

Hassle-Free Banking in India with Reference to ATM services : *An Empirical Study*

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Abstract

Multi-channel banking is becoming a viable strategy which banks are using to capture a large net work of customers. Also it makes conventional banking processes easier as boundaries are blurred and data can be distributed across country. ATM banking is one of the many electronic channels through which banking services can reach customers. Through this channel other important services can be availed like mobile phone recharge, advertising, etc. This paper is an attempt to examine the status of ATM banking in India, adoption by banks and important attribute which lead to ATM adoption from corporate dimension. The findings clearly indicate that almost all responds reportedly indicated that their banks have adopted ATM banking to provide services to customers. Also, it was indicated that non-complexity and convenience were the most vital attributes which lead to ATM adoption. Data for this study was obtained through a primary survey conducted in India.

Keywords: Automated Teller Machine, ATM, Banking, Hassle-free, Services

1. Introduction

Technology now has become synonymous with banking sector world wide and in India. The banking industry has emerged as one of the largest IT spender (Malik, 2005), however, this was not the situation in the past. A lot of effort went into bringing the current level in Indian banking sector. Technology has played a significant role in improving the efficiency of the financial system in recent years (Singh, 2008). For example, computerization has become more relevant today, since the banking Industry is expected to continue undergoing phenomenal changes from time to time (Srivastava, 2000). Recent development in information and communication (ICT) and the rise in the volume of banking business transacted electronically are causing what will be a lasting impact on business policies of financial institutions, and their risk situation.

Banks have been making extensive use of these developments to reap the real benefits of state-of-the art technology in numerous forms such as gain in efficiency, productivity, profitability, cost reduction, better in-house management of resources and up-to-date availability of information for better strategic decision making (Garg and Sharma, 2009). However, people are cautious and often downright reluctant to depart from traditional brick and mortar banks to electronic click and avatar banks. On the

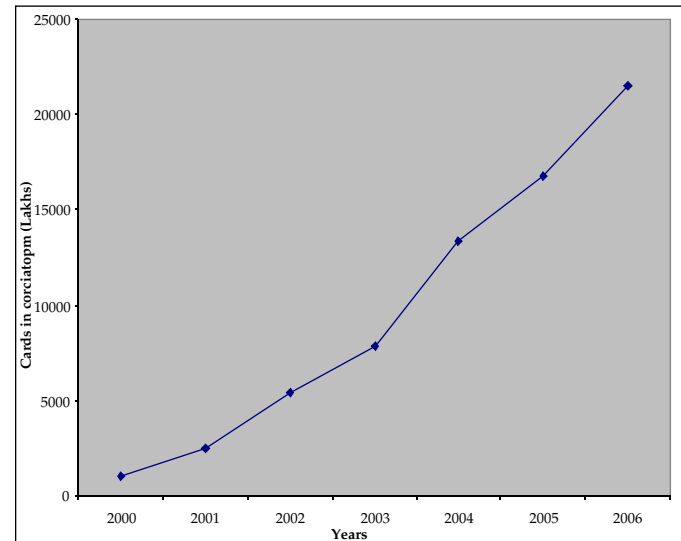
other hand, however with the threat of globalization in sight and possible squeezes and in margins, banks are attempting to push clients towards multimedia banking (Vijayan, 2005) Krishna and Usha (2009) argues that Automated Teller Machine have become a popular choice of customers in India The increasing number of ATM customers indicates a huge business potential for expansion of banks at low cost. An ATM card provides 24x7 banking convenience and cash withdrawals within seconds. They have been in use for more than three decades and customers a cross the globe use ATM for millions of transactions everyday. According to this study hassle-free banking refers to the use of new technology in banking business. However, this study will examine only ATM channel in detail. This paper is an attempt to investigate the trends in ATM banking adoption in Indian banks and services provided through ATM machines in India.

