



## A Study on Innovative Banking User's Awareness towards Mobile Banking in South Gujarat Region

### KEYWORDS

Mobile Banking, Innovating Banking, Competency Level, Area Profile, Consumer Education

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**ABSTRACT** Purpose: The main purpose of the present study was to measure the awareness level of innovative banking users towards mobile banking in South Gujarat Region.

*Design/Methodology/Approach:* The study is based on primary data collected from 150 respondents of the five District of South Gujarat Region based on structured questionnaire. The research design is descriptive in nature and equal samples have been collected from all the five District of the region and hence the sampling technique is quota sampling. Likert's five point scale had been used to categorize the level of mobile banking awareness of the users and then chi square test had been used to measure the association between the demographic variables and awareness level of the respondents.

*Findings:* It had been found that there is a strong association between the various demographic variables and the awareness level of the respondents.

*Practical Implications:* The findings have implications for marketing theory and management, as well as consumer education. Bankers may apply the scale to their customers and assess which dimension is the most important in terms of the outcomes examined. The managers in the various banks of South Gujarat Region should understand this association and then they should develop their mobile banking products and services to satisfy the customer's needs. They should also know the present awareness level and should emphasize on the enhancement of awareness level.

*Originality/Value:* This is the first study to test the association between the area profile, information technology competency level of the user and awareness level of the users.

### INTRODUCTION:

The mobile phone has been the tool driving the mobile banking initiative as its use has continued to grow. The use of mobile phone in mobile banking is far growing now that even countries with poor infrastructure are now using a mobile phone for their communication and business transactions. The inexpensive nature and low maintenance of this device have prompted many into using it unlike the use of lap tops, desktop, etc, which are quite expensive to get and to maintain. The trend is still on which is towards joining the mobile phones and electronic devices like Personal Assistant (PDAs) together to give a brilliant combination of mobile devices, such as the innovation of multifunctional phones like smart phones (e.g. Apple's Iphone) which has the combination of cell phone capabilities, PDA and wireless email (Deans 2002).

The growth of mobile phone varies from countries to countries, in Germany at least 87% while 79% for South Korea are reported to have own a mobile phone (Tiwari et al 2006b). This shows a high adoption rate of mobile banking and the use of mobile phone have been used to that advantage. The developed countries easily adopt new innovative than developing countries although there are evidences that some developing countries are experiencing high adoption rate such as China (Donner 2008). According to International Telecommunication Union (ITU) report, Africa and Asia has benefited from this innovation, and is changing people's lives and has brought about opportunities for mobile commerce (ITU 2008B; ITU 2008C). New mobile devices which are being developed can enable data transmission with the introduction of UMTS (Universal Mobile Telecommunication system), this is a third generation (3G) technology

which is an improvement over the 1G, 2G, 2.5G and 2.75G (Tiwari et al 2006b). Presently, the 4G mobile is being introduced to the world and countries like Sweden, Germany and United States have rolled out the new technology which is faster, a lot cheaper and has more capacity than 3G but for UK it is expected to be used in 2013 though it has been tested in London by O2 (BBC NEWS 2011), While developing countries like Nigeria, Philippines and Sri-Lanka have introduced 3G networks (Telecoms insight 2008; ITU 2008a) and have started using it.

### REVIEW OF LITERATURE:

**Clark (2008)** suggested that as a channel the mobile phone can augment the number of channels available to consumers, thereby giving consumers more low-cost self-service options by which to access funds, banking information and make payments. Mobile as a channel delivers convenience, immediacy and choice to consumers. But there are a large number of different mobile phone devices and it is a big challenge for banks to offer Mobile banking solution on any type of device. Some of these devices support Java2Micro Edition (J2ME) and others support Wireless Application Protocol (WAP) browser or only SMS.

**Further Vyas (2009)** stated that Indian banks will target non-online banking users who may lack regular access to desktop Internet but are very likely to own a mobile device, thus reporting great potential of Mobile banking in India. This report of Vital Analytics suggested huge potential of Mobile banking in India, as it found that urban Indian customers' checking account balance is the most frequently cited reason for using Mobile banking. 40 million Urban Indians used their mobile phones to

check their bank account balances followed by viewing last three transactions.

**Rao & Prathima (2003)** finds that there is huge potential of Mobile banking in India but Indian banks offering m-banking services still have a long way to go.

