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RESEARCH PAPER

Impact of Mobile Banking Services on Customers' Satisfaction in Lahore

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ABSTRACT

Mobile Banking has put a greater advantage since the wireless technology has been adapted. These wireless technologies not only put additional values in terms of doing business but have also changed the way of business transaction, shopping and many finance and non-financial activities. In our study, we used questionnaire for primary data collection and used this data In SPSS.v17 for calculation and found our results were positive. The key Hypothesis are Ease of use, Usefulness and privacy concern. The basic purpose of testing these variables is to check customers' satisfaction with mobile banking. It is interesting that the ending results were positively correlated. Also, it is recommended that banks should arrangesome techniques of customer awareness about these growing technological benefits. The connection between different banks should be properly and actively managed so there would not be any disruption of banking transactions. Furthermore, they should hire excellent technical staff to avoid security jeopardies so costumer can easily and safely get the services.

Key words: Mobile banking and Customer Satisfaction

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INTRODUCTION

The banking industry no doubt has witnessed advancement in technology just like any other sector; and adoption of E-banking services is one of these as it affects banking operations entirely. At present, a big proportion of people are associated with cellular phones and its fast development in mobile phone technology. In fact, mobile phones are easily reachable to every group of societies with 136.4 million of mobile connections (Telecom Indicators, 2017). With the adoption of self-service technology by the banks, e-banking system has continued to service the general public, in which mobile is one of them. They offer customer convenience and focusing on the services well beyond the traditional period. It encourages cashless society. Mobile banking means a financial transaction conducted by logging on to a bank's website using cell phone, such as for viewing account balance, making transfers between accounts, paying utilities bill and getting mini account statement.

In addition to this, mobile phone companies much concentrating on development of customer oriented applications. Mobile phones have also provided a wide platform for business flexible transaction with wireless communication technology. This development also comes in the form of trading, business transaction, purchase of goods and services. With all these, mobile phone has become a very vital in day to day life of banking customer. With an aim to move towards paper less society and to save their valuable time

majority of people avoid to go bank for financial transaction. Young people are also having greater fond of doing their work at modern technology at far distant. Hence; the main purpose of this study is to identify the level of satisfaction among customer using mobile banking (Laforet, August, 2005).

Mobile banking has become an important issue, not only to retain customers but also gaining a competitive advantage while maintain and growing overall effectiveness. In Present banking system, customer service is the most important tool for sustainable business growth. Like other business world, complaints in banking service is part of business life, this is more so for the services business. As a services organization, customer satisfaction and customer servicing is at prime concern. The banks believe that providing prompt and efficient services is essential not only to market the new one but also to retain the existing one. Services organizations are focusing on customer complaints through various channels so their services can be improve. Service has been described to be the best key performance indicator of an organization. The extent to which customers are satisfied with the level of satisfaction and services provided is consider the overall performance indicator. Through this study it would be beneficial for the stakeholder to identify the optimum level of satisfaction among users and the major problems that need to be improving for healthier return.

PROBLEM STATEMENT

Study shows that mobile technology put a considerable impact on the economy being an emerging communication industry in Pakistan as well as in Lahore as one of the fastest growing market in communication. To attain customer loyalty, long-term commitment and profitability and consequent success institutions are placing special interest on customer satisfaction. From many studies, it is shown that quality of services and products offered is key point of customer satisfaction and loyalty.

The extent of which the use of mobile banking by Lahore citizens can improve service delivery is worth exploring. None of the study is made yet to understand the mobile and internet banking adoption and with the more focus on ATM banking. The main reason of this is that it is just introduced few year earlier and made a good impact with its usage.

Our purpose of study is to examine the effect of Mobile banking services on customer satisfaction in Lahore and to answer following questions.

1. To check the mobile banking impact on customer satisfaction
2. How people are satisfying with this new technology?
3. What are the factors that influencing the customer confidence against this technology?

LITERATURE REVIEW

Initially, the mobile phone services were just restricted to calls and text messages between two parties and with the passage of time, it increases to many other services like Global Positioning System (GPS), online gaming, watching movies, listening to music and broadcasting channels (Okazaki, 2005).

