

Future Outlook Of ATMs In India- Emerging Issues and Possible Solutions

* *Dr. R. K. Uppal*

I

INTRODUCTION

The financial sector reforms introduced in the early 1990s envisaged an effective and strong financial industry. The introduction of these reforms brought with it healthy competition. Banks felt the need to upgrade their customer service to a much higher plane in order to survive in this competitive environment. They found technology as an ideal tool to achieve this objective. Public sector banks were guided by the recommendations of the committee for up-gradation of banking technology. Though the pace of the computerization has been moderate, the manner in which public sector banks went in for investments in technology was enough proof of the belief the banks have on technology to secure their future. Till 1980s, banks had only one delivery channel- which is the branch presence. Suddenly, technology has opened up options for various delivery channels. Technology-aided products like ATMs, point of sale devices, anywhere banking, smart cards, internet banking and WAP Banking have given the customers to choose his channel of getting catered his requirements.

The cash machine or Automated Teller Machine (ATM) is the most visible and perhaps the most revolutionary element of virtual banking revolution. ATMs are self service vendor machines that help the banks to provide round the clock banking services to their customers at convenient places without visiting the bank premises. They enable the banks to transact more business by offering various services in a cost effective way on one side and to get more customer satisfaction on the other. To avail the ATM services, customers are provided with an ATM card, which is a small plastic card with magnetic strip, containing information about the name of bank, name of the customer, card number, validity period and signature panel. The magnetic strip contains information about the customer, which enables the banks to verify the identity of the customer when the card is inserted at the slot provided in the ATM.

✿ **First Generation ATMs:** The first generation ATMs were first used in 1939 and served as instruments for cash withdrawal and offered very limited banking functions. In the next two years, ATMs were installed in several European countries, Japan and the United States and the first ATM network was created in Switzerland. In 1972, Lloyd's Bank in the UK installed the first ATM connected online with their banking system. By the mid 1970s, ATMs with a range of transactional services were developed.

✿ **Second Generation ATMs:** The next phase (late 1970s to early 1980s) saw the use of microcomputer technology in ATMs, which resulted in a number of technical improvements and significant reduction in cost. Consequently, the development and usage of ATMs picked up substantially.

✿ **Third Generation ATMs:** In the mid 1980s, modular ATMs were developed on account of which banks could configure ATMs to suit their specific requirements. Moreover, these new features permitted upgradation of ATMs as and when new technology emerged.

✿ **Fourth Generation ATMs:** In the phase, the ATMs graduated to systems based on PCs and O/S2. This enabled ATMs to take full advantage of developments in PC hardware, like improved processing power, larger memory and high performance-high capacity disk drives. Consequently, ATMs could support a wide range of services. During this period, deployment of ATMs gained momentum and banks in advanced countries necessarily provided ATMs to their customers, both on-site and off-site. Alongside, cash dispensers, which did not provide cash deposit facilities, were deployed in large numbers at every conceivable convenience point.

✿ **Fifth Generation ATMs:** The fifth generation marks a quantum jump in ATM technology with the manufacture of open web-enabled ATMs. These ATMs contain many significant improvements in design and architecture. These ATMs support delivery of wide range of bank products and services. It has also become possible to integrate the ATM

* *Principal Investigator*, University Grant Commission Sponsored Major Research Project, D.A. V College, Malout, Punjab
E-mail: rkuppal_mlt@yahoo.com

channel with other retail banking e-delivery channels.

The following functions can be performed at an ATM:

- ✿ Withdrawal of cash up to a particular limit.
- ✿ Deposit of cash, cheques or drafts. The ATM will immediately print out the receipt for the same.
- ✿ Updated account balance of the customer appears on the screen and will also be printed on a transaction slip.
- ✿ Transfer of money from one account to another account can be done.
- ✿ A customer, through an ATM, can obtain a mini account statement.
- ✿ A customer can ask for a cheque book/detailed account statement through an ATM. These are mailed to customers later on by a bank employee.
- ✿ A customer can maintain a joint account- for which he can get an additional card on the name of the other joint account holder.
- ✿ All the branches of a bank are provided with an on-site, online ATM. A customer can operate his account from any ATM of the bank across India. It is a concept of anywhere banking.