**Sathye (1999)** study focused on the capital cities of Australia where use of internet and population was likely to be high and suggested that security concerns and lack of awareness about Internet banking and its benefits stand out as being the obstacles to the adoption of Internet banking in Australia. Author suggested some of the ways to address these impediments. Further, he suggested that delivery of financial services over the Internet should be a part of overall customer service and distribution strategy. These measures could help in rapid migration of customers to Internet banking, resulting in considerable savings in operating costs for banks.

**Rotchanakitumnuai & Speece (2003); Akinci, Aksoy & Atilgan (2004)** stated that researchers investigated why corporate customers do not accept electronic form of banking, which can assist banks to implement this self-service technology more efficiently. Further they suggested that security of the e-channel is a major factor inhibiting wider adoption. Those already using electronic form of banking seem to have more confidence that the system is reliable, whereas non-users are much more service conscious, and do not trust financial transactions made via e-channels. Non electronic form of banking users tend to have more negative management attitudes toward adoption and are more likely to claim lack of resources. Legal support is also a major barrier to electronic form of banking adoption for corporate customers.

**Kolodinsky, Hogarth & Hilgert (2004)** stated that millions of Americans are currently using a variety of e-banking technologies including Mobile banking. However, millions of others have not or will not. They explored factors that affect the adoption or intention to adopt three e-banking technologies and changes in these factors over time and suggested that relative advantage, complexity/ simplicity, compatibility, observability, risk tolerance, and product involvement are associated with adoption. Income, assets, education, gender and marital status, and age also affect adoption. Adoption changed over time, but the impacts of other factors on adoption have not changed.

**Gan, Clemes, Limsogunchai & Weng (2006)** findings stated that in New Zealand the output from the logistic regression indicates 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.

**Comminos et al. (2008)** suggested that consumers will only transact electronically (online/mobile banking) if there is convenience and security. Further Sharma and Singh (2009) found that Indian mobile banking users are specially concern with security issues like financial frauds, account misuse and user friendliness issue - difficulty in remembering the different codes for different types of transaction, application software installation & updation due to lack of standardization.

#### PROBLEM IDENTIFICATION:

Customer are facing problem to do the banking transaction when they are travelling or they are out of their office or away from their desk. At the same time more effort and time is wasted while going to the bank and doing all the banking transactions.

Many of the authors and the researchers tried to find out the awareness level of the mobile banking users based on various demographic variables, but specific research is not being conducted based on types of users, geographical area and competency level of the user as the demographic variables. Thus the researcher has made an effort to do study in this area and topic has been entitled as "A Study on Innovative Banking User's Awareness towards Mobile Banking in South Gujarat Region". The researcher has carried out literature review and also conducted focus groups interviews with the users, branch managers and banking technology experts. Thereafter, three major demographic variables had being identified which has significant association with the awareness level of innovative banking users in region.

#### OBJECTIVES OF THE STUDY:

1. To measure the level of awareness of Innovative banking users towards Mobile Banking.
2. To find out new awareness strategies for the commercial banks in the region.

#### RESEARCH METHODOLOGY

The present study has been conducted on the basis of primary data and was descriptive in its nature. Primary data obtained by interacting with various people, getting the questionnaires filled by them. The data was collected by means of questionnaire and was classified and analyzed carefully. Questionnaire was constructed innovatively and systematically distributed to respondents in the study field. In this research, the questionnaire was formed as a direct and structured one. The questions were mostly close-ended questions. Open-ended question has been used only for deriving suggestions from the respondents.

#### SAMPLING DESIGN:

**Table: 1 Sampling Design to meet Objectives:**

Location	: South Gujarat Region
Sampling units	: Innovative Banking users
Sampling method	: Quota Sampling
Sample Size	: 150 Respondents
Instrument for data collection	: Structured Questionnaire

#### TOOLS AND TECHNIQUES OF DATA ANALYSIS:

The statistical analysis carried out in the study by using MS-Excel and SPSS (Statistical Package for Social Science) Software. The statistical technique like Chi-square has been used for the analysis. Analyzed & interpreted data have been presented in the form of tables, charts and figures.

#### DATA ANALYSIS & INTERPRETATION:

##### Hypothesis: 1

H0: There is no association between gender and Mobile Banking awareness about fund transfer.

