Exploring Usage Pattern of Mobile Banking among Public and Private Sector Banks in Indore.

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Abstract

Technology has introduced new ways of delivering banking to the customers like ATM, internet banking and Mobile banking. Hence, banks have found themselves at the forefront of technology for the last decade. The present research explores the usage pattern of mobile banking among the public and private sector banks in Indore. Using information drawn from the survey of 478 mobile banking users of various public and private sector banks of Indore, during the month of December, 2011 to March, 2012. Percentage analysis and pilchard were used for analysis. The results indicates that getting information like mini-statement, balance inquiry; utility bill payment like telephone bills, mobile top up, electricity bills and funds transfer from one account to other account are the most preferred service by the mobile banking user's in Indore.

Keywords: Banking, Preferred Mobile banking services, Public sector bank, private sector bank.

INTRODUCTION

Banking is one of the most information intensive sectors and is an ideal domain using technology. For customers, it provides them: anywhere, anytime, anyway banking dream. This has prompted the banks to effectively use technology to meet the increasing customer expectation and face the tough competition.

With rapid growth of cellular services in India, banks identified mobile phones as an effective tool to reach maximum unbanked customers. To become more efficient, flexible and competitive in today's changing business environment, banks are increasingly acknowledging the benefits of internet using mobile phones in satisfying the needs of the modern consumer. Mobile banking is another vehicle; banks can utilize to make banking more accessible to customers. Mobile banking is a very effective way of improving customer services and could be used to inform customers better.

Banking through mobile has emerged as a strategic resource for achieving higher efficiency, control of operations and reduction of cost by replacing paper based and labor intensive methods with automated processes thus leading to higher productivity and profitability. The purpose of present study is to analyze such effects of mobile banking in Indore, where no rigorous attempts have been undertaken to understand this aspect of the banking business. The primary aim is to advance the understanding of how mobile banking of public sector banks is different from private sector banks in terms of demographic profile like gender, age, annual income, occupation, educational qualification and other mobile banking related characteristics like mobile banking length of usage and frequency of using mobile banking from year during the

month of December, 2011 to March, 2012. The present study also compares mobile banking users of public sector banks and private sector banks.

MOBILE BANKING IN PUBLIC AND PRIVATE SECTOR BANKS

Mobile banking is availing banking and financial services with the help of mobile telecommunication device. According to Barnes and Corbitt (2003); Scornavacca and Barnes (2004) Mobile banking is a channel whereby the customer interacts with a bank via a mobile device, such as a mobile phone or personal digital assistant (PDA).

The phenomenon where mobile is used to carry out banking services is termed as mobile banking. Mobile banking caters for financial transactions using a mobile device like mobile phones, PDAs, Smartphone's such as viewing account balances, making transfers between accounts, or paying bills. There are three types of operations done in Mobile banking i.e. mobile accounting, mobile brokerage and mobile financial information services. Accounting and brokerage services are transaction-based, like fund transfers from account to account in the same bank or account from one bank to other account in different bank; bill payment processing; mobile phone recharge, micro-payment handling. According to (Kumar, 2013) the top five banks in India based on the mobile banking transactions during October-December 2012 provided by RBI are State bank of India, ICICI bank, Axis bank, City bank and Hdfc bank. The popular mobile banking services in India are balance checks, account transactions, cheque status, setting alerts, payment reminders, accessing mini statement, placing orders for cheque books, etc.

By (RBI, 2013) during the financial 2012-13, total of 1,329,221.92 billion rupees were transacted through RTGS, paper clearing, government securities clearing, forex clearing, cheque clearings, retail electronic clearing, credit and debit cards and mobile banking. Out of which a total 59.90 billion funds were transferred by the mobile banking users in India. Out of which 8.07 billion is from January 2013, 9.92 billion rupees is in feb '13 and 9.89 billion rupees is transected in mar'13 using mobile banking in India.

