RISKS IN MOBILE BANKING

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ABSTRACT

The present study is conducted to know the customers perception towards risks mobile banking in selected public, private and foreign banks on the basis of judgement sampling. Population is based on the Banks which provide Mobile banking facility to customers. from Delhi and NCR. To find out the patterns of relationship that exist among data-groups, statistical tools used for this purpose are Standard Deviation, Regression Analysis, t-test, Z-test. The results show that age has significant impact on agreement on boost up of security risk solutions. There is a significant difference in the average agreement on boost up of security risk solutions, performance/service quality risk solutions, technological risk solutions and financial risk solutions in mobile banking of unmarried and married respondents. However, unmarried respondents consider security risk solutions, performance/service quality risk solutions, technological risk solutions and financial risk solutions most important than married respondents to boost up the mobile banking.

Key Words: Mobile, private, Public, Foreign Bank.

Introduction

Latest facility provided the banking Industry is Mobile Banking. Trade shopping has also become a common suddenly linked activity using mobile banking. Wireless instantly authorization payments can be made directly from the bank by the customer. Micro-payments

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can replace cash but it has some threat (e.g. fraud). Mobile Wallet enables cardholder to purchasing from their mobile devices. Wireless Bill Payments are made directly from a cell phone. Voice and Mobile Portals gives access to information. Telemedicine: provides clinical care to people who don't have access to local doctors. Telemetry: transmission and receipt of data from remote sensor Internet Banking complemented by core banking solutions implemented by banks, mobile banking, card based electronic transactions at any bank ATM and merchants locations (both physical and through e-commerce sites) have offered a variety of channels to bank customers to conduct their payment transactions.(Chakrabarty,2012).Earlier banks had concern with only Customers financial needs. After that EFS (Electronic Funds Transfer) started where customers got the facility to transfer fund electronically but still they had to visit bank during only public dealing hours to deposit & withdraw money. After some time ATMs were introduced and customers were facilitated to deposit & withdraw cash any where any time without visiting the bank and without time boundaries. Presently banks have introduced Web banking and electronic banking and with the help of ATMs and online banking, customers have facility to do all banking transactions without visiting the bank.

REVIEW OF LITERATURE

Different piece of writing on varied facet of mobile banking appear in poles apart bulletin, periodicals etc. but they are off-putting in nature and do not give all-inclusive picture. **Kamini,Sandip and Nirmal (2011)** examined the awareness and perceptions of Customers about Mobile Banking to find out awareness and willingness to use mobile banking and to study the change pattern of customers interaction with banks. it was found that that if a bank can address the security concerns of customers, it may have a positive effect on the usage of mobile banking. As per new RBI guidelines **Ashish** and **Anand(2012)** examined how mobile banking has become an essential tool of financial inclusion. Mobile banking is most spoken factor in the area of developments in the banking sector as a whole and is expected by industry experts to replace the credit/debit card system in future. It was also suggested that reach of banks unbanked through treating Mobile banking as a platform as appropriate tool for India's financial inclusion plan. age has significant impact on agreement on boost up of security risk solutions. **Sultan and Madhu(2014)** in a empirical study found that there is a significant difference in the average agreement on boost up of security risk solutions, performance/service quality risk solutions, technological risk solutions and financial risk

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solutions in mobile banking of unmarried and married respondents. However,unmarried respondents consider security risk solutions, performance/service quality risk solutions, technological risk solutions and financial risk solutions most important than married respondents to boost up mobile banking. There is no significant difference in the average agreement on problems in mobile banking amongst the different education levels. It is recommended that SMS (short message service) and push messages for smart phones, customer authentication such as Personal Identification Numbers (PIN), review of privacy protection policies, providing information to the customers on the importance of safeguarding information in non-secure transactions are necessary to boost up the mobile banking amongst the customers. Customers should also be advised to have unbreakable passwords for the protection of their transactions.

SCOPE OF THE STUDY

The present study has been conducted to know the different risk of different Levels in Mobile Banking.

OBJECTIVES OF THE STUDY

The main objective of the study is to examine the technological risk at different Education Levels about mobile banking in the selected banks. In this broader framework, the following are the specific objectives of the study:

(i)   To study the relationship of variables with the use of mobile banking of the in the selected banks.

(ii)   To examine the impact of mobile banking on customer satisfaction by analyzing the problems faced by the customers in risks in the selected banks.

(iii)   To suggest measures to boost up the services in mobile banking for the betterment of the society.

RESEARCH METHODOLOGY

Sample Design

The universe for the purpose of this study comprises of all the banks in Delhi and NCR. For the present study, judgmental sampling is used for selection of 187 customers using mobile banking. Sample has been taken from those selected banks which are providing mobile banking facility to the customers from Delhi and NCR.

Data Collection

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The present study includes both primary and secondary data. Primary data have been collected from the customers with the help of pre-structured questionnaire and secondary data have been extracted from the Annual Reports of the selected banks, national and international agencies, various RBI Publications and IBA Publications, etc. The other sources include the research studies and articles published in various journals, magazines, newspapers and websites.

Data Analysis

To find out the patterns of relationship that exists among data-groups, statistical tools used are Standard Deviation, Regression analysis, t-test, Z-test and Chi-square test and ANOVA. Data have been analyzed with the help of Statistical Package of Social Science (SPSS).