Currently, mobile phones are enough powerful to perform really complex tasks and banking is one of them. According to some researchers the use of m-banking depends on ease of use, convenience, trust and ubiquity. Mostly companies allows mobile to have access to their banking database so you can perform any banking services at mobile locations. Packets of information travel back and forth to access transaction. Especially in financial service it is really necessary to pass the information between buyer and seller properly to conduct transaction (Herath H. M., May, 2009).

Mobile banking is considered the most growing value added services in a banking transactions. People are no longer bound for face to face transactions and can get the facility wherever possible. This idea actually came from the growing need of customer satisfaction and at far distance trust. Mobile Banking has the ability to design and redefine the Business models and Banking services sector (Herath H. , Jan, 2010).

Customer need the services twenty-four hours a day, 365 days a year which only can be possible if customers are distant apart and can access to Banking servers through their Mobile devices. Some researchers expects and looking forward of Mobile banking as the major form of Business transactions. According to (Laukkanen, Jan-2009), Mobile phone would be a frontline technology in banking as it facilities customer to get done their banking services through electronic channels. Many services are offered as account retrieval, third party transaction and account balance checking.

Information and communications technologies (ICTs) approach to conducting business. The promise of ICTs in the banking sector has been seen in terms of its potential to increase customer base, reduce transaction costs, improve the quality and timeliness of response, enhance opportunities for advertising and branding, facilitate self- service and service customization, and improve customer communication and relationship (Parasuraman, 1988). The adoption of ICT allows for a reduction of transaction costs and leads possibly to more efficient markers. Much clearer and stronger evidence of the impacts of ICT comes from evidence at the firm level.

SERVICE QUALITY AND CUSTOMER CONVENIENCE

E-Banking Service providers have embraced the relationship marketing, to cultivate a long term relationship so that, their customers can move along the 'ladder of customer relationship'. Customer loyalty, long-term viability and profitability and consequent success, institutions are placing emphasis on the customer satisfaction (Reichheld et al, 2000). Profit strategy and the ultimate aim of the company are to be continually productive and profitable. In their words perfect service occurs at customer's moment of value especially when the customers want service, where they want it, how they want it and in a manner that is guaranteed to the customers known as perfect service delivery. In the off-line environments, it is common knowledge that the quality of services and products is a key determinant of customer satisfaction and customer loyalty (Parasuraman, et al, 1988).

MOBILE BANKING TOOLS AND BANKING MODEL

The INTERNET: The internet is a global system of interconnected computer networks that uses the internet protocol to serve billions of users worldwide, Wikipedia. The mobile banking system is routed through the internet to allow accessibility to customers anywhere and at virtually all times.

ATM (Automated Teller Machine): The ATM, (Automated Teller Machine) is an innovative customer delivery service tool that offers wide range of services such as cash withdrawals, funds transfer, payment of bills, etc. the use of ATMs as a customer service delivery strategy has enabled bank customers to transact banking business using a coded ATM card, wherever an ATM facility is situated, customers can access their accounts at any hour of the day. However, customers have to get to those ATM centers to transact such businesses. This is subject to some flaws such as robberies and snatching on point of sales.

Observed that trust has a more direct effect on a customer's attitude than professed ease of use in the electronic banking context. In most developing countries, the automation of the banking services has become a critical point in the course of realizing efficiency in delivering customer services.

The Bank-Focus Model:

The bank focus model emerges when a traditional banks uses non-traditional low cost delivery channels to provide banking services for its existing customers. Examples range from the usage of automated teller machines, (ATM), to internet banking or mobile phone banking to provide certain limited banking services to bank customers. The model is additive in nature and may be seen as a modest extension of conventional branch based banking.

MOBILE BANKING SERVICES

In general 'mobile' means "fully portable, real-time access to the same information, resources, and tools that, until recently, were available only from the desktop" (Bhattacharjee 1998). The rapid advancement in technologies and adaptable tool to bridge the digital divide. The rapid technological advancement that the world has witnessed in the recent years especially in the electronic industry has also changed the means of production around the world, (2005) However, mobile banking services are often differentiated as 'push' or 'pull'. Pull is when a customer explicitly requests a service or information from the bank while push, occurs when a bank sends an alert to a customer when their accounts goes below a threshold level. Pull services are often of higher security measures.

