



The Role and Impact of ATMs in reducing Regional Disparities to Enhance Competitive Edge for the Indian Economy

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Abstract

Every nation runs its economic chariot through the guidance of the banking sector. The policy makers work on the twin objectives of removing regional imbalances across the length and breadth of the country and to reach out to the underprivileged masses of the society in our country. To serve objectives with such lofty ideals, not only does profit making take a back seat, it also calls in for investment in infrastructure to enhance competitive edge to the entire sector.

The power of nationalization was seen as it emerged to shift focus from “Class Banking” to “Mass banking”, from “Profit Banking” to “Social Banking” and from “Elite Banking” to “Every body’s Banking.

Automated Teller Machines (ATM), Telephonic Customer Service (TCS), online banking and mobile banking are the most prominent ones amongst banking technological advances. Yet, has it really touched the heart and soul of the country? The measurable progress with its impressive numbers, guided by policy making at the centre, has churned out progress year after year and managed to hide a growing hole called the disparity in banking services between the urban and rural masses. This paper attempts

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to uncover the growing disparity and the role of infrastructure, particularly ATMs, in diminishing the same to aid competitive edge for the whole country.

Keywords: ATMs, Regional imbalance, Banking, Growth & development, Competitive edge.

Introduction:

In India, the economic environment is regulated and controlled by the RBI from time to time. While TCS, Net banking and Mobile banking enabled remote access to banking services, ATMs allowed and strengthened physical distribution of banking services, working as an extended delivery channel.

Though there has been a 25 percent year-over-year growth in the number of ATMs (90,000 plus), India has one of the lowest concentrations of ATMs in the world: 63 per million people, and mostly concentrated in large cities. In June 2012, the Reserve Bank of India issued guidelines to allow non-banking entities to set up, own, and operate automatic teller machines (ATMs). Known as White-Label ATMs (WLA), these machines are expected to increase the penetration of banking services in smaller cities and towns³, thereby allowing such towns to grow in terms of their potential to attract trade and commerce through enhanced facilities encouraged by the banking industry. While banks prefer to establish ATMs according to the population willing to access it, as part of its' objective to remove regional disparities, they may take the initiative in this direction to promote related development that boosts the overall regional development in the country.

This showcases the potential of ATMs and that the government is working on tapping it at various levels. ATMs were introduced to the Indian banking industry in the early 1990s initiated by foreign banks. Most foreign banks and some private sector players suffered from a serious drawback at that time – lack of a strong branch network. ATM technology was used as a means to partially overcome this handicap by reaching out to the customers at a lower initial and transaction costs and offering hassle free services⁵.

In the global market, India remains an underpenetrated market when it comes to financial services. Technology will also play an important role here. This will result in efficient customer acquisition, better risk management, and better customer service and reduce the cost to serve. [Ref 18]

Research design

Objectives of the study

- i. To disclose the disparity between urban and rural banking with special reference to ATMs in India.
- ii. To identify the growing role of ATMs in reducing such disparities to enhance the reach and competitiveness of the Indian banking sector in the global scenario.

Literature Review

Some of the accessible studies with respect to ATMs are listed here:

- Mr. Shamsher Singh conducted a study titled “The impact of ATM services on customer satisfaction in Indian banks”. It focused on the relationship of ATM services has on customer satisfaction. This has been published in International Journal of Financial Services Management, 2011 Vol.5, No.2, pp. 177 - 196.
- Shariq Mohammed conducted a study on “*Factors influencing ATM usage in India: An Empirical Analysis*” Confined to the state of UP, significant positive influence of characterized socio-economic attributes on the use of ATM service was found. This paper has been published in February 2012.

Need for the study

While a number of studies are available with respect to ATMs, they are mainly studied from customer satisfaction point of view, limited to a particular region and do not bring out a macro outlook about regional disparities. This offers relevant research gap to explore in this direction. Hence the need for the study is felt.

Scope of the study

The scope of the study is limited to the objectives mentioned above.

