



THE PERFORMANCE, PROSPECTS AND CHALLENGES IN THE USE OF ATMS AND THE ENHANCED SATISFACTION OF CUSTOMERS

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ABSTRACT

The rapid growth in the use of ATMs in the nation offers opportunities to banks to reduce the workload of the employees, free from human errors, avoid overcrowding at the branches in the banking operations and extend their services twenty four hours and seven days a week and three sixty five days in a year to its customers. The banks should monitor the preferences of customers in advance for satisfying them in all spheres of their demands and requirements. Banks should focus on the important aspects of security and privacy as well as the efficient operation of ATMs. Banks should also concentrate on old age people and rural people for utilization of ATMs at the maximum extent. Banks must also take necessary steps to minimize the fear, shyness, theft and the fear of fraud. Finally, the very important need of the hour is an alternative arrangement for power failure for all ATMs and the availability of security guards to every ATM centres to ensure risk free transactions round the clock.

Key words: ATM, Work load, satisfaction, Risk free transactions.

INTRODUCTION

The Indian banking sector is experiencing a fast change in enabling banking services through ICT enabled services that benefits the banker and customers in a larger extent. The Automated Teller Machine (ATM) is one of the most important innovation that offer significant contribution and benefits to both banks and customers in the post liberalized era. These machines are designed with an embedded systems for finance related services that enable automation services to help the customers withdraw cash at more convenient times and places than banking hours which lead to reduction in costs of servicing customers'

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demands. These potential benefits are multiplied when the core banking concept in banking services are introduced to share ATMs by different banks with the customers for their financial transaction allowing customers of other banks to access their accounts through another bank's ATM with reasonable times of withdrawals.

The mushrooming of ATMs in the country to support customers and bankers to save their precious time and convenience in enjoying the service is the major advantage assured. This culture is composed of individuals, who have personal bank accounts and access to a wide range of technology with usable knowledge. ATMs are convenient and reliable, everyday artifacts push a few buttons and get their required money. As ATMs pervade new borders and pervade different cultures, it urges the need to understand the role of cultural characterization on people's perception of attitudes towards and action on the machine. This understanding is instrumental in facilitating technology uptake and improving design, localization, or the process of infusing a specific cultural context into products designed for different cultures.

History of ATM

Automated teller machine (ATM) was developed by Luther George Simjian and installed in 1939 in New York, USA but was removed after 6 months due to lack of customer acceptance. Thereafter the history of ATM paused for over 25 years, until De La Rue developed the first electronic ATM, which was installed first in Enfield town in north London on June 27, 1967 by Barclay's Bank in England. The first working ATM was installed in New York. The first machine followed by that, the deal was signed with the bank to develop six ATMs on a trial basis, followed by 50 more machines.

ATMs have become the order of the day in banking transactions of customers. Though they were evolved as novel cash dispensers, now they have emerged as a marketing tool that attracts large number of customers. There are about 9500 off-site and on-site ATMs of many banks are nothing but virtual branches, as customers can conduct any transactions, through the touch screens anytime and anywhere features. They are user friendly and they have mass acceptability, can effectively reach out a large customer base at low cost. At present, banks have started outsourcing and sharing of ATM services to reduce cost. Most banks are used to cross-sell other products also so as to meet the varied requirements of customers. Banks have started dispensing railway tickets, air tickets, movie tickets etc. through ATMs. Voice activated ATMs, ATMs with fingerprint scanning technology, etc are on the move. If they become operational, they can save the customers from the hassle of carrying a card. In future, a bank's ATM would function like a kiosk delivering more on non-cash transactions, thereby reducing fixed and operating costs.

ATM Functionality-How It Works

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Automated Teller Machine (ATM) is a computerized telecommunication device that provides the customer of a financial institution with access to financial transactions in a public space without the need for a bank teller.

ATM card issue procedure

The customer is identified by inserting a plastic ATM card with a magnetic strip and chip card. The card contains a unique number and some security information, such as expiration date. Security is provided by the customer entering a Personal Identification Number (PIN). An ATM card is issued only to an existing customer who belongs to a bank. The customer, who wishes to avail of the facility, has provided an application form by the branch. The filled up form is forwarded to give authorization by the concerned branch manager for a central office of the bank to be dealt with ATM card issuing department.

