e-readiness. The major reason for lack of e-readiness is lack of trust, unavailability of proper infrastructure and security, service charges and lack of education (Kundi et al. 2009)

Computer literacy is basic requirement for usage of online banking systems (Heeks, 2002). Computer cost in Pakistan is too high and it’s not possible for common man to purchase computer as its cost three times higher than common man salary (Nizamuddin et al., 2001). However Zarmeene (2006) identified several other factors which impede the success of ECRM systems in Pakistan. These include low literacy rate, pirated software’s, inadequate infrastructure and awareness.

Literature Review

Electronic Banking

Foreign banks in Pakistan are initiators for introducing E-banking practices in mid 1990’s. In late 90’s domestic banks also adopted the technology and e-banking services like ATM cards and debit cards. According to the definition provided by (Abid et al., 2006),“Any use of information and communication technology and electronic means by a bank to conduct transactions and have interaction with the stakeholders”.

Electronic banking provides ease and facilities to their customer. Electronic banking provides convenience to their customer to use bank website for all kind of transactions in secure environment. Customers can interact with bank website 24 hours a
day and seven days a week. Electronic banking provides convenience by saving time and cost for both individuals and companies. There are few banks who charges for using their online services but many banks provide free of charge online banking services for keep their customer intact with bank (Karjaluoto et al., 2002).

Now the customer it is possible for customers to perform all kind of banking transactions from their account any time and in every part of the world. Electronic banking made all kind of online shopping easy and secure. Now its customer who self manage and control their accounts. According to Amor (1999), electronic banking facilitates customers in number of ways i.e. customer is now able to pay their utility bills, get and pay loans and installment, can change their password online. Now customers are able to see all their past transaction records and history. 24 hours banking customer services help them to keep in tact with banking staff. But in case of Pakistan as the process of e-banking is not too matured as equipment required for e-banking i.e. personal Digital Assistance (PDA), computer and internet connection are not readily available for every one.

**E-Readiness**

According to the definition and description of Electronic readiness by Economist Intelligence Unit in 2008, “The ability to pursue value creation opportunities facilitated by the use of the Internet”, E-readiness is capacity of the country to promote available technologies like Information and Communication Technology (ICT) and other digital support for successful implementation of electronic banking in country. E-readiness in basic estimation about infrastructure required to launch e-services successfully. It is measure of consumer, government and business unit’s abilities for use of information and technology for their benefits (Aladwani, 2001). It is the source to make your activities more efficient, smooth and only way for country to become stable economically. E-readiness is the way forward for under developed country to their better future (Woodall, 2003).

Woodall (2003) suggested the ways a country can adopt e-readiness. These factors are interrelated with country social, economical, political profile and may vary in size and quality depending upon digital facilities and infrastructure available for Information Communication Technology (ICT). He recommended that policy maker have to make environment feasible for ICT and digital services and create awareness among society about associated profit which individuals and business organization can get by linking commerce and societies with these technologies. According to Porter (2005), country e-readiness is measure of facilities and digital connection which counties must have to adopt electronic services. Countries have to adopt these facilities as it an integral contributor for economical development of country.

The “digital divide” is merely the latest demonstration of the socio-economic landscape of Pakistan. In Pakistan access to digital media and ICT are provided by mean of dial up network which is used to connect with internet. There is only one network in country who access to dial up telephone service i.e. Pakistan Tele Communication Authority (PTCL). While telecom services in country available widely and lot many internet services providers in every big city of country. There are almost one fifty different internet providers in all over the country. While the available speed in cities is about 56 KB per second and government schools have no access to internet facilities. In order to adopt IT service in banking sector, it is very important that country improve their infrastructure and digital setup so that
businesses and organizations can easily access connecting media.

**Current banking situation in Pakistan**

Banking practices in underdeveloped countries are quite different from those of developed countries. In Pakistan, still most of the private banks use traditional banking systems and have not adopted e-banking practices yet. While few banks that adopted e-banking services are not fully functional. For example, there is no website and ATM machines are working. Similarly there is no facility to pay bills online so most of the customer deposit their bills in nearest banks or in post office branches.

According to Kundi and Shah (2009), provision of e-banking services in Pakistan are still in growing stage and not fully functional because of lack of infrastructure and technology. Available technology infrastructure is not sufficient to fulfill the requirements of current country requirements. They concluded in their studies that it is almost impossible for developing country like Pakistan to provide support to their growing industries like telecommunication and banking sector to compete and fulfill the customer perceived requirement with high technology systems.