**Table 3: Type of users and Mobile Banking awareness about Fund transfer**

Type of user and Mobile Banking awareness about fund transfer Cross Tabulation						
Particulars		Corporate	Type of users		Total	
			General			
Mobile Banking Awareness about Fund Transfer	Highly Aware	Count	54	10	64	
		% of Total	36.0%	6.7%	42.7%	
	Aware	Count	12	12	24	
		% of Total	8.0%	8.0%	16.0%	
	Neither Aware & not aware	Count	15	16	31	
		% of Total	10.0%	10.7%	20.7%	
	Not aware	Count	5	12	17	
		% of Total	3.3%	8.0%	11.3%	
	Highly Not aware	Count	4	10	14	
		% of Total	2.7%	6.7%	9.3%	
	Total		Count	90	60	150
			% of Total	60.0%	40.0%	100.0%

**Table 4: Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.961	4	.000
Likelihood Ratio	22.377	4	.000
Linear-by-Linear Association	2.910	1	.088
N of Valid Cases		150	
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.60			

From the table 3 it can be identified that, out of 150 total respondents 90(60%) are General and 60 (40%) are Corporate Users. Out of Corporate user respondents majority fall under highly aware 54 (36%) followed by aware 12 (8%), 15(10%) of the corporate users are neither aware nor not aware and the lowest level of respondents fall under highly not aware are aware category are 4 (2.7%).

Out of General User, majority fall under highly aware 10 (6.7%) followed by aware 12 (8%) and the lowest level of respondents fall under highly aware category are 10 (6.7%). It can be inferred that majority of General users are not aware compared to Corporate users about Fund transfer done through Mobile banking.

From the table 4 it can be identify that, the Pearson chi-square value is 21.961 and p-value is less than .05, (p = 0.00). So we can reject the null hypothesis, and say that Type of users and Mobile banking awareness about Fund Transfer are associated

**Hypothesis: 2**

**H0: There is no association between Geographic area and Mobile Banking awareness about Fund Transfer**

**Table 5: Geographic Area and Mobile Banking awareness about Fund transfer**

Geographic Area * Awareness about the fund transfer Cross Tabulation									
			Awareness about the Fund Transfer on Mobile					Total	
			Highly Aware	Aware	Neither aware nor not aware	Not Aware	Highly Not Aware		
Geo-graphic Area	Valsad District	Count	10	8	13	8	6	55	
		% of Total	6.7%	5.3%	8.7%	5.3%	4%	36.7%	
	Navsari District	Count	6	10	8	13	0	37	
		% of Total	4%	6.7%	5.3%	8.7%	.0%	27.3%	
	Surat District	Count	20	8	2	0	0	20	
		% of Total	13.3%	5.3%	1.3%	.0%	.0%	10.7%	
	Bharuch District	Count	0	0	7	0	0	7	
		% of Total	.0%	.0%	4.7%	.0%	.0%	4.7%	
	Tapi District	Count	0	0	6	16	9	31	
		% of Total	.0%	10.7%	4.0%	10.7%	6%	20.7%	
	Total		Count	36	26	36	37	15	150
			% of Total	24.7%	28.0%	24.0%	14.0%	13.3%	100.0%

**Table 6: Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	91.798	12	.000
Likelihood Ratio	97.600	12	.000
Linear-by-Linear Association	28.703	1	.000
N of Valid Cases		150	
a. 12 cells (48.0%) have expected count less than 5. The minimum expected count is 0.93			

From the table 5 showed the classification based on geographic area and Mobile awareness about Fund transfer.

It is being observed on the bases on geographic area, majority of respondent 20(13.3%) from Surat district are highly aware about the mobile banking. In Navsari and Valsad District, 10(6.67%) and 6(4%) of respondent are highly aware about the mobile banking. In Bharuch and Tapi district, 0% of respondent are highly aware about the mobile banking.

From the table 6 it can be identify that, the Pearson chi-square value is 91.798 and p-value is less than .05, (p = 0.00). So we can reject the null hypothesis, and say that, So we can reject the null hypothesis, and say that, there is no association between the innovative banking user's Geographic area and Mobile awareness about Fund transfer.