2. Theoretical Background of the Study

Banks in India have traditionally been in the forefront of harnessing technology to improve their products and services efficiently. Singh, (2008) argues that banks have over along time been using electronic and telecommunication network for delivering a wide range of value added products and services. For example, the recent trends show that most brick and mortar banks are shifting from a product-centric model as they develop their new e-banking capabilities. ATMs have become important channels for delivering banking transactions and services in India, particularly for cash withdrawal and balance inquiry. The spread of ATMs have increased from 34,789 in March 2008 to 43,651 in March 2009 (RBI, 2009). To extend the facility of using of ATMs of one bank to the customers of other banks, banks have entered into bilateral or multilateral arrangements with other banks to have bilateral or inter banks ATM networks. These arrangements help weak banks to enter into competition with the minimum resources available. Also, it enables extension of customer base as it meets dynamic demands of the customers. According to RBI's Annual report 2008-2009, it is indicated that during the financial year, the charges levied on the customers for use of ATMs varied from bank to bank and according to the ATM network that was used for the transaction. In order to bring greater transparency and reasonableness in ATM charges being levied by banks on their customers the RBI issued directives in making use of banks' ATM or any other bank's free of charge for cash withdrawal from April 1st 2009. The volume of ATM transactions has increased from 17897 lakh aggregating to Rs.438151 crore during 2007-08 to 23530 lakh aggregating to Rs. 616456 crore during 2008-09.

ATMs have potential to provide facilities other than balance enquiry and cash dispensing. Some banks have tapped these capabilities and are providing value added services to their customers such as funds transfer, bill payment services, mobile phone recharge etc. An assessment of RBI shows that the density of ATM availability (as a ratio of availability of ATM to population) in India is very low compared to developed countries and some emerging economies. The Population per ATM in India for example, was more than 29,500 in March 2008 as against the range of 1000-9500 in some of the Emerging Economies (EMEs). To encourage the spread of ATMs for building national payment infrastructure relaxation has been announced in the annual policy statement 2009 to 2010 to allow

Figure 1 : Growth of ATM Cards in circulation



Source : RBI, 2007

scheduled commercial banks (SCBs) to set up off site ATMs without prior approval of the Reserve bank (RBI,2009). Figure 1 show the cards in circulation from 2000 to 2006.

2.1 Objectives of the study

The study had many aspects to be investigated but it was narrowed to the following objectives:

- To investigate ATMs adoption in India
- To study the adoption of ATM services in Indian banks
- To study factors affecting adoption decision of ATM banking

2.2 Study organization

This study is organized into five sections including the present one. The next section deals with theoretical background of the study which leads to research questions and to the agenda of conducting this study. The third one deals with database and research methodology which explains the source of data and statistical techniques used to obtain result. Section four presents findings and discussion of the study in detail. The last section gives the concluding remarks and implications of the study. As part of section four the scope and limitation of the study is given.

3. Materials and Design

The universe of the study comprised bankers of all commercial banks in India, in some selected major cities. It was necessary that the approached executives should be e-banking savvy. This was done by approaching the respondent and asking if their banks had adopted ATM banking technology. The respondents which do not use these services were excluded from the sample. The research instrument was mailed to identified respondents addresses, others were personally distributed using drop and pick method. Out of the total 400 questionnaires send to respondents and after several reminders, 150 usable responses were received.

The questionnaire was prepared in such away that a five point likert scale was used to measure the level of opinions given by respondents. It included from Strongly Agree, Agree, Neutral, Disagree and Strongly Disagree. The period of the study was the

Last quarter of 2006 to the third quarter of 2007. Important statistical tools like Chi-square, Cross-tabulation and other appropriate tools were applied with the help of SPSS statistical software Version 12.0

4. Findings and Discussion

4.1 Impact of Demographic Characteristic on ATM Adoption

Demographic characteristic is always very vital in determining new technology adoption. Different characteristic for examples employees have different views regarding adoption of new technology depending on what they think about their banks and services they offer, customer base etc. In this study four variables were chosen viz. bank type, work experience, designation and education of respondents. Table 1 reveals that majority of respondents belonged to public banks (63.3%) and only 4% belonged to multinational banks. It was also found that 62% of the respondents had less than 10 years of experience and majority of the respondents 64.7% were managers and head of departments. Further, it was indicated that 98.6% were graduates and post graduates. The result hence confirms that banks in India have young employees with few years of experience who are well educated.