According to Singh (2012) report, current status of Mobile banking In India is as follows:

- -HDFC has 1.2 million mobile banking users. State Bank of India has 5.2 million registered mobile banking users and this is increasing by 2 lakh new mobile banking users per month. Almost 63% of Citibank account holders use the digital medium for banking.
- -Banks have gradually moved from offering non-financial services to financial services on mobile phones the evolution curve has been: alerts (on ATM withdrawls, credit card purchases etc), cheque book request, payments (of utility bills), debit and credit statements, fund transfer, opening fixed deposits, cash management at low end (up to Rs 50,000 per day) etc. In future more services will be added.
- To expand mobile banking reach, HDFC Bank has started Hindi mobile banking service and a 'net safe light' virtual card both were started last month. The latter helps a user to store a limited value on his mobile.

MOBILE BANKING SERVICES IN INDIA

According to a report (Vital 2009) Based on data gathered in April 2009 for Feb/March mobile banking urban Indian customer's checking account balance is the most frequently cited reason

for using mobile banking. Followed by status of chequebook and demand draft services and then payment reminder are the popular mobile banking services by the Indian customers. About 40 million Urban Indians used their mobile phones to check their bank account balances followed by viewing last three transactions.

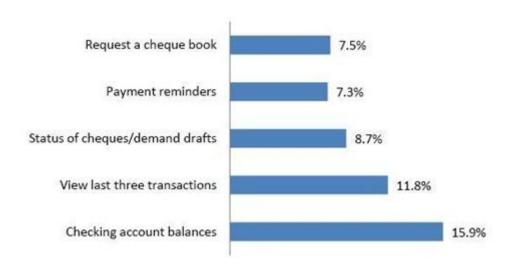


Chart 1: Popular Mobile Banking Services in India

source: http://www.telecomindiaonline.com

OBJECTIVES

The purpose of this research is to explore usage pattern of mobile banking service quality of public and private sector banks. Based on the purpose of research, the main research objective arises as:

Is there any difference between Usage Pattern of mobile banking service quality of public and private sector banks in Indore?

The following supporting research objectives emerged to answer the overall research objective. The study is undertaken with the following objectives:

- 1. To explore Preferred Mobile Banking Services among Users of Public and Private sector banks in Indore.
- 2. To study Mobile Banking Usage Duration of Public and Private Sector Banks in Indore.
- 3. To study Frequency of Transactions by the Mobile Banking Users of Public and Private Sector Banks in Indore.

METHODOLOGY

The study is based on empirical research, conducted to compare mobile banking of public and private sector banks located in Indore district of Madhya Pradesh in India. The choice of research

design depends on the objectives of the research in order to be able to answer the research questions (Crotty, 1998). The nature of study is exploratory. Quantitative approach is used to test an objective theory which is done by collecting numerical data and analyze it statistically.

All the mobile banking users of Indore district are population of the study. As it was difficult to identify sample frame i.e. total number of mobile banking users in Indore district, hence non-probabilistic convenient sampling method was used for the purpose of sampling. To some extend snowball sampling technique was also used. As snowball sampling is a non probabilistic sampling technique where existing study subjects recruits future subjects from among their acquaintance. A sample is taken from the target population being researched. If the sample is adequate it will have the same characteristics of the population (Zikmund, 2003). Thus the sample group appears to grow like a rolling snowball. As the sample builds up enough data is gathered to be used for research. Snow ball sampling technique is often used in hidden population, as in this study, which is difficult for researcher to access.

In general, there are two types of quantitative research methods (Creswell, 2007): survey and experiment. This study has used survey method where the data is collected by using a questionnaire to discover the opinion of a population, based on sample of the population.

The primary data has been collected by means of structured questionnaire in two ways i.e. personally and through e-mail. In this study the final questionnaire was operationalised on a sample of 454 mobile banking users of public and private sector banks of Indore during the month of December, 2011 to March, 2012. Out of 478 responses, 24 invalid questionnaires were eliminated and 454 questionnaires were retained for final analysis which suggest response rate as 95.7%. The study has applied percentage analysis using pie chart for the purpose of analyzing the data.