ATM Operations

The Automatic Teller Machine (ATM) generally performs the following functions:

- ✓ PIN change
- ✓ Balance Enquiry
- ✓ Cash Withdrawal/ Fast cash
- ✓ Cash deposit (CDM)
- ✓ Cheque Deposit
- ✓ Mini Statement
- ✓ Cheque Book Request
- ✓ Funds Transfer

Value Added Transactions

- ✓ Mobile recharge
- ✓ Utility bill payments
- ✓ Buying mutual funds
- ✓ Charity and donations
- ✓ Buying internet packs or airline tickets or cinema tickets

Statement of the problem

ATMs provide the needed and required services to its users in various forms that is deposit or withdrawals of cash, making balance enquiry, obtaining an account statement for the previous limited transaction, inter account transfer of funds and making utility payment of bills (e.g.) electricity, telephone, etc., The success of every innovative technology providing easy

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operation, educating, convincing, stimulating desire to the users regarding utilization of such technology. The improved customer service the bank has become very important for survival and growth in the emerging deregulated financial markets. The banks are competing with each other to offer multifarious and diversified services to the customer to widen their client base. In this research, the researcher made an attempt to find out the level of satisfaction and the problem faced by the users towards using ATMs.

Scope of the study

This study is focused on analyzing several dimensions of customer satisfaction on personal factors, social factors, technological factors and institutional factors in the selected district of Tiruchirappalli.

Overall objectives

The overall objective is to inquire into the performance, prospects and challenges facing the customers using ATMs in Tiruchirappalli District.

Specific objectives

1. To examine the essential dimensions of ATM service provided by the public and private sector banks and to ascertain the frequency of using ATMs and their reliability. It also identifies the satisfaction of the customers relating the use of ATMs and the related factors.
2. To check the role of public and private sector banks in maintaining the balance in establishing ATM centers in rural, semi urban and urban areas in alignment with the overall personal factors.
3. To find out the problems faced by the users and to identify the strengths and weaknesses of ATM services provided by public and private sector banks and to offer suggestions.

Hypotheses

The study will bring out the outcomes only based on the association and relationship of one factor over the other. This is possible only when it is supported by the hypotheses and hence the following hypotheses are designed to arrive at a meaningful conclusion of the study.

1. The age of the ATM users have no significant relationship and impact in the utilization of ATMs.

2. The occupational status of the users has no significant impact over the frequency to use the technology.
3. Safety and protection against fraud in ATMs have not significantly made an impact on the satisfaction of the customers.
4. Inadequate knowledge of ATM users has not significantly affected the decision towards the use of the technology.
5. Alternative arrangement made at the time of power failure in ATM centre has not significantly affected the satisfaction level of the customers.
6. Challenges faced by the users have not significantly affected the satisfaction on ATMs.
7. Insecure feeling, chances of fraud in ATMs has not significantly affected the satisfaction level of the ATM users.

Research Methodology

The study is of analytical and exploratory in nature, accordingly the study has been made with the help of primary as well as secondary data. It includes the choice of study area, the sampling technique and tools of analysis.

Sampling Techniques

The two stage cluster sampling technique is adapted to select the respondents for the study. In first stage 50 ATMs were selected randomly using simple random sampling method and in the second stage twelve ATM users were selected using a systematic random sampling method. The researcher has selected ATM centers and met twelve customer respondents based on their attitude and behavior in the process of use of ATMs. The chronological order of visiting the ATM is taken as the case number of the sample frame. Totally five hundred and thirty five respondents were provided with the interview schedule and among them thirty five responses were found to be default and were rejected.

Tools of Analysis

Statistical tools namely, correlation analysis, chi-square, factor analysis, principal component analysis and co-efficient matrix were used to arrive at a meaningful conclusion.

Limitations of the study

The study was made with the use of the available data provided by the respondents. Frequency of usage of ATMs were very limited in rural areas, it was a problem for the researcher to meet the respondents in the ATM centers in person. Some of the employees and

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businessmen met in the ATM centers were not patient enough, due to their busy work they were not co-operating properly. A few respondents hesitate to give all the information, especially income details, it necessitates much time to explain about the study.

FINDINGS:

- ✓ In case of public limited banks considered for the study a large number of the respondents (46.0 per cent) were from semi-urban area, 42.4 per cent of the respondents were from rural area and 11.6 per cent of the respondents were from urban area. As the study area is covered by semi-urban area, majority of the respondents are from the semi-urban area.
- ✓ It is found that, 44.8 per cent of the respondents were from urban areas, 34.8 per cent respondents were from semi-urban areas and remaining 20.4 per cent respondents were from rural areas using private sector bank ATMs. As the private sector banks concentrate more in urban areas the respondents from this segment is more.
- ✓ A maximum of 53.6 per cent female respondents and 46.4 per cent of the male respondents use ATMs of the public sector banks and a large number of male respondents (58.8 per cent) and 41.2 per cent of the female respondents use private sector bank ATMs.
- ✓ Thirty per cent of the respondents belong to the age of 26 and 35 are using the public sector bank ATMs and 34.8 per cent of respondents belong to the age of 18 and 25 are using private sector bank ATMs.
- ✓ A considerable number of 30.8 per cent of the respondents working in private sectors use public sector bank ATMs and 24.8 per cent of the students using private sector bank ATMs.
- ✓ Fifty per cent of the respondents earning below 5,000 per month use private sector bank ATMs and 32.4 per cent of the respondents earning below 5,000 use public sector bank ATMs. The minimum balance in the public sector banks are considerably less when compared with the private sector banks.
- ✓ Forty seven per cent of the respondents of the public sector banks have opened their accounts between the year 2001 and 2010 whereas, 46 per cent of the respondents of the private sector banks have opened their accounts between the year 2001 and 2010. Majority of the respondents have account before the year 2010.
- ✓ Forty four per cent of the respondents of the private sector bank and 42.4 per cent of the respondents of the public sector banks have opened their accounts after the year 2010. The employment and awareness is little late than these respondents.
- ✓ The highest number of 95.2 per cent of the respondents from private sector banks and 94.4 per cent of the respondents from public sector banks has saving bank accounts.
- ✓ A very few number of the respondents (5.6 per cent) from public sector banks and 4.8 per cent of the respondents from private sector banks have current accounts.

- ✓ Forty five per cent of the respondents from private sector banks and 42.0 per cent of the respondents from public sector banks use their ATM cards whenever necessary, they do not follow any periodical intervals.
- ✓ The majority of 57.2 per cent the respondents from private sector banks and 55.2 per cent of the respondents from public sector banks use ATM cards for a period between 2 and 5 years.

Personal Factor relating to satisfaction

- ✓ A considerable number of 67.2 per cent respondents from private sector banks and 57.6 per cent of public sector bank respondents were satisfied with the usability of ATMs.
- ✓ Forty two per cent of the respondents from the public sector banks and 39.2 per cent of the respondents from the private sector banks were satisfied with statement request.
- ✓ A reasonable number of 44.0 per cent respondents from the private sector banks and 42.8 per cent the respondents from the public sector banks were satisfied with account activity enquiry.
- ✓ Forty four per cent of the respondents from the public sector banks and 42.4 per cent of the respondents from the private sector banks were satisfied with multiple usages on ATMs.
- ✓ Thirty four per cent of the respondents from the public sector banks and 32.8 per cent of the respondents from the private sector banks were satisfied with withdrawal limit in ATMs.
- ✓ Fourteen per cent of the respondents from the private sector banks and 12.4 per cent of the respondents from the public sector banks were dissatisfied with withdrawal limit in ATMs.
- ✓ Forty two per cent of the respondents from the private sector banks and 35 per cent of the respondents from the public sector banks were satisfied with amount transfer facility.
- ✓ Forty per cent of the respondents from the private sector banks and about 36 per cent of the respondents from public sector banks were satisfied with the assistance given by the bank at the time of usage.
- ✓ Thirty seven per cent of the respondents from public sector banks and 36 per cent of the respondents from private sector banks were satisfied with the operating system of ATMs.
- ✓ Forty per cent and 39 per cent of the respondents from the public and the private sector banks were satisfied with the delivery of ATM card by the banks respectively.

Institutional Factors

- ✓ Forty five per cent of the respondents from the private sector banks and 35 per cent of the respondents from the public sector banks were satisfied with the benefits of twenty four hour banking facilities offered by banks through ATM centers.

