

Mobile Banking: No wires, No Worries

A Case Study of State Bank of India, Uttarakhand.

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Abstract

M-banking is one of the newest approaches to the provision of financial services through information communication technology. It has increased its significance during the last decades and its importance is still continuing to increase. It enables payments to be transacted regardless of place and times, without purchasing internet. In the present study, an effort is made to know whether mobile banking services is depended on different age groups customers of SBI, in Uttarakhand, India with the help of statistical tool. An interesting finding, i.e., mobile banking services and age groups are independent and free from biasness. In general, we can conclude from the results that the mobile banking services can play a useful role in our financial transactions.

1. INTRODUCTION

Today, there are more phones than PCs in the market. Mobile phones make it simple to communicate with the target market and establish a stronger relationship for banks and their customer also. Its “*Mobility*” is its big advantage, as mobile devices improve the quality of the service and clients can perform transactions at their convenience wherever and whenever they want it. Mobile banking (m-banking) involves the use of a mobile phone or another mobile device to undertake financial transactions linked to a client’s account. It is a term used for performing balance checks, account transactions, payments, credit applications and other banking transactions through a mobile device.

Mobile device becomes an electronic payment device. Its ‘*Mobility*’ enables payments to be transacted regardless of place and times, without purchasing internet. The mobile phone as a channel for service consumption offers enormous potential. Since today, a mobile phone is an integral part of customers’ lives and a growing number of these devices. Currently mobile banking services enable consumers, for example, to request their account balance and the latest transactions of their accounts, to transfer funds between accounts, to make buy and sell orders for the stock exchange and to receive portfolio and price information (*Laukkanen and Lauronen, 2005*). In spite of the advantages the use of the mobile phone in banking actions has remained small. There seem to be some inhibitors that slow down the use of mobile channels in banking transactions.

Furthermore, security issues are argued to be among the greatest concerns in the adoption of mobile banking (Brown, I., 2003 and Luarn and Lin.,

2005). Contrary to previous findings, some studies have argued that security issues are not perceived by customers to be major obstacles in banking transactions (Suoranta, 2004). These studies state that, mobile banking was found a secure way to conduct banking transactions by the users. Mobile banking is used in this paper to mean sms banking that uses mobile phone technology to deliver the financial transaction/services to consumers. It has been taunted as a powerful new marketing and CRM tool for financial services companies (Sinisalo et al., 2007). This is particularly true because there are more phones than PCs in the market; mobile phones make it simple to communicate with the target market and establish a stronger relationship as banks provide market compelling-needed services (The World Bank, 2009). Also, mobile devices improve the quality of the service because clients can perform transactions at their convenience wherever and whenever they want it (Laukkanen, 2005) provided there is a connection. Thus, a mobile bank service can foster stronger relationships to the existing ones between financial institutions and clients.

a) Definitions of Terms for Mobile

Banking Service : The following words and expressions shall have the corresponding meanings wherever appropriate -

'Account' shall mean an account with the Bank in which a request for availing the Mobile Banking Service has been registered or re-registered with the Bank.

'Customer' means the holder of an Account in SBI.

'MPIN' shall mean the Personal Identification Number (password) for the Mobile Banking Service.

'MBS' shall mean Mobile Banking Service of the Bank and includes the service over the application/USSD/WAP/SMS Banking.

'USSD' shall mean Unstructured Supplementary Service Data.

'Bank' shall mean State Bank of India or any successor or assign of it.

'Facility' shall mean Mobile Banking facility provided to the Customer including IMPS.

'Mobile phone' means the handset and SIM card along with the accessories and necessary software

for GSM phones and handsets and software for CDMA phones, which is owned by the mobile subscriber.

'Mobile Phone Number' shall mean the Mobile number that has been used by the Customer to register for the Facility.

'User' means the customer of the Bank having registered for the Mobile Banking facility and authorized by the Bank to use the Mobile Banking facility.

'Alert(s)' means the customized messages sent to the customer over his mobile phone as short messaging service ("SMS") in response to the Triggers set by the customer.

'Application' shall mean the Banks Mobile Banking application which will be downloaded onto the mobile phone of the Customer.

'WAP' means Wireless Application Protocol.