BENEFITS OF ATMs TO CUSTOMERS AND TO BANKS

BENEFITS TO CUSTOMERS

- ✿ 24 hours access availability.
- ✿ Less time for transactions.
- ✿ Acceptability of the card across multiple bank ATMs, even foreign tourists can access Maestro/VISA ATMs.
- ✿ Plethora of services available in addition to cash dispensing.
- ✿ Less space required.
- ✿ Convenience of shopping-no need to carry cash.
- ✿ AAA Banking- Anytime, Anywhere, Anyhow.

BENEFITS TO BANKS

- ✿ Cost of setting up ATMs is much lower than setting up the bank branch.
- ✿ Migration of the routine transactions to the ATMs frees the bank staff for more productive work.
- ✿ ATMs serve as the crucial touch points for cross selling of a bank's products.
- ✿ Enables the bank to display products on the screen and serves as a media for publicity for the bank.
- ✿ Bank's staff gets more time to do marketing.

OPERATION MODELS OF ATMs

- ✿ **Online:** When an ATM is connected to the bank's database and provides online, real time access to customers' accounts, it is said to be "online". Normally, there is a daily limit of withdrawal set by the bank. This limit is monitored by the ATM switch centre.
- ✿ **Offline:** When ATM is not connected to bank's database, it is stated to be "offline". In this mode, withdrawals are permitted upto a pre-fixed limit only, irrespective of the balance available in the customers accounts.
- ✿ **Stand Alone:** When an ATM is not connected to any ATM network, it is said to be "stand-alone". In this case, transactions at an ATM are restricted to customers of the ATM branch and its link branches.
- ✿ **Networked:** When ATMs are connected to an ATM network, they are said to be "networked". The advantage of networked ATMs is that cardholders can use their ATM cards at any of the networked ATMs. This, in effect, permits "anywhere, anytime" banking.

FACTORS ENCOURAGING ATM GROWTH WORLD WIDE

The following factors lead to the growth of ATMs worldwide:

- ✿ Availability of low cost ATMs.
- ✿ Cost rationalization by banks.
- ✿ Customer convenience.
- ✿ Increasing transaction volumes through ATMs.
- ✿ Competition between the deployers.

- ✿ Increasing off-site deployment.
- ✿ Increase in number of bank customers.
- ✿ Introduction of shared networks.
- ✿ Demand from tourists.

II

REVIEW OF LITERATURE

Avasthi & Sharma (2000-01) in their study have analyzed that advances in technology are set to change the face of banking business. Technology has transformed the delivery channels by banks in retail banking. It has also impacted the markets of banks. The study also explored the challenges faced by the banking industry and its regulator face.

B. Janki (2002) analyzed how technology is affecting the employees' productivity. There is no doubt, in India particularly public sector banks will need to use technology to improve operating efficiency and customer services. The focus on technology will increase like never before to add value to customer services, develop new products, strengthen risk management etc. the study concludes that technology is the only tool to achieve their goals.

Chopra, V.K. (2006) highlighted the importance of IT and business re-engineering in achieving the objectives of banks. He observed that PSBs and old private sector banks are slow in imbibing technology in their operations, whereas, new private sector banks and foreign banks are early adopters of the technology and increasing the competition. He emphasized that IT along with the business process re-engineering can be helpful in the transformation of Indian banking system.

Garg & Jham (2006) investigated factors that influence Indian customers to adopt ATMs by using factor analysis and focused on the influence of demographic and psychological variables of 296 customers of six selected banks such as SBI, PNB, ICICI, HDFC, ABN Amro and IDBI. It is examined that most of the respondents are below the age of 35 years and the users with lesser experience face more problems in comparison to others and they look for reliability of information. There are problems of dim vision of screen and they use ATMs maximum for withdrawals and rarely for deposits.

Kukkudi & Deene (2006) studied the impact of ATMs on customer satisfaction with special reference to SBH in Gulbarga district with sample size of 100 respondents. It is concluded that ATMs are used mostly by the age group of 25-35 years comprising more male members. 79 pc uses ATMs weekly where 85 pc are aware about the restrictions concerning ATMs usage and the number of ATMs are sufficient to meet current needs. It is suggested in this study that ATMs should be popularize among the maximum customers. Overall it is a good attempt to study the ATMs related aspects from customer point of view, but the methodology for banks, criteria to select this bank and its customers is not clearly defined.