Limitations of the study

- i. The study focuses only on ATM infrastructure and its relationship with reducing regional disparities by promoting the distribution of banking services.
- ii. The study is limited by the accessibility of policy decision to online resources and shared learning resources, such as libraries, etc.
- iii. The study has limitations w r t time, place and resources.

Methodology

- i. Type of research: The study is historical in nature as it relies highly on past data.
- ii. Collecting data: Data has been collected from various secondary sources such as libraries, online resources, newspapers, magazines etc.
- iii. Method of analysis:
 - Statistical methods were used and the data is presented in the form of charts and tables.
 - Descriptive analysis is the method employed to present data

Findings, Analysis & Evaluation:

An ATM is a technological representative of the bank which is expected to serve 24/7 as an extended delivery channel. Since their inception in the nineties, their popularity can be attributed to the degree of convenience they offer to both:

- a. The bank: - For reducing queues in their daily workload
 - For allowing man power to be engaged in other banking tasks

b. The customers/users:

- For reducing the wait time in the branches
- For providing easy access to cash in many places and even during after banking hours
- For using other banking services without entering the branch

Citibank was the first to introduce these machines – one of their kind – with the tag line: *The Citi never sleeps.*

Over a period of time, some interesting points have been observed worth discussing, which have awarded competitive edge to the banks according to the increased convenience they offer to the customers:

1. Although money can be withdrawn 24/7, it has come with its own set of challenges. Most ATMs don't allow the user to choose the denomination, thus putting the user in the trouble of changing a big denomination like Rs. 1000 or a Rs. 500.

To tackle this, Indus Bank added the option of choosing the denominations in the desired combination, thus redefining efficiency in service delivery.

This bank has also ventured into introducing 'Card less transactions', assisting fool proof withdrawal of money! This is one of the latest features in news in the banking industry.

2. Some banks gave memory powers to their ATMs. Example: HDFC Bank ATMs remember the value commonly withdrawn by a user. So the screen pops it up to speed up the process. They claim their ATMs to be 40% faster in case of cash withdrawals.
3. Yet others increased the range of services the ATM can provide. ICICI Bank added the option of opening an FD account in their ATMs.

4. There have been cases of frauds, even though the system is set up through tested methodologies. How can such mis-happenings be addressed?

In the early 2012, Times of India carried an article highlighting how an individual used a match stick to fraudulently withdraw money from accounts of strangers from ATMs. There have been many such events reported from time to time. These situations have been hurdles for banks to cross over and reinforce faith in their customers, which has been happening at varying degrees. Another equally important concern is about malfunctioning of ATMs.

The RBI has issued directives and guidelines from time to time to accelerate redressal measures for the end-customer. A few to substantiate the same may be stated as follows:

- In this regard, in August, 2011, the government informed Parliament that banks have been told to redress customer complaints of ATMs not dispensing cash despite debiting the amount within seven working days, and pay compensation at the rate of Rs. 100 per day thereafter.[Ref. 15]
- The central bank instructed the issuing bank and the acquiring bank to settle failed ATM transaction disputes through the ATM system provider only. [Ref. 15]

To summarize, ATMs can now perform the following increased functions:

- ▲ Pay utility bills, such as telecom, gas, electricity etc.
- ▲ Place orders for DDs and issue Stop Payment for cheques
- ▲ Transfer of funds between accounts within the same bank
- ▲ Recharge mobile phone
- ▲ Pays loan EMIs, tax, Insurance premium, etc.
- ▲ Investment in fixed deposits
- ▲ Buying train tickets at railway stations
- ▲ Flight tickets, Donations

- ▲ Some ATMs suck back the issued amount on non-collection within ten seconds with a displayed warning about this feature, while others only warn and display a disclaimer that the bank is not responsible if money is lost due to customer negligence.

Some large banks in India have taken their first steps towards large scale introduction of biometric ATMs, especially for rural banking. It provides for better security system by linking credentials verification to recognition of the face, fingerprints, eyes or voice. At the industry level, however, this technology is yet to be adopted. The high costs involved largely account for the delay in adoption.