ANALYSIS AND INTERPRETATION OF DATA

Customer of public and private sector banks of Indore are profiled using demographic and socioeconomic factors. The descriptive statistics of the demographical variables for public and private sector banks are shown in table 1.

Table 1 : Demographic Profile and Usage pattern of Mobile Banking Users of Public and Private Sector Banks.

	Total n=454 (in %)	Public n=302 (in %)	Sector	Private Sector n = 152 (in %)		
Gender						
Male	79.6	77.2		81.6		
Female	20.4	22.8		18.4		
Mobile banking Length of Usage (In months)						
less than 3 months	34.7	34.8		34.9		

3-12 months	41.3	41.1	41.4			
more than 12 months	24.0	24.2	23.7			
Mobile banking Frequency (In Months)						
up to 5 times	59.8	64.6	57.2			
between 6 and 10 times	29.2	23.8	34.2			
more than 10 times	11.0	11.6	8.6			

From table 1, the overall population (n=454), It is observed that 79.6% mobile banking users are males and 20.4% mobile banking users were females. Among public sector mobile banking users, 77.2% were male and 22.8% were females. For private sector 81.6% mobile banking users contribute to male and 18.45% users belongs to females. Thus it is concluded that mobile banking is more popular among male users for both the banks in Indore.

In order to study the preferred mobile banking services among users of public and private sector banks. The users were asked the question that which services you prefer while using mobile banking. It is clear from the table 2, that mobile banking users of Indore preferred services like: getting information (balance enquiry, mini statement etc); funds transfer; utility payment (bills payment) are most preferred services overall contributes 80.5% among the services available on mobile banking in Indore. Whereas Requests for cheque book, Demand Draft, Stop-payment etc. and Stock trading and demat account services of mobile banking provided by various banks in Indore are not so popular.

The researcher is also interested to identify the preferred mobile banking services by the users of public and private sector banks. It is clear from the table 2, that getting information like ministatement, balance inquiry; utility bill payment like telephone bills, mobile top up, electricity bills and funds transfer from one account to other account are the most preferred service by the public sector bank user's in Indore. Where sending requests using mobile—like issue cheque book, demand draft request ,stop-payment request ,shares trading, demat account services are the least preferred services by the users of public sector banks in Indore.

Table 1: Preferred Mobile Banking Service by Users of Public and Private Sector Banks in Indore.

	All Users	Public Sector Banks	Private Sector Banks
Preferred Mobile Banking Services	n=454 (in %)	n=302 (in %)	n=152 (in %)
Information Services : balance enquiry, mini statement	35.3	37.0	32.0
Utility Payments: electricity bills payment, mobile top-up, premium payment.	23.9	25.2	22.0
Funds Transfer: interbank transfer and intra bank transfer	21.3	22.1	20.7
Requests Services: cheque-book request,	10.6	8.7	12.9

Demand Draft, Stop cheque payment.			
Trading Activity: Buying and Selling Stocks	5.0	3.8	6.8
Demat account services	3.9	3.1	5.5

Chart 2 : Prefered Mobile Banking Services by Users of Public Sector Banks(in %)

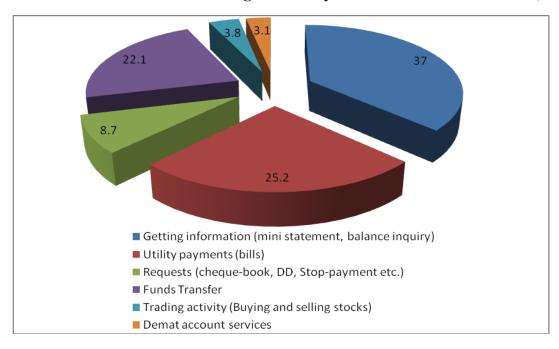
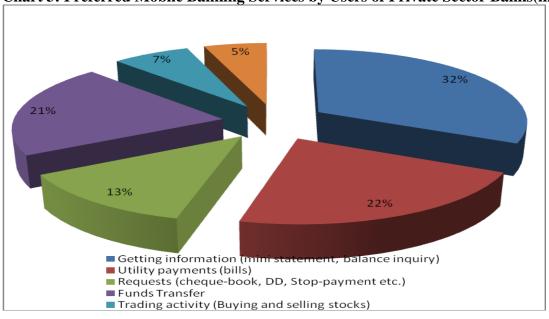