'Bank's Website' means www.statebankofindia.com/www.sbi.co.in

'SMS Banking' means a service that allows Customers to access their account information via Mobile phone using SMS messaging.

b) Benefits of Mobile Banking Services

i) Grow new customer base and markets:

Developing wireless applications and services targeted at the mobile mass market will allow attracting new, high-value customers into mobile banking portal and expanding the reach to global markets.

ii) Increase share of customer wallet: The convenience of having personalized wireless access to critical financial information is an invaluable service for customers on the move. Enabling the execution of time-sensitive financial transactions anywhere, anytime, provides the opportunity to strengthen the relationships with existing customers. This ultimately results in an increased share of the customers' transactions—preventing them from taking a portion of their financial business elsewhere.

iii) Grow assets, number of transactions and fees: Granting customers flexible access to financial information and accounts enables them to perform transactions when it's most convenient for them. As a

result, they have the opportunity to conduct transactions more frequently, driving increased revenue from fees.

iv) Expand and enhance brand presence: Brand and reputation for convenience, service and innovation will be strengthened and enhanced each time customers on the move stop to check their stock portfolio or to pay bills wirelessly. This also offers significant potential to grow the market.

c) Mobile Banking Service (MBS)

In the state of Uttarakhand, mainly *Balance Enquiry* which includes enquiry of balance in account(s) as well as mini statement of last five transactions, *Fund Transfer* which includes transfer of funds to accounts with SBI/other banks and mobile to mobile transfer, *Bill Payments* which includes electricity bill, telephone bill etc, *Top-up Recharge* including mobile top up and top up of DTH connections are used by the customers of SBI Bank, through mobile banking services, whereas some other facilities like payment of SBI life insurance premium, request for issue of cheque book, enquiry regarding demat account, etc are also provided by State bank of India.

2. OBJECTIVES OF THE STUDY

- To study the customer preferences between the age groups regarding various mobile banking services.
- To analyse whether mobile banking services are depended on different age groups of customers.

3. RESEARCH METHODOLOGY

Primary data was collected through field survey method. The sample size was confined to 250 respondents. A fine mix of two different age groups was taken into consideration which includes male and female both to avoid concentration on any 'one' specific group. Random sampling method was adopted for selecting respondents. Primary data was collected through specially structured questionnaire. Before embarking on to collect the data to be used in the research study, a pilot study was conducted, which comprised 10% of the total sample size for checking the feasibility of questionnaire. A few questions were removed and a few added up to get

the answers of the hypothesis. The study area included the different branches of SBI in different areas of the state of Uttarakhand, India. Secondary data was collected from various relevant journals, e-journals and research studies.

4. LIMITATIONS OF THE STUDY

The sample size is relatively small from which primary data has been collected. Hence the drawn conclusions are area specific and any generalization will need a cautious approach. The second limitation of the study is that the analysis is done on the data which is specific from only one public bank not from others.

5. HYPOTHESIS OF THE STUDY

Null Hypothesis (H_0) - Mobile Banking Services (MBS) will not be depended on different age groups of customers.

Alternate Hypothesis (H_1) - Mobile Banking Services (MBS) will be depended on different age groups of customers.

6. FINDINGS AND DISCUSSION

After doing cross tabulation between age group and mobile banking services, it was found that out of 250, 119 respondents belonged under the age of 35 years and 131 respondents belonged above the age of 35 years. (See Table 1)

From Figure 1 and Figure 2, it was found that with the help of mobile banking, the highest preference is given for balance enquiry service by both the age group of customers of SBI, and the lowest preference is given for bill payment service by the age group of customers under 35 years, whereas the age group of customers above 35 years gives the lowest preference for fund transfer service by the customers of SBI, in the state of Uttarakhand.

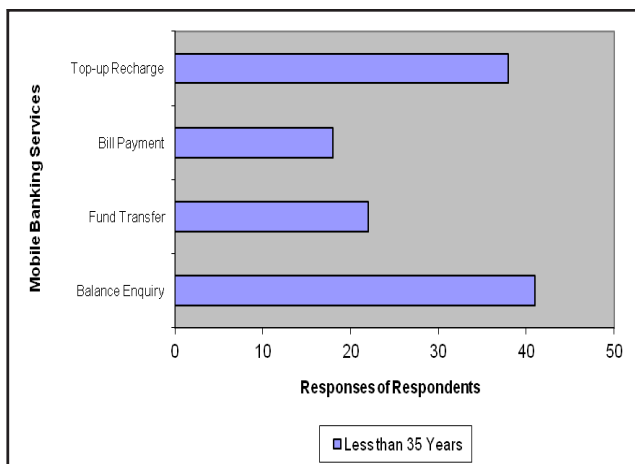
Analytical tools used in analysis

Chi square test was employed to analysing the association between both the age groups and mobile banking services (MBS). The test of goodness of fit is conducted by setting up null hypothesis. The values of Chi-Square has been computed using the formula