Innovations ahead

As per a research conducted by BT Group, London; the banking industry is moving towards innovations, which includes the following:

- i. **Value stored card:** Workers in developing areas rarely have personal bank accounts and are typically paid in cash for their labour. A value stored card can avoid the disaster if wages are lost/stole, for entire families.
- ii. **Product and service portfolio:** To ensure a fully inclusive product and service portfolio, banks must focus on highly-accessible contact channels for people with disabilities, such as low ATMs and wheelchair access.
- iii. **Customised products and services:** Some banks are analyzing customer account details during ATM transactions, suggesting alternative products or services that may be of interest.
- iv. **Email receipts:** Citibank and Wells Fargo are two that let customers receive a digital ATM receipt via email, eliminating the use of paper.

When reach is multiplied with expansion in service portfolio for banks, disparity is bound to show a downward turn.

By 2017, the installed base of these machines in India will reach 400,000, from about 100,000 in the third quarter of 2012. India will bring some 300 million people into the banking system for the first time over the next few years. That's (almost) larger than the population of the United States⁶.

India's ATM density has tripled in the last four years, but it still remains lower than China. India has 74 ATMs per million, while China's density is about 300 ATMs per million. Over the next three years, it's projected that the Chinese will have about 400 ATMs per million, though India could struggle with 120 ATMs per million⁶.

Year	Country	ATM density (Nos. per million)
2012	India	74
	China	300
By 2015	India	120
	China	400

The volume of ATM transactions increased from 17,797 lakh aggregating to ₹ 4,38,151 crores during 2007-08 to 23,530 lakh aggregating to ₹ 6,16,456 crores during 2008-09, as per RBI. [Ref 14]

Among the public sector banks, SBI has the largest network with about 12,000 ATMs. SBI would increase its presence in the semi-urban and rural areas by setting up low-cost ATMs, biometric ATMs and for the visually handicapped. SBI plans to double the number of its ATMs to 25,000 by 2010, according to a senior official at the bank²².

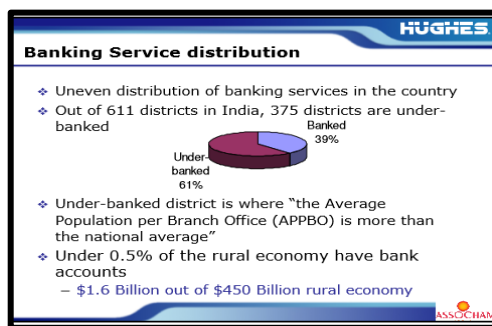


Fig 1. Uneven distribution of banking services in India

The above figure clearly shows the dire need for distribution of banking services and the role ATMs can play in the near and distant future.

In 2008; the number of ATMs was stated by RBI as follows²³.

Period	Type of Bank	No. of ATMs
2008	Public Sector	22,500
2009	Private Sector	13,500
	Total	36,000