Account Information: Mini Statements and check account history, Alerts on account activity or transitory of set thresholds Monitoring of them, deposits access to loan statements, Access to cards statements status on cheque, stop payment on cheque

Payments and Transfers: Domestic and international funds transfer, Micro-payments, handling Mobile recharging

Investments: Portfolio management service, Real-time stock quotes, personalized alerts and notification on security prices and etc.

SERVICE DELIVERY AND MOBILE BANKING

An understanding of the role of e-service delivery is critically important because a study has suggested that as much as \$8billion in potential sales were lost on 2001 due to inadequate e -service. The banking industry today is witnessing heavy IT revolution to the extent that Customers now have freedom to pay bills: plans payments while held in traffic jams, receive updates on banks transaction other mobile banking also welcomed other financial services like share, trading, sophisticated enquiry based banking services for transaction alerts, minimum balance alerts, account balance enquiry, cheque-book request, and bill payment alerts. The security controls used are PIN code and pass code identification. Mobile banking services have a very exciting potential within Nigeria, given the low infrastructural requirements and rapidly increasing mobile phone penetration.

CHALLENGES OF MOBILE BANKING

Application Toolkit, a WAP browser, or only SMS Initial interoperability issues however have been localized, with countries like India using portals like R-World to enable the limitations of low end java based phones, while focus on areas such as South Africa have defaulted to the USSD as a basis of communication achievable with any phone. The desire for interoperability is largely dependent on the banks themselves, where installed applications (java based or native) provide better security, are easier to use and allow development of more complex capabilities similar to those of internet banking while SMS can provide the basics but becomes difficult to operate with more complex transactions. Security of transaction: Security of financial transactions, being executed from some remote location and transmission of financial information over the air are the most

complicated challenges that need to be addressed jointly by mobile application developers, wireless network service providers and the bank's IT departments. Advantages of Mobile Banking Mobile banking reasonably reduce the cost rendering service to customers. For service providers, mobile banking offers the next surest way to achieve growth by offering suitable service to attract new customers or retain old ones. Mobile banking helps alert customers or trends happening in their accounts order to minimize fraud. It also encourages them and wishes customers well on special occasions like birthdays that customers value a lot.

ADVANTAGES OF MOBILE BANKING

1. Mobile banking reasonably reduces the cost of rendering services to customers
2. For the service providers, mobile banking offers the next guaranteed way to achieve growth by offering suitable services to attract new customer or retain old ones
3. Mobile banking helps alerts customer on trends happening in their accounts in order to minimize fraud
4. It also encourages them wishes customers well on special occasions like birthdays that customers value a lot

CONCEPTUAL FRAMEWORK

The Technology Acceptance Model (TAM) lifecycle is a sociological model that describes the adoption or acceptance of a new product or innovation, according to the demographic and psychological characteristics of defined adopter groups. This theory defines the perceived adoption of usefulness and adoption of new technology. Every time the new technology introduces also brings the risk factor that can badly influence the way of satisfaction and usage by the customer. So, the point is whenever, the new technology is adapted its keep in view that customer satisfaction is the major point of adoption. It is a fact that progression can be made with the adoption of Mobile Banking technology Adoption. Innovation diffusion theory defines that the technology adopted by the customer is to the straight forward process. Relative advantage can also be described as innovation when it comes to compare with predecessors. This Conceptual Framework mainly base on Technology Acceptance Model and innovation Diffusion Model. The main identified factors are usefulness, ease of use and security concern. These three factors have use to Conceptualized the Hypothesis about the customer satisfaction.

HYPOTHESIS

H1: A higher usefulness of mobile technology could be a positive impact on Customer Satisfaction:

Usefulness is a key factor that can impact in positive way if successfully made a link between the customer need and area of mobile commerce.