**Growth of ICT in Pakistan**

According to Aljifri et al., (2003), Developing countries like Pakistan have to lot many problems while adopting e-banking faculties and one of them is customer trust on system. Other issues include technological dependence, economic issues and parameter of local authorities which manipulate the trust level of community. Khan and Bawden (2005) reported in their study that progress of growth towards progress of ICT in Pakistan is very slow then that of other developing countries. They appreciated the effort of government toward development of providing plate form for promoting ICT and ecommerce in banking sector.

According to government education policy (1998-2010), government planned to renovate education system in country by using ICT so that all generation get awareness about new developing technologies. Initiative of Cisco and other IT related programs sponsored by Microsoft, Sun and Oracle provide basis for foreigner companies to invest in Pakistan in IT sector (Shahzada, 2006).

According to Kolachi (2006), the following online banking services and products are provided by the banks of Pakistan:

1. **Inquiry:**
   - Inquiry about the following things:
     - Bank Statement
     - Checking of the balance
     - Statement check inquiry
     - Fixed deposit inquiry

2. **Payments:**
   - The funds transfer
   - Payment of credit card
   - Direct payments
   - Payment of Utility bills

3. **Request:**
   - Request for Cheque book
   - Stop payment requests
   - Demand Draft request
   - Request for Credit/Debit card

4. **Download:**
   - Personal Profile
   - Bank Statement

**Technology Acceptance Models:**

**Theory of Reasoned Action (TRA)**

Theory of reasoned was proposed by two scientists i.e. Fishbein and Ajzen in 1975. In order to validate the reliability, they submitted improved version of TRA in 1980. They postulated in TRA theory that “Behavioral intention of any human is the instant indication of his attitude and behavior towards any activity. They suggested that subjective norms arbitrate the behavioral factors while normative beliefs are mediated through attitude.”
**Figure 1. The Theory of Reasoned Action**  

**Theory of Planned Behavior**

**Figure 2. Theory of Planned Behavior**  

**Technology Acceptance Model**

**Figure 3. The Technology Acceptance Model**  
Note. From "Extending the Technology Acceptance Model"
TAM model is readily used to judge the perception of consumer on e-banking. This model is helpful to streamline the different factors which motivate consumer to accept and reject technology. Devis et al. (1989) give explanation about their model as “All accepted variables provide the basis for individual acceptance of computer system. It judges the behavior of consumer for adopting computer technologies and their perceived use for computer systems. This model focuses to highlight the external factors and their impact on internal belief of consumers i.e. attitude towards technology, personal beliefs about technology and intentions for adopting new technology”.

![Figure 4. Conceptual Framework](image)

Figure 4 shows the proposed model for this study. Variables used in this model are explored from literature survey from previous studies. The model considered the customer prospective as well as bank prospective. For bank prospective, variables in consideration are online banking information, security and privacy, perceived usefulness, technology infrastructure and government policies. While variables considered for consumer are services awareness, perceived benefits, trust and support, technology awareness and data privacy. All these factors were considered an important in previous studies in case of developing countries especially in case of Pakistan.

**Data Collection Procedure:**

**Data Gathering Instrument:** In the current study, the qualitative issue i.e. E-banking operational problems and E-banking customer awareness was operationalised and are measured in quantitative terms through a questionnaire designed and tested in Employees and customer of Askari bank.
Table 1

<table>
<thead>
<tr>
<th>Questions</th>
<th>Perspectives</th>
<th>Authors</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2, Q3, Q4, Q5</td>
<td>Services awareness, Perceived benefits</td>
<td>Chaffey et al. (2003), Clark &amp; Miller (1993), Adam (1992), Akinci (2004)</td>
<td>These questions help gathering information regarding customer usage of provided online services. These questions help gathering data on perceived associated benefits, over all improvement in efficiency and effectiveness of online banking system.</td>
</tr>
<tr>
<td>Q9, Q10, Q11, Q15</td>
<td>Data records and privacy</td>
<td>Aladwani (2001)</td>
<td>These questions help gathering data on customer data security during transaction, banking service in case of difficulties and privacy.</td>
</tr>
<tr>
<td>Q6, Q7, Q8, Q12, Q13, Q14</td>
<td>Technology Awareness, Trust and support</td>
<td>Moutinho, L. (2000), Anderson and Keer (2001), Woodall (2003)</td>
<td>These questions help gathering data on internet speed, governmental policies and customer trust on technology. These questions help gathering data on trust about online data security, transaction security and transaction information.</td>
</tr>
</tbody>
</table>

As defined by Joseph F. Hair, Jr, et al., (2007) that "questionnaire is a prepared set of questions (or measures) used by respondents or interviewers to record answers (data)." This method provides a better understanding and reliability of data as it is a mixture of art and science which is providing an accurate instrument to collect and measure data on the variables of the study.

