# Evolution of ATMs – A Perfect Financial Inclusion Strategy

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***Abstract:***

Bank branches and ATMs are by far the most popular channels, despite a decade of alternate channels. The experience in developed economies also corroborates that branches and ATMs continue to be the critical channels. (Emphasis added) "Indian banking 2020: Making the Decade's Promise Come True".

***Key words:*** ATMs, Anytime and anywhere, inclusiveness.

**Introduction:**

One of the most important benefits to customers is that they can withdraw any amount within the stipulated limit, anytime, anywhere and form any bank's ATMs. This is, in fact, helps inculcate saving habits among the people as they do not have to withdraw bulk amount, let us say, at the beginning of every month for their monthly requirements in order to avoid standing in long queues several times at branches. If they withdraw lump sum amount, the idle money with them may temp them to spend. This holds significant implications from macroeconomic view point of bolstering financial savings which as a proportion of GDP is recently on a downhill. For bank branches, they save particularly on space which is very costly nowadays. Moreover, they save on staff cost, stationery cost and various other hassles that they have to deal with if customers visit, in massive numbers, to withdraw money. Thus, ATM has proved won win for both banks and customers. Further, ATMs serve the cause of green environment.

**Objectives of Study**:

To study the evolution ATMs in India as well as World to reach the un-reached place in the planet of earth and become the excellent tool of financial inclusion

There is an element of inclusiveness as to the invention of ATM. According to some experts, the earliest attempt dates back to 1939 when Luther Simjian patented a prototype of ATM, though it met with partial success. Another group of experts credit James Good fellow of Scotland with the earliest patent for a modern ATM dating back to 1966. In the US, John D White of Docutel is believed to have designed the first free standing ATM. In 1967, John Shepherd- Barron invented and installed an ATM in a Baraclays Bank branch in London. Don Wetzel (again of Docutel) invented a US made ATM in 1968. However, most beliver that it was John shepered Barron who invented the modern ATM.

In India, Hong Kong and Sanghai Banking Corporation introduced ATMs in 1987 in Mumbai. However introduction of ATMs of the Indian banking industry became significant only after the launch of Shared Payment Network System (SPNS) or Swadhan network of ATMs by Indian Bank's Association (IBA) for its member banks in Mumbai. The network which went live on February 1, 1997 aimed at providing 24*7*365 electronic banking service to the customers of a member bank anywhere in the city of Mumbai.

Under the arrangement, the member banks issued cards to their customers for transacting at ATMs of any of the member banks. The services offered under SPNS were cash withdrawal, balance enquiry, cash/ cheque deposit, transfer of funds, request for cheque book, standing instructions, statement of account and change of personal Identification Number (PIN)

A central switch, which was central to the Swadhan network, connected ATMs of the member banks through Mahanagar Telephone Nigam Limited leased lines. The Central Switch was located in Dadar and connected to three zonal hubs located in Chembur, Fort and Andheri (all in Mumbai). The nearest zonal hub connected the ATMs in a particular area.

The database of the cardholders was kept at the central switch. Banks updated the balances at the switch at Pre determined frequencies. On a daily basis, the switch provided reports necessary for inter bank settlement.

Bank of India acted as the settlement bank for all interbank transaction in Swadhan. Every member bank had to maintain a deposit of INR 25,000 with the settlement bank.

As on January 15, 1998, Swadhan had connected 69 ATMs of 19 member banks. By 2003 end, when IBA exited from Swadhan (with which Swadhan closed down), it had over 1,000 ATMs (both on and off – line) of 32 public, private, foreign and co-operative banks. These ATMs were spread over 82 centers across the country.

Swadhan had proved operationally uneconomical. The average per day per ATM transactions on Swadhan was only around three. As against this, some of the private sector banks in the country had an average per day per ATM transactions of around 200.

Swadhan network lacked economy of scale. ATM / debit cards issued by all the 32 live banks put together under SPNS were three million. In contrast, a private sector bank like ICICI bank, which had its own switch and was aggressive on ATM installation, had issued 3.2 million debit cards and 1.9 million ATM cards on a standalone basis. Further, most banks preferred to have their own switch so that authentication and approval of transactions was possible.