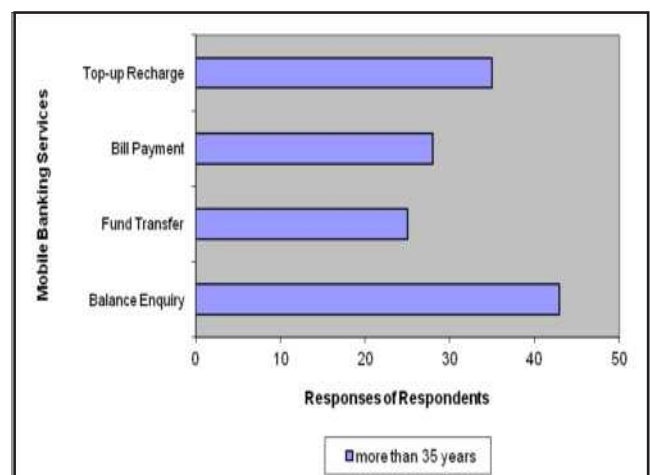
**Table 1:
Age Group and Mobile Banking Services**

Age Group (Years)	Mobile Banking Services				
	Balance Enquiry	Fund Transfer	Bill Payment	Top-up Recharge	Total
less than 35	41	22	18	38	119
35 & above	43	25	28	35	131
Total	84	47	46	73	250

**Figure 1:
Responses of respondents (less than 35 years)
for mobile banking services**



**Figure 2:
Responses of respondents (more than 35 years)
for mobile banking services**



**Table 2:
Calculation of Chi square value**

O	E	O - E	(O - E) ²	(O - E) ² /E
41	39.98	41.016	1.032	0.025
22	22.372	-0.372	0.138	0.006
18	21.896	-3.896	15.178	0.693
38	34.748	3.252	10.575	0.304
43	44.016	-1.016	1.032	0.023
25	24.628	0.372	0.138	0.005
28	24.104	3.896	15.178	0.629

CHI-square “ $\chi^2 = \sum [(O-E)^2/E]$ ”

Where:

O = Observed value

E= Expected value

And the degree of freedoms=

$(R-1)(C-1)$

Hypothesis testing: The hypothesis states that “*Mobile Banking Services (MBS) will not be depended on different age groups of customers*”.

The rejection criterion was set:

Degree of Freedom (d.f): $(4 - 1)(2 - 1) = 3$

The critical value from chi square distribution table is 7.815, (at alpha 0.5 and d.f = 3).

The result of the test conducted is given in table 2. As the value of chi square is below the critical value, null hypothesis is accepted.

That is, mobile banking services (MBS) will not be dependent on both the different age groups of customers of SBI, in Uttarakhand state.

7. CONCLUSION

M-banking is one of the newest approaches to the provision of financial services through information communication technology. In general, we can conclude from the results that the mobile banking services can play a useful role in our financial transactions. The chi square value of mobile banking services and age groups comes out to be 1.964 which is very less as compared to the critical value 7.815. It means both the variable i.e., mobile banking services (MBS) and age groups of customers are independent.

REFERENCES

1. Brown, I., Cajee, Z., Davies, D. and Stroebel, S. (2003), “Cell phone banking: predictors of adoption in South Africa”, *International Journal of Information Management*, Vol. 23(5), pp. 381-94.
2. Divakar Goswami and Satish Raghavendran, (2009), “Mobile-banking: can elephants and hippos tango”? *Journal of Business Strategy*, Vol. 30(1), pp. 14-20.
3. Donner, J. and Tellez, C.A. (2008), “Mobile banking and economic development: Linking adoption, impact and use”, *Asian Journal of Communication*, Vol. 18(4), pp. 318-32.
4. Hernan E. Riquelme, (2010), “The moderating effect of gender in the adoption of mobile banking”, *International Journal of Bank Marketing*, Vol. 28(5), pp. 328-341.
5. Laukkanen, T. and Lauronen, J. (2005), “Consumer value creation in mobile banking services”, *International Journal of Mobile Communications*, Vol. 3(4), pp. 325-38.
6. Luarn, P. and Lin, H. (2005), “Toward an understanding of the behavioral intention to use mobile banking”, *Computers in Human Behavior*, Vol. 21(6), pp. 873-91.
7. Seidel, G. (2009), “Challenges but opportunities for mobile banking”, *Card Technology Today*, Vol. 2, pp. 5-6.
8. Sinisalo, J., Salo, J., Karlajuoto, H. and Leppaniemi, M. (2007), “Mobile customer relationship management: underlying issues and challenges”, *Business Process Management Journal*, Vol. 13(6), pp. 771-87.
9. Suoranta, M. and Mattila, M. (2004), “Mobile banking and consumer behavior: new insights into the diffusion pattern”, *Journal of Financial Services Marketing*, Vol. 8(4), pp. 354-66.
10. www.statebankofindia.com
11. www.sbi.co.in