**Correlation Analysis of Operational Problem**

Correlation results reveal that e-banking has significant relation with internet quality. Correlation coefficient value is \( r = 0.42 \) and this relation is significant at 1%. It means that quality of internet affects the electronic banking privacy. Government has to improve the quality if internet to overcome the privacy issue of online banking system. Similarly value of \( r \) is 56% for relation between e-banking privacy and e-banking infrastructure. This relation is also significant at 1% and true strong relation. Available infrastructure of Askari bank is capable of all the facilities of electronic banking. System maintenance and update can make system quality better.

Provided electronic banking infrastructure has positive relation with electronic banking privacy as value of \( r = 0.56 \) mean \( r \)-square is 56% and relation is also significant at 1%. Privacy can only be improved by improving the provided infrastructure for online banking system. Electronic banking information has negative relation with governmental policies. Value of \( r \) is -0.67 and highly significant. In Pakistan, policies of government are not supportive towards online banking. This strong negative relation shows that government has to abolish the imposed taxes for support to flourish the electronic banking in Pakistan.
Government policies have negative impact on electronic banking privacy but results are not significant. While there is negative significant relation reported between government policies and internet quality. Value of $r$ for this relation is -0.67 and significance level is 1%. Government has to improve the quality as well as increase the access to internet by expanding their infrastructure. It will help people to access online banking facilities which are currently available to only urban areas and in urban area to only major cities.

**Customer perception about usage of online banking**

Table-3 shows the customer response on usage of facilities available through online banking. Most of the customers (60%) are not aware about technology and use of IT facilities so mostly they pay their utility bills in near by post office or in banks. While banks entertain their utility bills as secondary task so people have to wait for long hours in line outside the bank to pay their bills. Customers prefer to call a bank to check their balance as according to them internet is not secure to check balance online. While 40% of the customer doesn’t know whether there is online balance check facility available. This response is contradiction to employee’s survey results as almost all the employees are confident that consumer has awareness about available e-banking facilities. Only 20 % of user check their balance online usually those who has internet facility available in their offices. Same is the situation about transfer of money through bank website. Almost 60 % of the customers are using their ATM card to pay utility bills. 80 % of the customers are not willing for online investment because of lack of trust on technology as well as lack of computer knowledge. Mostly military officials and business man (Almost 60%) use bank website for online payments. While only 20 % pay their home loans using online facility.

<table>
<thead>
<tr>
<th>Correlations</th>
<th>ebankingprivacy</th>
<th>ebankinginfrastructure</th>
<th>ebankinginfo</th>
<th>internetquality</th>
<th>govtpolicies</th>
</tr>
</thead>
<tbody>
<tr>
<td>ebankingprivacy Pearson Correlation</td>
<td>1</td>
<td>.564*</td>
<td>.001</td>
<td>.428*</td>
<td>-.054</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
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<tr>
<td>N</td>
<td>40</td>
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<tr>
<td>ebankinginfrastructure Pearson Correlation</td>
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<td>1</td>
<td>-.264</td>
<td>.428*</td>
<td>.081</td>
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<tr>
<td>Sig. (2-tailed)</td>
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<td>N</td>
<td>40</td>
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</tr>
<tr>
<td>ebankinginfo Pearson Correlation</td>
<td>.001</td>
<td>-.264</td>
<td>1</td>
<td>.137</td>
<td>-.673*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.996</td>
<td>.099</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>internetquality Pearson Correlation</td>
<td>.428*</td>
<td>.424*</td>
<td>.137</td>
<td>1</td>
<td>.264</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.006</td>
<td>.006</td>
<td>.400</td>
<td>.100</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
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</tr>
<tr>
<td>govtpolicies Pearson Correlation</td>
<td>-.054</td>
<td>.081</td>
<td>-.673*</td>
<td>-.264</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.741</td>
<td>.620</td>
<td>.000</td>
<td>.100</td>
<td></td>
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<tr>
<td>N</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
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</tr>
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</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Almost Never</th>
<th>Never</th>
<th>Don’t Know</th>
<th>Almost</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>I mostly prefer to pay utility bills?</td>
<td>60%</td>
<td>20%</td>
<td>0%</td>
<td>0%</td>
<td>20%</td>
</tr>
<tr>
<td>I mostly check my online balance?</td>
<td>40%</td>
<td>0%</td>
<td>40%</td>
<td>0%</td>
<td>20%</td>
</tr>
<tr>
<td>Transfer money to other accounts?</td>
<td>40%</td>
<td>0%</td>
<td>40%</td>
<td>0%</td>
<td>20%</td>
</tr>
<tr>
<td>I usually pay bills using ATM?</td>
<td>0%</td>
<td>20%</td>
<td>20%</td>
<td>60%</td>
<td>0%</td>
</tr>
<tr>
<td>My basic purpose is online investment?</td>
<td>80%</td>
<td>0%</td>
<td>0%</td>
<td>20%</td>
<td>0%</td>
</tr>
<tr>
<td>I usually make online payments?</td>
<td>20%</td>
<td>0%</td>
<td>20%</td>
<td>40%</td>
<td>20%</td>
</tr>
<tr>
<td>I apply for loans (house, car, others)?</td>
<td>60%</td>
<td>0%</td>
<td>20%</td>
<td>20%</td>
<td>0%</td>
</tr>
<tr>
<td>Others (Please specify)</td>
<td>80%</td>
<td>20%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Cross Case Analysis