RESULTS AND DISCUSSIONS

Firstly Table 1 depicts respondents on the basis of sample of 105 public bank customers 51 private bank customers and 31 foreign bank customers using mobile banking.

Table 1:Respondents in different Types of Banks

Bank Type		Frequency	Percent
	Public	105	56.1
	Private	51	27.3
	Foreign	31	16.6
	Total	187	100.0

Source: Survey

Hypothesis: There is no significant difference in the impact of mobile banking on customer satisfaction in the selected banks. For this one-way ANOVA is used to find whether the average satisfaction of customers are same across the different banks. As we have three groups of banks, namely, public, private and foreign so we apply one-way ANOVA and the results are as follows from where It has been depicted there is not a significant difference in the Average Agreement on customer satisfaction, $F_{(2, 184)}=0.52$, $p=0.60$.

Table 2: Average agreement of customer satisfaction in selected banks using ANOVA

	Sum of Squares	df	Mean Square	F	Sig.

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Between Groups	.936	2	.46	.52	.59
Within Groups	165.68	184	.90		
Total	166.62	186			

Source: Survey

Hypothesis: There is no significant difference in the risks to the customers arising due to mobile banking in the selected banks. For this we will use one-way ANOVA to find whether the average risk felt by customers are same across the different banks. As we have three groups of banks, namely, public, private and foreign so we apply one-way ANOVA. From following results It has been depicted there is not a significant difference in the Average Agreement on Infrastructure Risk, $F(2, 184)=0.39$, $p=0.68$.

Table 3: Average agreement of Infrastructure Risk in selected banks using ANOVA

	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	.64	2	.32	.38	.67
Within Groups	153.97	184	.83		
Total	154.62	186			

Source: Survey

From following results It has been depicted there is not a significant difference in the Average Agreement on Political and Regulatory Risk, $F(2, 184)=0.93$, $p=0.40$.

Table 4: Average agreement of Political/Regulatory Risk in selected banks using ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.01	2	1.00	.93	.39
Within Groups	199.11	184	1.08		
Total	201.12	186			

Source: Survey

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From following results It has been depicted there is not a significant difference in the Average Agreement on Service Quality Risk, $F(2, 184)=0.44$, $p=0.65$

Table 5: Average agreement of Service Quality Risk in selected banks using ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.842	2	.421	.437	.647
Within Groups	177.419	184	.964		
Total	178.261	186			

Source: Survey

From following results It has been depicted there is not a significant difference in the Average Agreement on Personalized Risk, $F(2, 184)=0.28$, $p=0.76$

Table 6: Average agreement of Personalized Risk in selected banks using ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.518	2	.259	.276	.759
Within Groups	172.521	184	.938		
Total	173.039	186			

Source: Survey

From following results It has been depicted there is not a significant difference in the Average Agreement on Security Risk, $F(2, 184)=1.63$, $p=0.20$.

Table 7: Average agreement of Security Risk in selected banks using ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.106	2	1.553	1.627	.199
Within Groups	175.676	184	.955		
Total	178.782	186			

Source: Survey

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From following results It has been depicted there is not a significant difference in the Average Agreement on Operational/Technological Risk, $F_{(2, 184)}=2.62$, p=0.08.

Table 8: Average agreement of Operational/Technological Risk in selected banks using ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.47	2	2.73	2.61	.07
Within Groups	192.31	184	1.04		
Total	197.78	186			

Source: Survey

As there are too many predictors so we will use stepwise linear regression analysis. From following table it becomes clear that in the third step of the stepwise regression we get the final set of significant predictors which explained (R^2=) 41.8% of the variability in customer satisfaction. Durbin Watson statistics is close to 2 (DW=1.706) indicating that there is no problem of autocorrelation in our regression model.

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square	F	df1	df2	Sig. F	Durbin-Watson
1	.59[a]	.35	.34	.76	.35	100.	1	185	.000	
2	.63[b]	.39	.39	.73	.04	13.5	1	184	.000	

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3	.64^c	.41	.40	.72	.02	6.82	1	183	.010	1.70

a. Predictors: (Constant), Average agreement on Boost up of Financial Risk Solutions

b. Predictors: (Constant), Average agreement on Boost up of Financial Risk Solutions, Average Operational/Technological Risk

c. Predictors: (Constant), Average agreement on Boost up of Financial Risk Solutions, Average Operational/Technological Risk, Average agreement on Boost up of Security Risk Solutions

d. Dependent Variable: Average Agreement on customer satisfaction.

Source: Survey

CONCLUSION AND POLICY IMPLICATIONS

To sum up,It has been depicted there is not a significant difference in the Average Agreement on customer satisfaction. there is not a significant difference in the Average Agreement on Infrastructure Risk. there is not a significant difference in the Average Agreement on Political and Regulatory Risk. there is not a significant difference in the Average Agreement on Service Quality Risk. there is not a significant difference in the Average Agreement on Personalized Risk, depicted there is not a significant difference in the Average Agreement on Security Risk, there is not a significant difference in the Average Agreement on Operational/Technological Risk. Durbin Watson statistics indicate that there is no problem of autocorrelation in regression model.

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