Pikkarainen, Pikkarainen, Karjaluo, and Pahnla (2004) defines internet banking as an 'internet portal, through which customers can use different kinds of banking services ranging from bill payment to making investments'. With the exception of cash withdrawals, internet banking gives customers access to almost any type of banking transaction at the click of a mouse. Robinson (2000) believes that the supply of internet banking services enables banks to establish and extend their relationship with the customers. There are other numerous advantages to banks offered by online banking such as mass customization to suit the likes of each user, innovation of new products and services, more effective marketing and communication at lower costs.

Rao (2002) analyzed the impact of new technology on banking sector. The technology is changing the way the business is done and opened new vistas for doing the same work differently in the most cost effective manner. Tele-banking and internet banking are making forays such that branch banking may give to home banking. He provided some policies to protect their profitability.

Shastri (2001) analyzed the effect and challenges of new technology for banks. Technology has brought a sea change in the functioning of the banks. The earlier manual system of preparing of vouchers, etc. is slowly being automated, thereby saving a lot of time and effort.

RESEARCH GAP

The review of studies clearly indicates that no comprehensive study has been undertaken regarding the extent of ATMs among various e-channels and the extent of ATMs using customers in India. Therefore, the present study is devoted to fulfill this gap and also to analyze the profit and business per employee of those bank groups providing more services

through ATMs.

III

OBJECTIVES, RESEARCH METHODOLOGY & DATABASE

OBJECTIVES

- ✿ To explore the extent of ATMs among various e-channels used in banks.
- ✿ To know the extent of ATMs using customers in various bank groups.
- ✿ To analyze the profit and business per employee of various bank groups.
- ✿ To suggest strategies to enhance the services of ATMs in India.

RESEARCH METHODOLOGY

The research design of the paper is related to e-technology in the Indian banking sector. The present paper focuses on services offered by the ATMs of various bank groups. The whole banking industry makes the universe of the study excluding RRB's and Co-operative banks. The Indian banking industry has been divided into five groups as per the RBI guidelines.

- ✿ **G-I** : SBI & Associate banks: (8)
- ✿ **G-II** : Other Nationalized banks : (20)
- ✿ **G-III** : Old private sector banks : (17)
- ✿ **G-IV** : New private sector banks: (8)
- ✿ **G-V** : Foreign banks : (29)

We have deliberately taken the period of the post IT Act of 2000, because after this period, e-technology became mature in India. The study relates with the time period of 2000 to 2007. Some statistical tools like Mean, S.D, C.V, has been calculated to compare the various results and to get the desired results.

DATABASE

- ✿ Report on Trend & Progress, RBI, 2006-07.
- ✿ IBA, Performance Highlights 2000-06.
- ✿ Information collected from the head offices of many banks.

IV

RESULTS AND DISCUSSION

To know the extent of ATMs in the Indian banking industry, it is imperative to know the extent of branches of different bank groups providing the service of ATMs and the extent of customers availing this facility. Tables 1 to 5 show the extent of branches providing the facility of ATMs for different bank groups. These tables also show the position of ATMs among different e-channels.

✿ **Position Of ATMs Among Various E-channels (G-I)**: Table 1 shows the position of ATMs among different e-channels in G-I. It is clear that G-I has 95.55 pc computerized branches. After that comes the number of branches providing the facility of ATMs and Internet banking. Their average percentage is 35.43 and 30.04 respectively. G-I has only 35.43 pc branches providing the facility of ATMs.

✿ **Position Of ATMs Among Various E-Channels (G-II)** : In case of G-II, results are more depressing. It has only 14.95 pc branches providing the service of ATMs. Although, M-banking, I-banking and Tele-banking have even less branches than ATMs, but these statistics are not satisfactory for a country like India, where population is availing the facility of ATMs.

✿ **Position Of ATMs Among Various E-Channels (G-III)** : In case of G-III also, position of ATMs is not satisfactory. It has only 34.05 pc ATMs branches. Computerized branches are comparatively in a better position.

✿ **Position Of ATMs Among Various E-channels (G-IV)** : In case of G-IV, the position of all e-channels is quite satisfactory. All branches of G-IV are fully computerized and G-IV has been observed at 63.98 per cent ATM branches. The maximum average has been observed at the I-banking branches i.e. 72.75 per cent as compared to other branches.

✿ **Position Of ATMs Among Various E-channels (G-V)** : In case of G-V, the position of all e-channels is quite

satisfactory. All branches of G-V are fully computerized and G-V has observed the maximum average of ATM branches as compared to other branches i.e. 190.85 per cent. I-banking and M-banking is on the second and third position and it has 50.17 per cent and 49.01 per cent providing services respectively.