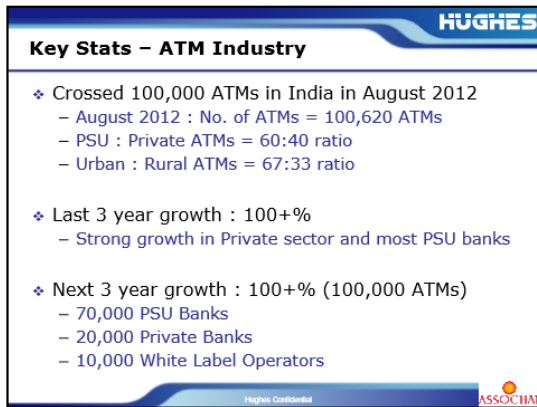


Fig 2. Key stats of ATM industry in India

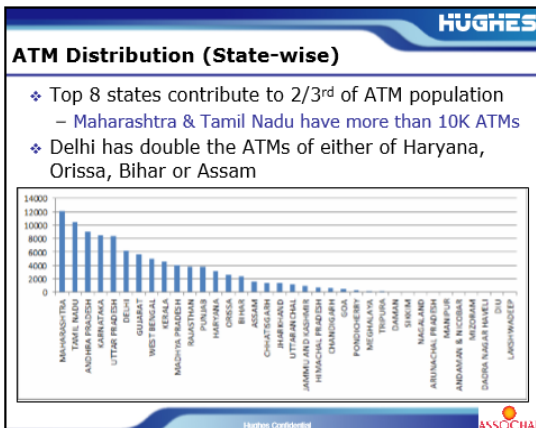


Fig 3. State-wise distribution of ATMs in India

Measures to reduce disparity

1. An apex level switch or inter-connectivity of ATM Networks provides access to the customers to use any ATM in the country irrespective of the bank with which the customer is banking. There are a number of ATM network switches such as Cash Tree, BANCS, Cash net Mitr and National Financial Switch (NFS). In addition, most ATM switches are also linked to VISA or MasterCard gateways ⁴.

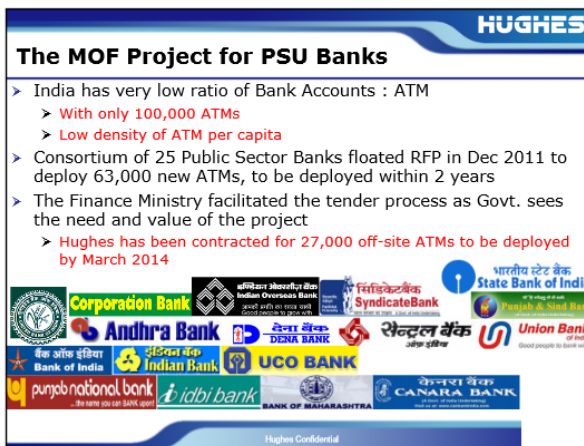


Fig 4. Low ratio of Bank accounts and low density of ATM per capita

2. Banks have chosen service providers by dividing the country into 13 zones and auctioning the contracts for installing 3,000 to 6,000 ATMs in each zone to the bidder with lowest charges. Each zone—some with large single states like UP and Maharashtra and others like north-east with seven states—is led by a public sector bank which held the auction. The lead PSU banks were Bank of India, PNB, SBI, BoB, UBI and Canara Bank ⁷.
3. In July 2012, Minister of State for Finance, Namo Narain Meena, said "there is shortage of ATMs and effort is being made to provide as many ATMs as possible in rural areas. More than 60,000 ATMs will come up in rural areas in coming two years," he said.⁷

Conclusion

- In an attempt to work on effective reach and break geographical barriers; banks are compelled to parallel work on upgrading technology from time to time. Not doing so will again make way for disparity on various counts.
- Multi-lingual ATMs are being introduced, but this is limited to a handful of languages or to the state and national language apart from English. India, being a country with numerous languages has higher challenges perceived in introducing and promoting technology in general and technology for financial and banking services in particular.
- Telephonic Customer Care can offer complimenting services in walking the customer through the ATM structure, functioning and answering questions at any time.
- Apart from working on financial literacy, gauging customer satisfaction in banking services is crucial.
- ATMs have constantly been in news for fraud, theft or for not working. Offering effective machinery for these challenges is crucial as the very purpose of installing them will be defeated, if they are not addressed efficiently and effectively. For this, banks are yet to embrace technology enabled services such as biometrics, reverse use of password, etc.
- Rural sector comes with its own set of challenges. Having a trained official at the ATM to educate the masses and guide them from time to time, conducting orientation programs through traditional approaches such as street plays, weekly melas etc. can prove to be beneficial in breaking the cultural barriers and introducing the concept at the grass root level.

Scope for further research

Based on the above analysis, it is imperative to understand why there is such uneven distribution of ATMs in a vast and populous country like India. This will give rise to questions such as:

- a) What are the impediments in implementing ATM infrastructure?
- b) Are banks able to serve the need of making ATMs multi-lingual in their operations?
- c) Are ATMs efficient as extended delivery channels; as described by the RBI?
- d) Is the low literacy rate a challenge for the success of ATMs in the rural sector, in particular?
- e) What machinery are banks designing to make the ATMs friendly to the rural consumer?

All of these and many related questions showcase the scope for further research. Since the researchers are unable to address all the facets and problems about ATMs in the banking industry in this paper, they are willing to pursue further research on such lines in the near future.

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