Table 4 shows the empirical evidence about cross analysis of customer variables about e-CRM services. These variables include service awareness, perceived benefits, trust, and support and data/customer records privacy. Case-1 is military officer and had access to internet in office as well as in their homes. Customer has positive opinion towards awareness about e-CRM facilities. With increased awareness about internet banking customer had also positive opinion towards perceived benefits, trust on e-banking facilities, support in form of promotions and customer care services.

Customer-II is businessman and had not aware much about use of Information technology but still have trust on e-banking services. Customer is highly satisfied and most preferred online banking service is online payment to other clients. Customer is agreeing about e-banking save times and happy with other associated benefits.

Customer-III is It-Engineer and well aware about information technology and related systems. Customer has negative response towards services awareness as bank not advertises their new product on website. Customer is partially agreed with the support as bank website is slow at 56Kbytes internet connection. He suggested that bank website must have support for slow internet connections. Customer trust on technology is high and data privacy issue is not a concern as he use to dealing with Information Technology is route task for him.

Customer-IV is government servant and working in one of the Planning and Development head office. Customer was requested to fill survey questionnaire while he was in bank to withdraw money from ATM. Customer is not much aware about bank services as he is not using ATM machine and for him ATM is the only services bank is providing. Customer education is not related to IT so trust level is also very low.
Cross case analysis of customer variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
<th>Case 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services awareness</td>
<td>+</td>
<td>+</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>Perceived Benefits</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Trust</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>_</td>
</tr>
<tr>
<td>Support</td>
<td>+</td>
<td>+/-</td>
<td>+/-</td>
<td>_</td>
</tr>
<tr>
<td>Data records and privacy</td>
<td>+/-</td>
<td>_</td>
<td>+</td>
<td>_</td>
</tr>
</tbody>
</table>

+    : Agree with the theory
+/-  : Partially agree with the theory
-    : Doesn’t agree with the theory

Conclusions
Current study has covered the operational issues related to e-banking as well customer perception on usage of e-banking about Askari Bank, Pakistan. Study is an effort to judge the current problems faced by bank as well as customer. Results indicate that provided infrastructure is feasible but governmental policies are not supportive towards e-banking. Provided internet speed is not sufficient for home user to access online banking facilities and those who have access to internet are not satisfied with the internet rates. Customer technology awareness is very low and basic reasons behind this are rates of internet and computer literacy.

There are several factors which need to be considered to improve the situation of online banking in Pakistan. During survey, ATM theft cases were also reported which leads towards customer dissatisfaction as well as security concern. Customer orientation towards online banking is less that way most of the customer are not using basic benefits one can get by using online banking. Customer acceptance to online banking is slow because of different factors. These factors includes insecure transaction, slow speed of internet, high internet rates, low computer literacy rate and low capability to accept new technology.

Results indicate that most of the users have concern about their data privacy and security. Bank has to take initiative to increase customer orientation by educating them about new technology and security issues. In order to improve customer satisfaction, government has to provide basic infrastructure required to access online banking services. Most of the government offices still using the manual system and lag behind to adopt computer technology. New technology not only saves time but also efficiency. Government has to rethink about existing policies to improve and make situation favorable for prospective customers.

Recommendations
As analysis reveals that personal information privacy, security and trust on technology are the main reason for customer for not adopting electronic banking services. Banks have to cater for theft cases of ATM by providing them secure space to use ATM facility. Privacy policy and security policy of bank must be introduced to customer before opening account to make his mind clear from all security concern. Government has to support financial institutions by providing them proper infrastructure to provide customer user friendly and secure online banking.
services. E-banking is helpful to save time as well as abolish the ambiguities and issue related to cheque processing. Banks have to set customer problems management system to resolve the issues regarding online banking system. Government has to provide low price internet services to home users as it is pre-requisite to promote the online banking services to users. Banks have display all the new services and product on bank website to improve customer awareness. Official advertisement on local channels is also helpful to improve customer awareness.

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