Chart 3: Preferred Mobile Banking Services by Users of Private Sector Banks(in %)



Whereas for private sector banks from the table 2, getting information related to their account like mini-statement, balance inquiry, utility bill payment, funds transfer are also prefer mobile banking service by the users of private sector banks in Indore. Services like request for cheque book, demand draft and stop payment; demate account service and buying and selling of shares services are least preferred service for private banks in Indore. Chart 2 and chart 3 also explains the preferred mobile banking services by public and private sector banks.

The researcher is also interested to find the frequency of transactions Per Month by the users of Public and Private Sector Banks in Indore. Table no. 3, shows the frequency of usage of mobile banking services by the users of public and private sector banks is studied. From chart 4, it is clear that 64.4% users of public sector banks and 57.2% users of private sector banks are using mobile banking services up to 5 times in a month. 23.8% users of public sector banks and 34.2% users of private sector banks are using mobile banking services between 6 to 10 times in a month. 11.6 % users of public sector banks and 8.6 % users of private sector banks are using mobile banking services more than 10 times in a month.

Table 3: Frequency of Mobile Banking Services used Public and Private Sector Banks.

Frequency(in month)	Users of Public Sector	Users of Private Sector		
	Banks in % (n=302)	Banks in % (n=152)		
up to 5 times	64.6	57.2		
between 6 and 10 times	23.8	34.2		
more than 10 times	11.6	8.6		

70 64.6 57.2 60 Public Sector 50 **Bank** 40 34.2 Private 30 Sector 23.8 Bank 20 11.6 8.6 10 0 up to 5 times between 6 and 10 times more than 10 times Mobile Banking Frequency (in %)

Chart 2: Frequency of Mobile Banking Services Used Public and Private Sector Banks

Thus, it is observed that majority of users of public sector banks and private sectors banks are using mobile banking services maximum up to 5 times in a month.

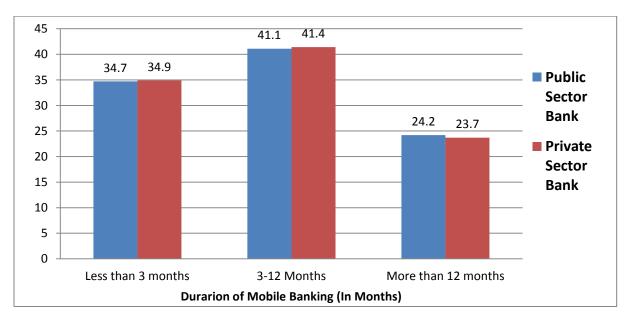
The researcher is also interested in order to know the time (i.e. duration in months) from which the users are using mobile banking services of public and private sector banks. The information about the length of usage (i.e. time from which mobile banking is used) is given in table 4, for public and private sector banks.

Table 4: Duration of Mobile Banking Services Used by Users of Public and Private Sector Banks.

Mobile Banking Usage	Public Sector Banks in % (n=302)	Private (n=152)	Sector	Banks	in	%
less than 3 months	34.7	34.9				
3-12 months	41.1	41.4				
more than 12 months	24.2	23.7				

From chart 5, it is clear that 34.7% users of public sector banks and 34.9% users of private sector banks are using mobile banking services from less than 3 months. 41.1% users of public sector banks and 41.4% users of private sector banks are using mobile banking services from 3 to 12 months. 24.2% users of public sector banks and 23.7% users of private sector banks are using mobile banking services from more than 12 months.