H2: Higher Ease of Use is very important for the Customer Satisfaction:

Customer prefers to get the things in one place and this is the major key that influence and left a positive and long lasting impact on customer psychology. When the customer finds it an effective, easy understanding and time efficient for the customer satisfaction, always make a good impact on customer behavior and perception about the quality of services.

H3: Privacy/Lose of information is a bigger threat of customer satisfaction:

People really get worry about the loss of personal information and the misuse of their Bank Account like ATM Card or lose of information can harm the trust of customer satisfaction.

METHODOLOGY

Data Collection and Analysis:

In-person and through E-mail Questionnaires were distributed for the data collection process, the major reason for the using questionnaire was its nature of flexibility, Cost efficient and quick way of getting information for the professionals from Lahore city. Hundred questionnaires were distributed among them 91 were responded back and 81 responses were collected and the rate was 80%.

Among the population of 80 respondents the ratio of Male and Female percentage involvement was 77.5% and 22%, respectively. Among the total population 90% employed and the rest were students with minor experience of corporate and banking.

Table 1: Frequency Table

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	62	77.5	77.5	77.5
Female	18	22.5	22.5	100.0
Total	80	100.0	100.0	

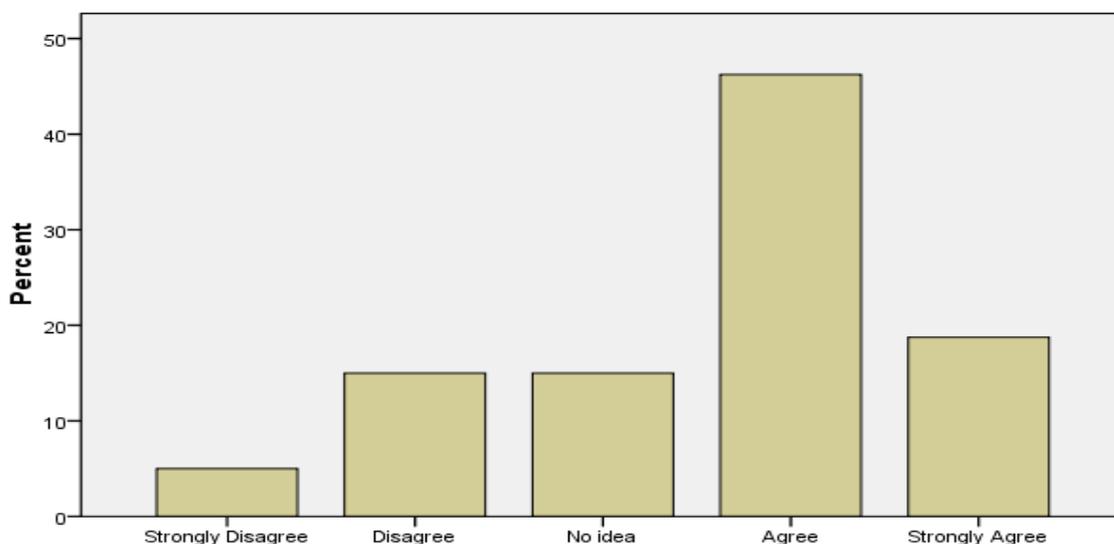
The age factor is about 25yrs. of age with 40 % value, 30yrs. with 26% value and 14yrs. with more than 35 yrs. of age respectively.

Table 2: Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 20-25yrs	40	50.0	50.0	50.0
26-30yrs	26	32.5	32.5	82.5
31-35yrs	14	17.5	17.5	100.0
Total	80	100.0	100.0	