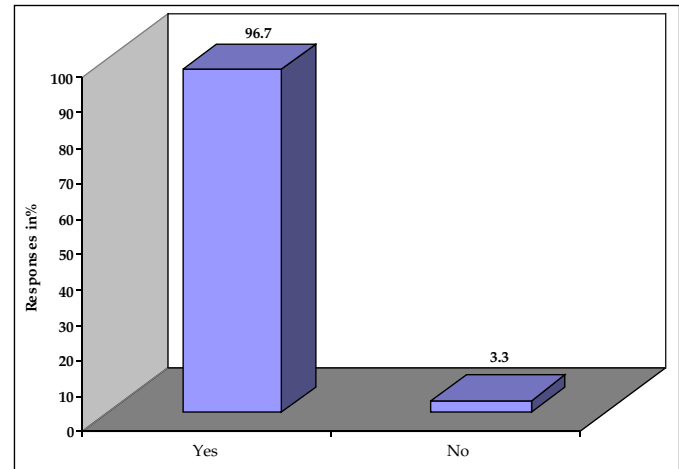
Table 1 : Statistics of Demographic Characters

Variable	Category	Responses	Percentage
Bank	Private	49	32.7
	Public	95	63.3
	Foreign	06	4.0
Work experience	<5 Yrs	44	29.3
	5-10 Yrs	49	32.7
	>10-15 Yrs	26	17.3
	>15 Yrs	31	20.7
Designation	Managers	57	38.0
	Hods	40	26.7
	Accountants	35	23.3
	Others	18	12.0
Education	Diploma and less	02	1.3
	Graduate	68	45.3
	Post Graduate	80	53.3

4.2 Adoption of ATM Banking in India

The rapid increase in customer demands and corporate competition has forced many banks to change their pattern of investment. They have started allotting more funds in technology. This study sought to study from bank employees the extent of ATM adoption in Indian banks. Figure 3 confirms that 96.7 percent of the respondents indicated that their banks have adopted ATMs which show a significant move towards capturing a large customer network. Also it shows that many Indian banks have leverage on technology which is the only gateway to cost reduction and profit increase and sustenance in the banking arena since every bank is having plans of technology inclusion in its business.

Figure 2 : ATM Banking Adoption in India



4.3 Adoption of ATM Banking Services in Indian Banks

ATM banking offer numerous types of services from withdrawal, balance check to transfer of funds and many more. Bank executives were asked to indicate the services offered to customers through the ATM machines they have launched. The result in table 3 shows that majority of respondents 98% reportedly opined that their banks provided withdrawal of cash services through their ATMs. Other mostly adopted services indicated balance check (90 percent), transfer of funds (75.3%) and requesting cheques books (73.3%). The services which are not commonly adopted by banks include payment of bills and depository services. This may be because, many customers prefer using traditional banking method to deposit their cash in banks. Also since electronic pay of bills has not received much support of customers and because of other electronic means like electronic debt or use of other methods has lead to non adoption of this service.

Table 3 : Adoption of ATM Banking Services

Service	PBs n=49	PSBs n=95	MNBs n=06	Total N=150
Withdraw of cash	48 (98.0)	93 (97.9)	06 (100)	147 (98.0)
Deposit of cash	31 (63.3)	64 (67.4)	06 (100)	101 (67.3)
Balance check	48 (98.0)	81 (85.3)	06 (100)	135 (90.0)
Request Cheque Bk	37 (75.5)	64 (67.4)	06 (100)	107 (71.3)
Pay bills	35 (71.4)	64 (67.4)	05 (83.3)	104 (69.3)
Check Statement	35 (71.4)	63 (66.3)	06 (100)	104 (69.3)
Order Cheque Book	35 (71.4)	57 (60.0)	06 (100)	98 (65.3)
Transfer Funds	34 (69.4)	73 (76.8)	06 (100)	113 (75.3)

Notes: Figures in Parentheses show percentage

Table 3 further shows that all multinational banks have adopted all services except payment of bills service (83%), which has not been adopted by few banks under survey. Public sector banks

have mostly adopted many services however it indicated that check of statement service is not found in some public sector banks. Private sector banks indicated that deposit service is adopted by few banks (63%) as compared to other services. Finally it can be inferred that most of the banks have considered adopting majority of services mostly demanded by customers to increase convenience and hassle-free banking.