✿ **Comparative Position Of ATMs Among Various E-channels** : Table 6 highlights the comparative position of ATMs among different bank groups. It shows that G-V is on the top position in providing the ATM service to their customers. It has 190.85 pc ATMs branches. G-IV is on the second position and it has 63.98 pc branches providing ATM facility. Nationalized banks (G-II) have gained the last position to provide the ATMs services i.e. only 14.95 per cent.

✿ **Use Of ATMs By Customers** : Table 7 shows the number of customers of different bank groups availing the service of ATMs in different years. It is clear from the table that G-IV holds a strong position among different bank groups. It had 86976103 customers in the year 2006-07 availing the facility of ATMs. In terms of number of customers using ATM services, G-V & G-I gained second and third position respectively. They have 8991771 and 4363961 ATMs users correspondingly. Compared to these three bank groups, G-II and G-III have very less ATM customers and they are 1681363 and 574197 respectively. In all the bank groups, customers of ATMs are increasing year by year. This indicates the increasing popularity of ATMs.

✿ **Net Profit As A Percentage Of Working Funds** : All the bank groups under study, more or less, are providing ATM facilities to their customers. Among these bank groups, G-V & G-IV have maximum net profit as percentage of working funds. On an average, their net profit as percentage of working funds is 1.19 & 1.01 respectively, while G-III & G-I have gained next two positions. In case of G-II, net profit as percentage of working funds is only 0.79 pc.

✿ **Business Per Employee Of Various Bank Groups**: Table 9 indicates the business per employee of different bank groups under study, providing the service of ATMs. The study reveals that foreign bank groups have maximum average of business per employee as compared to other bank groups. Foreign banks benefit more than other bank groups. G-III & G-IV have almost same average of business per employee as shown in table. But on the other hand, public sector banks have very low average. Co-efficient of variation reveals that maximum variations are found in G-I, G-II & G-V while least variations were found in G-III & G-IV.

✿ **Profit Per Employee Of Various Bank Groups** :Table 10 shows the profit per employee of those bank groups providing the facility of ATMs to their customers. It is clear from table that G-V (9.67 pc) has maximum average of profit per employee followed by G-IV (7.42). In this respect, G-II gained the third & G-III gained the fourth position respectively. Their average profit per employee is 2.48 & 1.77 pc respectively. Co-efficient of variation reveals that the maximum variations were found in G-II & G-V and were found to be comparatively less in other bank groups. Though, after so many years of the enactment of the IT Act, ATMs have not gained satisfactory position, yet increasing number of ATM use indicates the comparative popularity of it among various e-channels. Among various bank groups, new private sector banks and foreign banks are on the top position in providing more ATM services and their efficiency is also high as compared to other bank groups.

V

EMERGING ISSUES

IT has created many issues for the Indian banks. If these issues are resolved efficiently, then this technology can prove to be a boon for the banks. ATMs are not an exception for banks. It has also created many limited issues, like less awareness regarding ATMs, less covering rural and semi-urban area under ATMs, widening scope of ATMs, transparency and security. These issues must be tackled very carefully and wisely to compete in the emerging global competition.

STRATEGIES TO ENHANCE ATM SERVICES

✿ AWARENESS REGARDING ATMs

It is imperative that more customers should be made aware of the service of ATMs.

✿ POSSIBLE SOLUTIONS

✿ Banks should provide operational knowledge of ATMs with information about each of their functions.

✿ Banks should arrange demo-fares or provide information to customers at counters.

✿ Posters consisting of list of services provided by ATMs should be displayed at appropriate places.

✿ **RURAL & SEMI-URBAN SECTOR**

More than 60 pc of the Indian population resides in rural areas. Therefore, it is the need of the hour to capture this market through e-delivery channels. ATMs are the best alternative method in this direction. Hence, banks should make ATMs popular in rural and semi-urban areas too.

✿ **POSSIBLE SOLUTION**

Bank service providers should tie-up in this direction and try to provide ATM facility to rural population free of cost.

✿ **WIDER SCOPE OF ATMs**

The banks should make the area of ATMs wider by adding some more banking facilities. This will further strengthen the popularity of ATMs and help to earn more income.

✿ **POSSIBLE SOLUTION**

Banks should allow the cash transactions of large amount through ATMs.

