

DEMOGRAPHIC PERCEPTION TOWARDS MOBILE BANKING IN INDIA

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(ABSTRACT)

The present study is conducted to know the demographic perception toward mobile banking in selected public, private and foreign banks. A sample of 187 respondents was selected on the basis of judgement sampling from the banks which are providing mobile banking facility to the 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. 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.

Key Words: Demographic, Personal Identification Numbers, Privacy, Non-secure Transactions.

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INTRODUCTION

Mobile phones, as a medium for extending banking services, have of-late attained greater significance because of their ever-present nature. 'Mobile Banking transaction' means undertaking banking transactions using mobile phones by bank customers that involve accessing/ credit/ debit to their accounts. Banks are permitted to offer mobile banking services after obtaining necessary permission from the Department of Payment & Settlement Systems and Reserve Bank of Delhi and NCR. The rapid growth of mobile banking customers in Delhi and NCR, through wider coverage of mobile phone networks, have made this medium an important platform for extending banking services to every segment of banking clientele in general and the unbanked segment in particular.

REVIEW OF LITERATURE

Various articles on varied aspects of mobile banking appeared in different journals, but they are restrictive in nature and do not give a comprehensive nature. **Supathanish (2010)** investigated the level of satisfaction and trust in using MB in Northern Region of Thailand and tried to find out the reasons for not using MB. It was observed that the service quality, perceived risk factors, user input factors, employment and education were the dominant variables that influence consumers' choice of electronic banking and non-electronic banking channels. **Anani (2010)** examined the banking industry's ways of attracting and retaining customers leading to customer satisfaction which in turn lead to increased profitability. The results of the show that customers have concerns with regard to the banks they conduct business with. The respondents were generally satisfied to some extent with their banks with regard to services, products and banking relationship. It was suggested that the banks need to do research on why customer satisfaction is low. **Vaidya (2011)** examined the emerging trends on functional utilization of mobile banking in developed markets in next 3-4 years, for achieving objectives of getting information about banking organizations such as customer communication and information, customer convenience, conduct transactions, create customer centricity, enrich mobile banking experience to non-banking financial services, building the customer relationship, extract the best advantage of technology, provide value-added propositions, generate new revenue stream, reduce cost of transactions, achieve multi-channel advantage, automate the servicing and support research methodology was based on all secondary data by analyzing different literature on the topic. It was suggested that less developed market could adopt mobile based transactions irrespective of

the type of handset due to innovative products especially in “fund transfer” or “remittances” segment with collaboration between telecom companies, payment providers, banks, etc. and some of the selected features have been effectively utilized in these markets. However, the high-featured mobile phones in smart environment would definitely take mobile banking to the next level in the next 3 to 4 years from now. **Malarvizhi & Rajeswari (2012)** examined the awareness and usage of mobile banking services and estimated the criteria for selecting the mobile banking services in Coimbatore city and found that mobile banking users were mostly educated, belonged to business group and middle income group. Customers perceived the mobile banking more useful but the banks must be ready to meet their expectations and provide them a hassle-free mobile banking experience. **Lalitha (2014)** tried to know the latest innovations introduced in commercial and private banks, and analyzed the adoption practices of customers regarding innovative banking product and customer satisfaction towards these innovative banking products. It was found that customers choose banks on the basis of location and accessibility. Many of the respondents were not using these innovative products either due to lack of knowledge or inaccessibility to the products. Many of the respondents were observed as beginners in the usage of computers. ATM card was found to be the most opted innovative product rather than internet banking and mobile banking. Customers were found suffering from technophobia which was observed as a hindrance in usage of internet banking and mobile banking due to increased rate of frauds. As a result, respondents were found hesitating in the adoption of innovative products.

SCOPE OF THE STUDY

The present study has been conducted to know the demographic perception towards mobile banking in selected public, private and foreign banks in Delhi and NCR.