At that time there were four shared ATM networks already in place. Cash tree (comprising Bank of India, Union Bank of India, Indian Bank, United Bank of India and Syndicate Bank), Cash Net (Comprising Citibank, the industrial Development Bank of India, Standard Chartered Bank and UTI Bank), MITR (Comprising Punjab National Bank, Oriental Bank of Commerce, India Bank, Karur Vysya Bank, Induslnd Bank and UCO Bank) and cash Online. Swadhan was followed by Banks ATM Network and customer Service (BANCS) in January, 2004. Though the set up of BANCS was almost similar to that of Swadhan, IBA did not have any role in this. This was run and managed by a committee and India Switch Company was the service provider.

Under this network, the transaction cost was INR 25 (interchange fee INR 20 and transaction fee INR 5). The cost was charged to the issuer bank. In other shared networks, the transaction cost was charged to the acquirer bank. A customer was to pay INR 25 per transaction. In Swadhan, the cost worked out to be INR 55 per transaction.

**A Dis-aggregate Analysis of Progress in India:**

ATMs have fast become an integral part of Indian banking population, cutting across all areas – rural, semi urban, urban and metro, banks particularly the Public Sector Banks (PSBs) are to be credited with this remarkable accomplishment although some foreign banks and new private banks were early entrants. It would not be exaggerated to say that PSBs put the ATMs on a 'mass revolution' mode. ATMs benefit both customers and banks.

**ATMs On Site and Off Site:**

An onsite ATM is at the same place as the bank. An off site ATM stands alone in another location from the bank, shift in composition of on and off site ATMs.

**ATMs on Site and Off Site**

(Per cent)

| Bank Group | 2005 | | 2014 | |
|---|---|---|---|---|
| | On-site ATM | Off-site ATMS | On-site ATM | Off-site ATMS |
| SBG | 30 | 70 | 56 | 44 |
| NBs | 67 | 33 | 63 | 37 |
| OPBs | 64 | 36 | 50 | 50 |
| NBPs | 34 | 66 | 32 | 68 |
| FBs | 27 | 73 | 22 | 78 |
| SCBs | 43 | 57 | 52 | 48 |

*Source: Indian Bankers Association.*

At March, end 2014, 52 percent of the ATMs was on site and 48 percent off site. Between 2005 and 2014, while the proportion of on-site ATMs increased, that of off-site decreased. On site ATMs prove less costly as banks can easily restructure their premises to accommodate ATMs in their own campus rather than going into the problems of renting in outside premises, also entailing high rentals. Ease of surveillance could be another reason. Thus SBG's thrust was on onsite ATMs to minimize cost, which is quite heartening. Therefore the

proportion of on-site ATMs in the case of SBG had almost doubled between 2005 and 2014. Traditionally, a large number SBG branches have large premises and this might have aided this. In the case all other bank groups, the trend was just the opposite.

**India vis-a-vis World:**

Despite the progress made hitherto, globally speaking, India ranks much below in terms of penetration of ATMs, measured in terms of number of ATMs per 100,000 adults. Data in this regard were sourced from the World Bank site.

As per this measuring, among 213 nations ranked in the descending order India's position was very low. In fact, over the four years, it has by and large, deteriorated. This implies that the other countries are faster ATMizing than India. In fact, the World Bank data indicate that almost all the countries have shown an increasing trend in respect of this indicator.

If we compare among the BRICS countries, India has the lowest penetration ratio. In 2012, it was 11.21 in India which was much below China (37.51). However, between 2009 and 2012, it multiplied 2.1 times which was just below Russia (2.4 times) China followed closely where it multiplied 1.9 times over the same period. Coefficients of Variation (Cvs) indicate that the inequality among the BRICS nations has increased over time.

In this context, the joint study by IBA (2010) observed as follows. India has a very low penetration of ATMs as compared to some of the other developed and developing nations.