✿ **TRANSPARENCY**

The banks should disclose the full information regarding service charges, service tax, interest, penalty if any, etc. to the customers to win their confidence.

✿ **IMPROVEMENT OF HRD SYSTEMS**

The employees of e-banks should be given training to match their skill with the requirements of changing environment. They should at least make them aware of all the schemes provided by the banks.

✿ **POSSIBLE SOLUTIONS**

- ✿ Banks should conduct training programmes to train their staff regarding 'how to use various e-channels' & update their knowledge from time to time.
- ✿ Arrangements should be made to test employees at regular intervals (particularly Customer Care Executives) to test their knowledge.

✿ **FRAUDS IN ATMs**

Moving the cash dispensing transaction from the banking hall to the "hole in the wall" outside the bank has also moved the problem of security from inside the bank (where it is predominantly the bank's problem) to outside the bank. Customer education plays a critical role in the successful delivery of banking services through the ATM channel. It is the moral responsibility of both the banker and the customer to take pre-emptive steps in this regards. The common types of frauds are:

- ✿ **Card Compromise:** Skimming; Trapping; Hacking
- ✿ **Pin Compromise:** Camera; Shoulders surfing; Pin Pads
- ✿ **Casual Frauds:** Friends; Relatives; Acquaintance
- ✿ **Cash Trapping:** Inserts in the cash presenter

While banks have to constantly supervise and upgrade the security safeguards, customers have to exercise basic minimum care in safe custody and use of ATM cards and PIN (Personal Identification Number).

✿ **ATM CARD SECURITY**

For the security of ATM, the card contains only basic data like name of the customer, card number and the expiry date of the card in what is called as Track 1 and 2 in case of networked ATMs. All the vital details like the balance, account number etc. are stored in the database at switch itself. Hence, the card cannot be easily duplicated. Also, the personal identification number (PIN), which is unique to every card, is encrypted through Triple DES encryption algorithm, which prevents cracking of the same during transmission from ATM to switch. The encryption used at the time of generation of PIN can be either software generated or hardware generated one. The most commonly used one is the hardware generated one called as Host Security Module (HSM). The HSM is used for PIN verification. A HSM is a

physically secure machine that has cryptographic processing capabilities and secure key storage facilities within a tamper-resistant platform.

IMPLICATIONS

In the era of IT, the world has become a village. This paper implies high growth of ATMs using customers, profit per employee and business per employee in new private sector banks as well as in the foreign banks. The paper also gives some hints for the awakening of the other bank groups. The use of ATMs is not an option, it is mandatory for all the banks to install ATMs both on-site and off-site. The launch of Mobile ATMs in future would be a revolutionary step that will enhance the performance and efficiency of banks.

FUTURE STUDIES

The study gives clue for comprehensive research in the following areas:

- ✿ E- channels and their impact on efficiency.
- ✿ Feasibility and viability of ATMs in both rural and semi-urban areas.
- ✿ Gender wise analysis of the use of ATMs.
- ✿ Occupation-wise analysis of the use of ATMs.
- ✿ Age-wise analysis of the use of ATMs.

FUTURE OUTLOOK

The findings of the present study predict a bright future for ATMs in India, but there is an urgent need to spread awareness about ATMs, particularly, in rural and semi-urban areas. India is a potential market in the global arena and many international business players are entering India and China. ATMs will be very convenient to enhance the national and international business prospects.

CONCLUSION

E-channels enables the banks to be better connected with the customers and vice versa. A customer who is provided with a variety of additional services feels appreciated and is more likely to be loyal to that bank, which is always a good sign for a bank. In the end, ATMs not only help a bank to reduce costs, but also helps it to retain its valuable customers. And as far as customers are concerned, the ATM facility enables the customer to bank anywhere, at anytime and in any condition, which is definitely a boon if a customer is stuck in the middle of nowhere and requires banking services as soon as possible. Thus, ATMs helps both- the customer as well as the bank, to lighten the burden of today's world and to save time, money and energy which is greatly required and appreciated.