4.4 Antecedents of ATM Adoption in Indian Banks

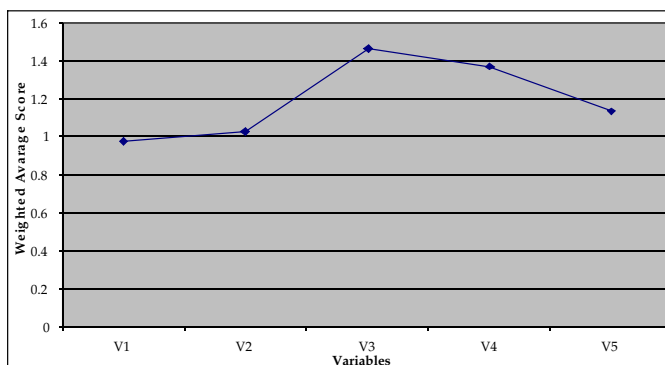
The process of technology adoption needs motivational antecedents which are very vital. This includes the factors which influence banks before they plan to invest in ATM roll out. This study considered five most important statements which indicate the factors influencing ATM adoption as indicated in table 4. The scale chosen for measuring customer response was five point Likent's scale which ranged from strongly agree, agree, neutral, disagree to strongly disagree. The result confirmed that non complexity (W.A.S. 1.46), convenience (W.A.S, 1.7) and customer demand (W.A.S, 1.13) were most important antecedents of e-banking adoption. Ease of installation and cost of technology received weak responses among other factors. This indicates that Indian banks have better choices before adopting technologies as they consider first customer demands before adopting any technology. This will enable them to stay in the competitive market. Figure2 shows weighted average score of respondents

Table 4 : Antecedents of ATM adoption

Statement	N	Mean	SD	WAS
V1.ATM technology is easy to install	150	2.02	.88	0.98
V2.It is not expensive among others	150	1.97	.99	1.03
V3.ATM technology is not complex in providing services to customers	150	1.54	.55	1.46
V4.The technology is convenient to many customers	150	1.54	.55	1.37
V5.Many customers demand ATM which accelerates the need for its adoption by banks	150	1.87	.89	1.13

Note: High mean indicates weak response since weights were assigned negatively i.e. strongly agree 1 to strongly disagree 5

Figure 3 : Weighted Average Score of Respondents



on factors influencing ATM banking adoption. Figure 3 show that all factors are important; however, the last three are considered more important than the first two.

5. Conclusion

ATM Banking in the world over has gained much importance as banks have realized the easy way of providing hassle-free, convenient and non time limit banking to self styled customers with dynamic demands. This study has confirmed that, among the bank employees surveyed, majority are young with better education. Also, apart from basic ATM services like cash withdrawal and balance check, other advanced services are present in Indian banks. It was indicated that from ATMs for example, customers can deposit cash, pay bills and transfer funds. Among the factors influencing ATM banking adoption banks consider customer benefits like convenience, non complexity and customers' dynamic demands before adaptation of ATM banking. This is paving a clear way for other new technologies like cards banking, Mobile/SMS banking and Internet banking

5.1 Implication of the Study

The study which considered opinions of bank executives will contribute a lot to the world of academics as it provides useful literature. It will also implicate financial institutions offering and planning to offer ATM banking services to know exactly what derives many banks to adopt new technology. The various services offered by many banks are identified which will increase knowledge to customers for adoption considerations. The study will also raise alarm to regulators and legal authorities for possible norms regarding provision of various services.

5.2 Scope of Further Research and Limitation of Study

This study recommend some more areas of investigation including the impact of technology adoption on bank profits, challenges faced after adoption impact on customer network, and legal/ regulatory requirement of ATM banking adoption. The study suffers survey limitation due to biasness in filling the survey instrument. Also, individual views provided and does not reflect that of banks as corporate body. The study is a representative of north Indian region which may differ from the views of other regions.

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