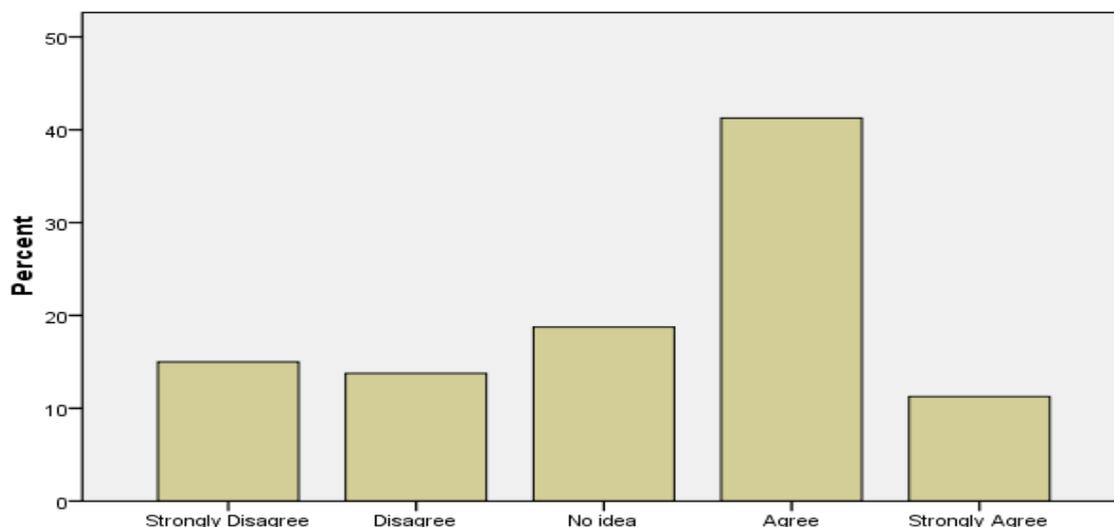
When it comes to Banking experience it involves a lower experience with 56.3%, 27.5% with experience of about yrs. 5% and 6.3% for above 15 yrs and above 15yrs., respectively.

Fig. 1: Does late transaction can ruin your trust about mobile banking



In this figure the reaction about the late intimation can ruin your trust have higher value at 45% and 25%, respectively. But few people disagree with this statement and among them the target people are old banking services users.

Fig. 2: Mobile banking is completely and easily accessible through your log-in id

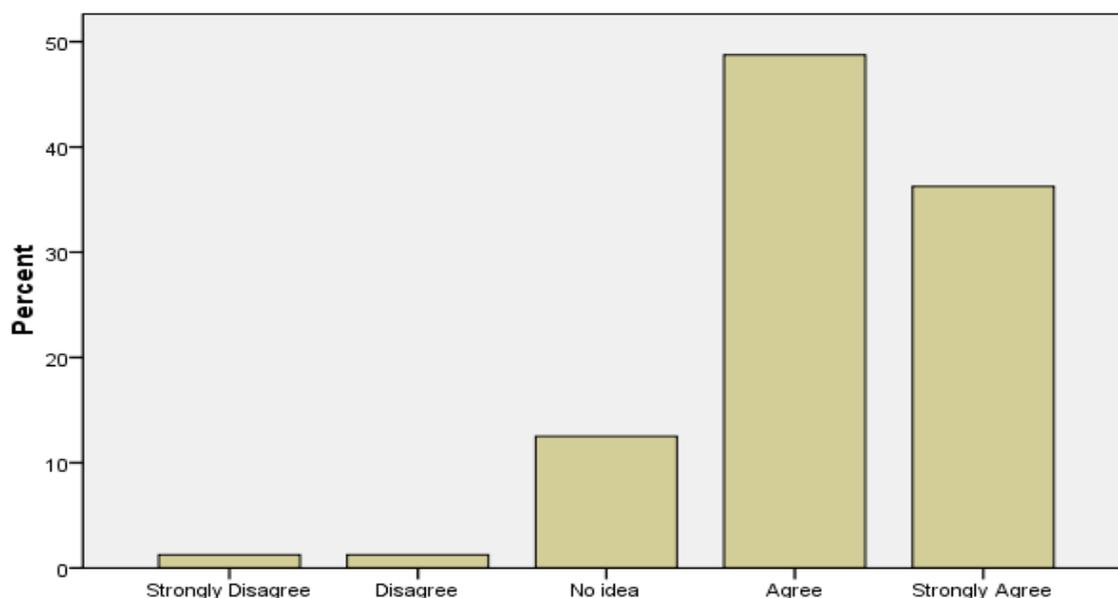


In figure 2 we see the rate of reaction of those people satisfied with the easily accessible with their log-In ids'. Here the biggest rate is possessed by the people who agree that Mobile is easily accessible and useful and can benefit more anywhere. In response to this a big ratio of people also rejected the idea that it can be accessible, it might be that they are not completely familiar with the mobile banking functions.