OBJECTIVES OF THE STUDY

The main objective of the study is to examine the perception towards 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 demographic in the selected banks.
- (ii) To examine the impact of mobile banking on customer satisfaction by analyzing the problems faced by the demographic in the selected banks.

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

RESEARCH HYPOTHESES

- (i) There is no relationship between demographic variables and the use of mobile banking in selected banks.
- (ii) There is no significant difference in the impact of mobile banking of demographic factors on customer satisfaction in the selected banks.
- (iii) There is no significant difference in the risks to the customers arising due to mobile banking in the selected banks.

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

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. Data have been analyzed with the help of Statistical Package of Social Science (SPSS).

RESULTS AND DISCUSSIONS

Correlation of Age with different Variables

Firstly, it has been found out whether age is associated with average Agreement on problems in mobile banking (X_1), average agreement on customer satisfaction (X_2), average infrastructure risk (X_3), average political and regulatory risk (X_4), average service quality risk (X_5), average personalized risk (X_6), average security risk (X_7), average operational/technological risk (X_8),

average agreement on boost up of security risk solutions (X_9), average agreement on boost up of technological risk solutions (X_{10}), average agreement on boost up of financial risk solutions (X_{11}), average agreement on boost up of performance/service quality risk solutions (X_{12}). From the results of correlation analysis, it is clear that age has significant impact only on average agreement on boost up of security risk solutions as p value is less than 0.10 at 10 percent level of significance

Table 1: Correlation among Age and Problems in Mobile Banking

Y	Name	Y	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉	X ₁₀	X ₁₁	X ₁₂
Age (Yrs)	R	1	-.11	-.11	-.04	-.05	-.05	.04	-.04	-.05	0.13*	0.10	0.11	0.12
	P		0.12	0.11	0.61	0.46	0.48	0.64	0.63	0.52	0.09	0.18	0.15	0.11
	N	-	187	187	187	187	187	187	187	187	187	187	187	187

*. Significant at the 0.10 level (2-tailed)

Source: Survey

Marital Status and Perception about solutions to different Risks in Mobile Banking

In this section, an attempt is made to analyze the relationship between marital status and perceptions of the customers about the solutions to different risks in mobile banking. Table 2 and 2.1 shows that there is a significant difference in the average agreement on boost up of security risk solutions in mobile banking of unmarried (Mean = 3.60, SD = 0.88) and married respondents (Mean = 3.20, SD = 0.94), $t = 3.04$, $p=0.003$. However, unmarried respondents consider security risk solutions most important than married to boost up mobile banking.

Table 2: Group Statistics for Security Risk Solutions in Mobile Banking

	Marital Status	N	Mean	Std. Deviation	Std. Error of Mean
Average Agreement on Boost up of Security Risk Solutions	Unmarried	93	3.60	0.88	0.09
	Married	94	3.20	0.94	0.09

Source: Survey

Table 2.1 Independent Samples Test

		F	p	T	d.f.	p	Mean Diff.	Std. Error	95% Confidence Interval of the Difference		
										Lower	Upper
(A)	Equal σ assumed	2.59	0.11	3.04	185	0.003	0.41	0.13	0.14	0.67	
	Not Equal σ assumed			3.04	184	0.003	0.41	0.13	0.14	0.67	

Source: Survey

Table 3 and 3.1 shows that there is a significant difference in the average agreement on boost up of technological risk solutions in mobile banking of unmarried (Mean = 3.69, SD = 0.91) and married respondents (Mean = 3.24, SD = 0.96), $t = 3.30$, $p=0.001$. However, unmarried respondents consider technological risk solutions most important than married to boost up mobile banking.