BIBLIOGRAPHY

- 1) Avasthi, G.P. and Sharma, M. (2000-01). 'Information Technology in Banking: Challenges for Regulators'. *Prajanan*. XXIX(4). 17p.
- 2) B. Janki (2002). 'Unleashing Employee Productivity: Need for a Paradigm Shift'. *Indian Banking Association Bulletin*. XXIV(3). March. 7-9.
- 3) Chopra, V.K. (2006). 'IT and Business Process Re-Engineering'. *Indian Bankers - Special Issue on e-payments & Commerce*. 1(3). March.
- 4) Garg, P. & Jham, V. (2006). 'Indian Banks and ATM An Empirical Study of Consumer Perceptions'. *Strategies of Winning Organizations*. Edited by Upinder Dhar, Santosh Dhar & Vinit Singh Chauhan. Excell Books. New Delhi. 516-23.
- 5) Kukkudi, J. & Deene, S. (2006). 'Impact of ATMs on Customer Satisfaction (A Case Study of SBH in Gulbarga District of Karnataka)'. *Strategies of Winning Organizations*, edited by Upinder Dhar, Santosh Dhar & Vinit Singh Chauhan. Excell Books. New Delhi. 509-15
- 6) Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., & Pahnla, S. (2004). 'Consumer acceptance of online-banking: An extension of the technology acceptance model'. *Internet Research*, 14(3), 224-235.
- 7) Robinson, G. (2000). 'Bank to the future'. *Internet Magazine*. Retrieved from www.findarticles.com
- 8) Rao, N.V. (2000). 'Changing Indian Banking Scenario: A Paradigm Shift'. *IBA Bulletin*. XXIV(1). 12-20.
- 9) Shastri, R.V. (2001). 'Technology for Banks in India-Challenges'. *IBA Bulletin*. XXIII(3). March.

Table 1 (G-I): Position of ATMs Among Various E-Channels**(Percent)**

E-Delivery Channel	2000-2001	01-02	02-03	03-04	04-05	05-06	06-07	Average
Computerized Branches	93.29	93.80	94.34	94.31	93.98	99.13	100	95.55
ATM	23.01	30.89	34.87	36.55	37.76	39.09	45.90	35.43
I-banking	11.80	16.25	23.08	32.27	35.08	40.37	51.44	30.04
M-banking	7.37	8.82	10.64	12.42	19.53	17.53	25.89	14.6
T-banking	3.69	4.41	6.68	9.50	12.30	13.62	19.38	9.94
Average	27.38	30.83	33.92	37.01	39.73	41.94	48.52	35.11

Source: Information Collected from Head Offices

Table 2 (G-II) : Position Of ATMs Among Various E-Channels**(Percent)**

E-Delivery Channel	2000-2001	01-02	02-03	03-04	04-05	05-06	06-07	Average
Computerized Branches	30.52	47.90	63.72	73.41	87.04	92.94	92.91	69.77
ATM	10.07	11.29	11.78	12.58	14.06	19.40	25.47	14.95
I-banking	1.55	1.94	2.74	4.21	5.01	6.65	8.40	4.35
M-banking	1.86	2.19	3.35	8.70	10.05	15.23	18.53	8.55
T-banking	0.94	1.37	2.96	3.53	3.86	6.10	11.40	4.30
Average	8.98	12.93	16.91	20.48	24.00	28.06	31.34	20.38

Source: Same as Table 1

Table 3 (G-III): Position of ATMs Among Various E-Channels

E-Delivery Channel	2000-2001	01-02	02-03	03-04	04-05	05-06	06-07	Average
Computerized Branches	19.69	23.15	46.31	48.59	67.21	71.09	73.19	49.89
ATM	11.81	16.42	22.39	22.67	27.35	62.36	75.41	34.05
I-banking	6.25	7.98	15.05	15.60	17.68	20.71	23.93	15.31
M-banking	6.91	7.17	12.55	13.57	13.44	17.79	21.52	13.27
T-banking	5.74	8.83	10.90	11.44	13.31	18.47	20.64	12.76
Average	10.08	12.71	21.44	22.37	27.79	38.08	42.93	25.05

Source: Same as Table 1

Table 4 (G-IV): Position of ATMs Among Various E-Channels

E-Delivery Channel	2000-2001	01-02	02-03	03-04	04-05	05-06	06-07	Average
Computerized Branches	100	100	100	100	100	100	100	100
ATM	40.66	42.51	58.58	51.65	81.84	89.03	83.60	63.98
I-banking	74.16	72.97	80.80	77.96	62.87	74.22	66.27	72.75
M-banking	64.59	69.63	72.72	71.21	56.59	69.26	61.04	66.43
T-banking	38.27	46.25	65.85	57.57	49.74	41.92	39.25	48.40
Average	63.53	66.27	75.59	71.67	70.20	74.88	70.03	70.31