In figure 4, represents the rate of reaction by the respondents that they are agree upon with statement of strong commitment depends on quality of services. Majority of the public agree and strongly agree with this statement

But among these some are also committed of not satisfied this statement and put an argument that trust and some other factors also works, that are responsible for the long term commitment by the customer.

Fig. 3: Mis-use of information in bigger obstracle in mobile banking



In this figure, the rate of respondent about the mis-use of information is really high at maximum of the population that agree with the statement that information can be take-out by any one for his own personal purpose that can badly harm them. In addition to this information can be represented in a wrongly way personally and professionally.

HYPOTHESIS TESTING

Primary data collected for this research is non-parametric data & we used Spearman's Correlation Coefficient & its significant values for hypothesis testing. The values of this are given below.

Table 3: Correlation Matrix

<i>Variables</i>	<i>Spearman's Correlation</i>	<i>Significance</i>
Usefulness and Customer Satisfaction	0.762	0.000
Ease of Use and Customer Satisfaction	0.731	0.000
Perception on Risk and Customer Satisfaction	0.695	0.000

This table shows correlation between customer satisfaction in relation to mobile banking & independent variables. This table also shows a strong positive relationship between usefulness & customer satisfaction with correlation coefficient value 0.762 & significant level is 0.000. Thus our first hypothesis "A higher usefulness of mobile banking services could have positive impact on customer satisfaction" can be accepted. Also our second hypothesis "Relationship between ease of use and customer satisfaction" have also strong relationship with Spearman's correlation coefficient value which is 0.731 and significant level is 0.000. Which shows that our Hypothesis H2 also accepted through this hypothesis testing.

Moving forward to our forth hypothesis H3 "perception on risk and customer satisfaction" shows result of average correlation with the Spearman's correlation value of 0.695 and significance value is 0.000.

CONCLUSION

Currently, mobile phones are not expensive, owned almost every one. The growing of usage of smart phone brought many opportunities for every segment of business. With time the development of wireless technologies add values to life by distant apart transactions and among them mobile banking is one of them. The major purpose of our study is to measure the customer satisfaction for their usage of mobile banking in urban areas especially in working environment where people are much familiar with the technology and its usage so I can measure the result with more accuracy. In result of our Hypothesis that consists of Ease of use, usefulness and privacy concern the results outcome was positive. First two Hypothesis told that the value of customer satisfaction rely on Ease of use and usefulness of services offered and the third Hypothesis told people are still using of mobile technology with the risk factor involves in loss of their information but the positive outcome is more important.

REFERENCES

1. Bhattacharjee A. (1998): Understanding Post-Adoption Behavior in the Context of Online Services, Information Systems Research, pp. 362-379.
2. Herath H. (2010): Modelling business readiness frameworks. International Journal of Business Continuity and Risk Management, 249.

3. Herath H.M. (2009): Computer misuse in the workplace. *Journal of Business Continuity & Emergency Planning*, 259-370.
4. I.E.C. (2005): Global system for mobile communication (GSM) definition & overview. Retrieved from www.iec.org; <http://www.iec.org/online/tutorials/gsm>
5. Laforet S. (2005): Consumers' attitudes towards online and mobile banking in China. *International Journal of Bank Marketing*.
6. Laukkanen T. (2009): Comparing Consumer Resistance to Mobile Banking in Finland and Portugal. *Communications in Computer and Information Science* , 48: 89-98.
7. Okazaki S. (2005): New perspectives of M-commerce research. *Journal of Electronic Commerce Research*, 6(3).
8. Parasuraman A.Z. (1988): A conceptual model of SQ and its implications for future Research. *Journal of Marketing*, pp. 41-50.
9. Telecom Indicators (2017): Annual Cellular Mobile Subscribers. Retrieved from <http://www.pta.gov.pk>: <http://www.pta.gov.pk/index.php?Itemid=599>