**Hypothesis: 3**

**H0: There is a significance association between Competency and Mobile banking awareness about Fund Transfer**

**Table 7: Competency Level and Mobile banking awareness about the Fund transfer**

IT Competency Level * Awareness about Fund Transfer Cross tabulation								
Particulars			Awareness about Fund transfer					Total
Highly aware			Neither Aware nor not aware	Not Aware	Highly Not aware			
Aware								
IT Competency Level	Fully Competent	Count	18	17	28	10	8	81
		% of Total	12%	11.33%	18.66%	6.66%	5.33%	54%
	Competent	Count	12	6	11	6	5	40
		% of Total	8.00%	4.00%	7.33%	4.00%	3.33%	26.66%
	Not Competent	Count	5	4	3	7	10	29
		% of Total	3.33%	2.66%	2.00%	4.70%	6.70%	19.33%
Total		Count	35	27	42	23	23	150
% of Total			23.33%	18.00%	28.00%	15.30%	15.30%	100.00%

**Table 8: Chi-Square Tests**

	Value	DF	Asymp. Sig. (2-sided)
Pearson Chi-Square	48.689	8	.000
Likelihood Ratio	58.101	8	.000
Linear-by-Linear Association	1.703	1	.000
N of Valid Cases		150	
a. 3 cells (15%) have expected count less than 5. The minimum expected count is 4.14%			

From the table 7 showed the classification based on competency level of the respondents and awareness about Fund Transfer.

It is being interpreted based on competency level of the respondent, majority of fully competent respondent fall under highly aware category is 18(12%) followed by aware category is 17 (17%) and the lowest level of fully competent respondents fall under highly not aware category is 8 (5.33%). Fully competent respondent are highly aware about the fund transfer through mobile as compared to competent and not competent respondents.

From the table 8 it can be identify that, the Pearson chi-square value is 48.689 and p-value is less than .05, (p = 0.000). So we can reject the null hypothesis, and say that, there is no significance association between the innovative banking user's Competency Level and Mobile banking awareness about the Fund transfer

**FINDINGS:**

**The major findings are as follows:**

1. From the data analysis and interpretation, it has being found that most of the corporate users are highly aware about the fund transfer through mobile banking and very less number of general users are aware about the fund transfer. This is because of less knowledge among the general users about the mobile banking and the corporate have sound knowledge about the fund transfer. Corporate users use these facilities for their business transactions and daily fund transferring from bank to their client and customers. General users

may have risk of money deduction from their account or fraud.

2. The response was collected from 5 district of south Gujarat region. It was being found that most of the respondents from Surat, Navsari and Valsad district are highly aware about the fund transfer through mobile banking. Respondent from Tapi and Bharuch are very less aware about the fund transfer through mobile banking. Surat, navsari and valsad is having good infrastructure in terms of information technology and other supportive tools for mobile banking.
3. Majority of the fully competent are highly aware about the fund transfer because those respondents are more aware about the operation of the mobile banking and understand the different functionality easily.

**CONCLUSIONS:**

From the study done in south Gujarat region, it has being found that most of the innovative banking corporate users are aware about the mobile banking, but specifically general users are not aware about the mobile banking services such as fund transfer. Due to risk and inconvenience of usage of mobile, general users are not aware of the services. Respondent in the urban area are highly aware about the mobile banking because the internet connection, education, internet usage, more number of branches of banks. Fully competent users are highly aware about the fund transfer through mobile banking because they have sound knowledge about the operation and functionality mobile banking services.

**SUGGESTIONS:**

The researcher would here by like to put forth the following suggestions to the bank based on observation, analysis and interpretation of the collected data from the respondents.

1. Infrastructure for mobile banking should be increased by the banks in remote area and also network problem should be eliminated in urban area too. Supportive staff should be employed dedicated only for the mobile banking services in rural area for the guidance and assistance to the bank users.
2. General users are very less aware about the mobile banking fund transfer, banks should make an effort to educate the general users about the usage of the

fund transfer through mobile banking. At the same time, banks should motivate general users to use mobile banking while explaining the advantages of mobile banking fund transfer. General users should be assured about the safety for the account details and deduction from their account. The whole procedure should be explained in details before the users start using the mobile banking services

3. Less competent respondent should be turned to competent or fully competent users to use the mobile banking services so that this service will reduce the time and cost of the banking transactions.

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