Table 3: Group Statistics for Technological Risk Solutions in Mobile Banking

	Marital Status	N	Mean	Std. Deviation	Std. Error of Mean
Average Agreement on Boost up of Technological Risk Solutions	Unmarried	93	3.69	0.91	0.09
	Married	94	3.24	0.96	0.09

Source: Survey

Table 3.1: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	p	t	d.f.	p	Mean Difference	Std. Error	95% Confidence Interval of the Difference		
										Lower	Upper
(B)	Equal σ assumed	4.03	0.045	3.30	185	0.01	0.45	0.14	0.18	0.72	
	Equal σ not assumed			3.29	184	0.01	0.45	0.14	0.18	0.72	

Source: Survey

Table 4 and 4.1 shows that there is a significant difference in the average agreement on boost up of financial risk solutions in mobile banking of unmarried (Mean = 3.70, SD = 0.85) and married

respondents (Mean = 3.32, SD = 0.93), $t = 2.95$, $p=0.004$. However, unmarried respondents consider financial risk solutions most important than married to boost up the mobile banking.

Table 4: Group Statistics for Financial Risk Solutions in Mobile Banking

	Marital Status	N	Mean	Std. Deviation	Std. Error of Mean
Average Agreement on Boost up of Financial Risk Solutions	Unmarried	93	3.70	0.84	0.088
	Married	94	3.32	0.93	0.096

Source: Survey

Table 4.1: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	p	t	d.f.	p	Mean Difference	Std. Error	95% Confidence Interval of the Difference	
									Lower	Upper
(C)	Equal σ assumed	2.94	0.088	2.95	185	0.01	0.38	0.13	0.13	0.64
	Equal σ not assumed			2.95	183	0.01	0.38	0.13	0.13	0.64

Source: Survey

Table 5 and 5.1 shows that there is a significant difference in the average agreement on boost up of performance/service quality risk solutions in mobile banking of unmarried (Mean = 3.75, SD = 0.86) and married respondents (Mean = 3.38, SD = 0.96), $t = 2.78$, $p=0.006$. However, unmarried respondents consider performance/service quality risk solutions most important than married to boost up the mobile banking.

Table 5: Group Statistics for Service Quality Risk Solutions in Mobile Banking

	Marital Status	N	Mean	Std. Deviation	Std. Error of Mean
Average Agreement on Boost up of Performance/Service Quality Risk Solutions	Unmarried	93	3.75	0.86	0.09
	Married	94	3.38	0.96	0.09

Source: Survey

Table 5.1: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						

	F	p	T	d.f.	p	Mean Difference	Std. Error	95% Confidence Interval of the Difference	
								Lower	Upper
(D) Equal variances assumed	3.01	.085	2.78	185	0.01	0.37	0.13	0.11	0.64
Equal variances not assumed			2.78	183	0.01	0.37	0.13	0.11	0.64

Source: Survey

Education Levels and Perceptions about Problems in Mobile Banking

Table 6 and 6.1 shows the relationship between education level and perception of the customers about the solutions to different risks in mobile banking. From the results, it is clear that there is no significant difference in the average agreement on problems in mobile banking amongst the different education levels {F (3, 183) = 1.15, p = 0.33}.

Table 6: Descriptive on Average Agreement on Problems in Mobile Banking at different Education Levels

	N	Mean	S.D.	Std. Error	95% Confidence level		Min.	Max.
					Lower Bound	Upper Bound		
U.G.	79	2.85	0.68	0.08	2.69	2.99	1.18	4.32
Graduate	51	2.68	0.76	0.11	2.46	2.89	1.14	4.09
P. G.	33	2.81	0.78	0.14	2.54	3.09	1.68	4.32
PhD	24	2.58	0.74	0.15	2.26	2.89	1.18	3.95
Total	187	2.76	0.73	0.05	2.65	2.87	1.14	4.32

Source: Survey

Table 6.1: Analysis of Variance

	Sum of Squares	d.f.	Mean Square	F	p
Between Groups	1.84	3	0.614	1.15	0.33
Within Groups	97.54	183	0.533		
Total	99.38	186			

Source: Survey

CONCLUSION AND POLICY IMPLICATIONS

To sum up, 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 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. Use of facial recognition technology may be a milestone to boost up the mobile banking amongst the customers.

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