Source: Same as Table 1

Table 5 (G-V): Position of ATMs Among Various E-Channels

E-Delivery Channel	2000-01	01-02	02-03	03-04	04-05	05-06	06-07	Average
Computerized Branches	100	100	100	100	100	100	100	100
ATM	132.85	130.61	217.22	188.94	294.32	169.63	202.42	190.85
I-banking	42.14	45.57	47.22	41.93	78.01	47.98	48.98	50.17
M-banking	40.71	40.13	45.00	44.23	75.88	46.96	50.20	49.01
T-banking	42.14	45.57	43.88	40.09	63.82	44.53	59.91	48.56
Average	71.56	72.37	90.66	83.03	122.40	81.69	92.30	87.71

Source: Same as Table 1

Table 6: Comparison Of Bank Groups Providing ATM Services

E-Delivery Channel	G-I	G-II	G-III	G-IV	G-V
Computerized Branches	95.55	69.77	49.89	100	100
ATM	35.43	14.95	34.05	63.98	190.85
I-banking	30.04	4.35	15.31	72.75	50.17
M-banking	14.6	8.55	13.27	66.43	49.01
T-banking	9.94	4.30	12.76	48.40	48.56
Overall Average	35.11	20.38	25.05	70.31	87.71

Source: Same as Table 1

Table 7: Customers Using ATM Services

Bank Group	2000-01	01-02	02-03	03-04	04-05	05-06	06-07
G-I	44610	95161	182531	465466	967571	2131905	4363961
G-II	45690	85971	101286	263163	577186	889981	1681363
G-III	9595	26141	38951	57963	88541	263193	574197
G-IV	415347	769177	1225637	3571953	9777851	36414975	86976103
G-V	656450	959211	1678251	2775761	4131471	6791711	8991771

Source: Same as Table 1

**Table 8: Net Profit As A Percentage Of Working Funds
(Percent)**

Years	G-I	G-II	G-III	G-IV	G-V
2000-01	0.42	0.62	0.81	-0.72	0.71
2001-02	0.72	1.08	0.41	0.13	0.13
2002-03	0.96	1.17	0.90	1.57	1.56
2003-04	1.12	1.16	1.22	1.65	1.64
2004-05	0.89	0.22	1.13	1.30	1.29
2005-06	0.83	0.54	0.99	1.52	1.52
2006-07	0.85	0.76	0.92	1.65	1.47
Average	0.75	0.75	0.99	1.03	1.15
S.D.	0.22	0.31	0.30	0.76	0.46
C.V. (%)	29.33	41.33	30.30	73.78	40.00

Source: Performance Highlights, Various Issues, 2000 to 2007, IBA Mumbai

Table 9: Comparative Performance Of Business Per Employee in Various Bank Groups

(Percent)

Years	G-I	G-II	G-III	G-IV	G-V
2000-01	1.60	2.00	7.46	9.03	159.93
2001-02	1.91	2.24	8.96	10.07	197.59
2002-03	2.15	2.99	10.94	10.31	221.90
2003-04	2.47	3.17	8.73	9.57	850.25
2004-05	3.06	3.55	8.75	9.40	307.62
2005-06	3.69	4.23	9.02	10.08	374.54
2006-07	4.61	4.96	8.11	9.95	434.05
Average	2.78	3.31	8.85	9.77	363.69
S.D.	1.07	1.05	1.07	0.45	235.99
C.V. (%)	38.48	31.72	12.09	4.60	64.88

Source: Same as Table 8

Table 10 : Comparative Performance Of Profit Per Employee In Various Bank Groups

(Percent)

Years	G-I	G-II	G-III	G-IV	G-V
2000-01	0.77	0.41	0.94	5.12	-6.33
2001-02	1.21	1.03	1.83	3.88	1.23
2002-03	1.59	1.65	2.62	9.19	15.50
2003-04	2.00	7.65	2.76	9.59	15.29
2004-05	2.04	2.03	0.57	8.27	11.63
2005-06	2.20	2.22	1.61	7.13	14.63
2006-07	2.22	2.40	2.09	8.77	15.74
Average	1.72	2.48	1.77	7.42	9.67
S.D.	0.55	2.38	0.81	2.17	8.74
C.V. (%)	31.98	95.98	45.76	29.25	90.38

Source: Same as Table 8