Chart 3: Duration of Mobile Banking Services Used By Users Of Public and Private Sector Banks.



Thus from the chart 5, it is clear that the percentage of users of mobile banking users for public and private sector banks is similar. Around 75.8% users of public sectors banks and 76.3% users of Private sector banks are using mobile banking services from less than 12 months, whereas 24.2% of public and 23.7% of private sector banks are using mobile banking services from more than 12 months. Thus the majority of the users for both banks are using mobile banking services less than 12 months.

CONCLUSION

The mobile banking among public and private sector banks users is more popular among male users for both the banks. Thus both banks need to made strategies in such a way so that the female users will also prefer mobile banking.

For public and private sector banks, getting information like mini-statement, balance inquiry; utility bill payment like telephone bills, mobile top up, electricity bills and funds transfer from one account to other account are the most preferred service by the mobile banking user's in Indore.

Regarding to frequency of usage majority of users of public and private sectors banks are using mobile banking services maximum up to 5 times in a month. Thus the frequency is mobile banking usage is very less as compared to transactions performed by users manually. Thus both the banks need to design customized software according to the specific needs of mobile handsets which will increase the convenience of user which ultimately increases the frequency of mobile banking transactions for both the banks.

According to the analysis based on duration of mobile banking users the majority of the respondents for both banks are using mobile banking services less than 12 months. Both banks users are using mobile banking for less than a year. Both banks must provide its mobile banking services to its customers in such a way that the customers feel satisfied and they keep on using mobile banking for long time. In order to increase the duration (time period) of usage of mobile banking services, both banks need to continuously encourage its users by providing offers like discounts on transactions, cashback offers on transactions, so that the mobile banking service users will use it for long time.

Thus RBI,TRAI and other decision making authorities in India needs to increase the duration, length and the popularity of less preferred services like issue cheque book, demand draft request, stop-payment request ,shares trading, demat account services by increasing the awareness and usability among the users of both banks.

LIMITATIONS OF STUDY AND DIRECTIONS OF FUTURE RESEARCH

This is an exploratory study related to mobile banking users of Indore. The choice of this sample strategy may limit to the generalization of our findings. This study covers the mobile banking customers of public and private sector banks in Indore but not the foreign banks. Despite the limitations this was an initial attempt to study the demographic study of mobile banking in Indore. Further the study can be extended to identify the dimensions responsible for the service quality of mobile banking and also to study the satisfaction level of mobile banking users of Indore. Future research work can be extended by comparing mobile banking services provided by public and private sector banks with foreign banks.

REFERENCES

- 1. Barnes, S., & Corbitt, B. (2003). Mobile banking: Concept and potential. *International Journal of Mobile Communications*, 1 (3), 273 288.
- 2. Creswell, J. (2007). *Qualitative Inquiry & Research Design: Choosing Among Five Approaches*. 2nd edn. Thousand Oaks: Sage Publication.
- 3. Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process.* SAGE Publications Ltd.
- 4. Kumar, S. (2013). What's holding us back from using mobile banking? *Live mint and Wall Street Journal* .
- 5. RBI. (2012). Report on Trend and Progress of Banking in India 2011-12. Mumbai: Reserve Bank of India.
- 6. Scornavacca, E., & Barnes, S. (2004). M-banking services in Japan: a strategic perspective. *International Journal of Mobile Communications*, 2 (1), 51-66.
- 7. Singh, S. (2012, December 14). Why India needs mobile banking & how customers benefit from it. *Economic Times Buereau*, pp. 1-3.
- 8. Vital. *Mobile banking in India Perception and Statistics*. 2009. http://www.telecomindiaonline.com/telecom-india-daily-telecom-station-mobile-banking-in-india-perception-and-statistics.html (accessed October 25, 2013).
- 9. Zikmund, W.G. (2003) Business Research Methods.7th ed., South-Western, Ohio.