**ATMs in Kirana Shops.**

ATM centers need 24 hours security, CC cameras, Air Condition to maintain its services to customers. Each transaction costs Rs.20 to the customers by the bank. Banks are planning establish ATMs Kirana shops where it has 150 to 200 transaction per day. The amount paid to the agencies for dispensing money in ATMs centre for security employee salary, AC expenses, electricity charges & CC cameras expenses all together becomes above Rs.50000 Per Month (PM) as maintenances expenses[1].

If these ATMs are established in Kirana shops the above expenses will be saved by Banks. They need to pay Rs.2,000 to Rs.10,000 PM to Kirana shop holders for maintenance charges.

**Bunching:**

Today what one observes is that of different banks are bunched in particular places, particularly in an around shopping malls. Residential places are given less importance. When inter-bank use of ATM cards is allowed and the same cards which a majority of merchant establishments accept today, there is little point in having back-to-bank ATMs in the same place. Banks should review this aspect. More ATMs in residential colonies will help particularly, the homemakers and senior citizens Committee on Comprehensive Financial Services for Small Businesses and Low Income House Holds - Dr. Nachiket Mor (2013)

A committee appointed by RBI to make recommendations to reach financial service to every nook and corner of India and make 100 per cent financial inclusion headed by Dr. Nachiket Mor gave following guidelines. They are:

1. Universal Electronic Bank Account (UEBA): By Jan 1, 2016 each Indian resident, above the age of eighteen years, would have an individual, full-service, safe, and secure electronic bank account.

2. Ubiquitous Access to Payment Services and Deposit Products at Reasonable Charges: By Jan 1, 2016, the number and distribution of electronic payment access points would be such that every single resident would be within a fifteen minute walking distance from such a point anywhere in the country. Each such point would allow residents to deposit and withdraw cash to and from their bank accounts and transfer balances from one bank account to another, in a secure environment, for both very small and very large amounts, and pay reasonable charges for all of these services. At least one of the deposit products accessible to every resident through the payment access points would offer a positive real rate of return over the consumer price index.

3. Sufficient Access to Affordable Formal Credit: By Jan 1, 2016, each low-income household and small-business would have convenient access to formally regulated lenders that have the ability to assess and meet their credit needs, and offer them a full-range of suitable credit products, at an affordable price. By that

[1]-Enadu Dated 1-1-2015

date, each District and every significant sector (and sub-sector) of the economy would have a Credit to GDP ratio of at least 10 per cent. This ratio would increase every year by 10 per cent with the goal that it reaches 50 per cent by January 1, 2020.

4. Universal Access to a Range of Deposit and Investment Products at Reasonable Charges: By Jan 1, 2016, each low-income household and small-business would have convenient access to providers that have the ability to offer them suitable investment and deposit products, and pay reasonable charges for their services. By that date, each District would have a Total Deposits and Investments to GDP ratio of at least 15 per cent. This ratio would increase every year by 12.5 per cent with the goal that it reaches 45 per cent by January 1, 2017.

5. Universal Access to a Range of Insurance and Risk Management Products at Reasonable Charges: By Jan 1, 2016, each low-income household and small business would have convenient access to providers that have the ability to offer them suitable insurance and risk management products which, at a minimum allow them to manage risks related to: (a) commodity price movements. (b) longevity, disability, and death of human beings. (c) death of livestock. (d) rainfall. and (e) damage to property, and pay reasonable charges for their services. By that date, each District would have a Total Term Life Insurance Sum Assured to GDP ratio of at least 30 per cent. This ratio would increase every year by 12.5 per cent with the goal that it reaches 60 per cent by January 1, 2017.

6. Right to Suitability: Each low-income household and small-business would have a legally protected right to be offered only suitable financial services. While the customer will be required to give informed consent she/he will have the right to seek legal redress if she/he feels that due process to establish Suitability was not followed or that there was gross negligence.

**Conclusion:**

Un-restrained access to Public goods and services is an essential condition of an open and efficient society. It is argued that as banking services are in the nature of a public good, it is essential that the availability of banking services to the entire population without discrimination is the prime objective of public policy.

RBI will continue to regulate the ATM usage in conformity with its payment system vision document 2012-15. RBI may consider deregulating its ATM Policy, in a calibrated fashion depending on the evolving demand from the customers, banks compulsions and regulatory scenario.

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