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- ✓ Forty six per cent of the respondents from the private sector banks and 49.2 per cent of the respondents from the public sector banks were satisfied with quality of currency issued through ATMs.
- ✓ Thirty eight per cent of the respondents from the private sector banks and 36.4 per cent of the respondents from the public sector banks were satisfied with the service quality of ATM centre personnel.
- ✓ Forty per cent of the respondents from the public sector banks and 34 per cent of the respondents from the private sector banks were satisfied with loading up of ATMs with cash periodically.
- ✓ Thirty eight per cent of the respondents from both the public as well as the private sector banks were satisfied with the availability of security in the ATM centres.
- ✓ Thirty nine per cent of the respondents from the private sector banks and around 35 per cent of the public sector banks respondents were satisfied with inter-connectivity of ATMs.
- ✓ Thirty six per cent of the respondents from the public sector bank ATM users and 32.4 per cent of the respondents from the private sector bank ATM users were satisfied with charges collected by the bank for inter connectivity of ATMs.
- ✓ Thirty nine per cent of the users from the public sector banks and 36.9 per cent of the private sector banks ATM users were satisfied with protection against fraud in ATMs
- ✓ Thirty three per cent of the public sector bank users and 34.4 per cent of the respondents from the private sector bank users were satisfied with the pin changing facility.
- ✓ Forty eight per cent of the respondents from the public sector banks and 46.4 per cent of the private sector banks respondents were satisfied with the security system followed by the banks.
- ✓ Thirty one per cent of the respondents from the public sector banks and 27.2 per cent of the respondents from the private sector bank respondents were satisfied with maintenance work done by the bank on ATMs.
- ✓ Thirty eight per cent of the respondents from the public sector banks and 28.8 per cent of the private sector banks respondents were satisfied with alternative arrangements made by the bank at the time of power failure/power cut.
- ✓ Twenty two per cent and 14 per cent of the respondents from private and public sector banks were dissatisfied with the alternative arrangements made by the bank at the time of power failure respectively.
- ✓ Thirty two per cent of the respondents from the private sector banks and around 30 per cent of the respondents from the public sector banks were satisfied with the door locking facility of ATMs.
- ✓ Thirty six per cent of the respondents from the private and 33.2 per cent of the respondents from the public sector banks were satisfied with the network connection of ATMs.

- ✓ Thirty three per cent of the respondents from the public sector banks and 32 per cent of the respondents from the private sector bank ATM users were satisfied with the charges for ATM utilization.
- ✓ Forty eight per cent of the respondents from the public sector banks and about 44 per cent of the private sector bank respondents were satisfied with the location of ATM centre.
- ✓ Thirty two per cent of the respondents of the public sector bank and 27.6 per cent of the respondents of the private sector banks were satisfied with the denomination of currency available in the ATMs.
- ✓ Thirty six per cent of the respondents from the public sector banks and 28.8 per cent of the respondents from the private sector banks were satisfied with the customer service offered by the banks.
- ✓ Thirty six per cent of the respondents of the public sector bank and 29.2 per cent of the respondents from the private sector banks were satisfied with the availability of ATM centres in their areas.
- ✓ Thirty six per cent of the respondents from the public sector bank ATM users and 30.4 per cent of the respondents from the private sector bank ATM users were satisfied with the encouragement given by the bank for utilization of ATMs.

Problems faced by the ATM users

- ✓ Seventy per cent of the respondents of the private sector bank ATM users and about 39 per cent of the respondents of the public sector bank ATM users were often faced the problem of out of cash situation in the ATMs.
- ✓ Forty seven per cent of the respondents of the private sector bank ATM users and about 38 per cent of the respondents of the public sector bank ATM users were often struggling with the problem of ATM machine out of order.
- ✓ Forty three per cent of the respondents of the private sector bank ATM users and 35.2 per cent of the respondents of the public sector bank ATM users were often faced with the difficulties of card locked inside the ATM.
- ✓ Fifty two per cent of the respondents of the private sector bank users and 34.8 per cent of the respondents of the public sector bank users were often struggling with the breakdown of a machine function.
- ✓ Forty three per cent of the respondents from the private sector banks and 30.4 per cent of the respondents of the public sector bank were agreed that often the repairs made shortly to the ATMs.
- ✓ Forty four per cent of the respondents from the private sector banks and 32.4 per cent of the respondents of the public sector bank ATM users have an unsecured feeling at the time of using ATMs
- ✓ Forty per cent of the respondents of the private sector bank ATM users often avail denomination in the ATMs.

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- ✓ Forty three per cent of the respondents of the private sector bank and 28.4 per cent of the respondents of the public sector bank often facing the fear of fraud on ATMs.
- ✓ It is found that about 34 per cent of the respondents from both the public and private sector banks were often faced with the problem of forgetting the operation from time to time.
- ✓ It is evident that, 42 per cent of the respondents of the private sector bank ATM users and 32 per cent of the respondents of the public sector bank ATM users were often faced the problem of lack of alternatives at the time of power failure.

RECOMMENDATION BY THE RESPONDENTS

- ✓ Ninety eight per cent of the private sector bank respondents and 96.4 per cent of the public sector bank respondents felt that the bank should try to establish some more ATM centres in the suitable locations.
- ✓ Ninety nine per cent of the private sector bank users and 98 per cent of the public sector bank users have suggested that the bank should try to increase safety measures and security system for preventing frauds on ATMs.
- ✓ Ninety eight per cent of the private sector bank users and 94.8 per cent of the public sector bank users expected that, the bank should try to simplify the operating system of the ATMs.
- ✓ Ninety seven per cent of the private sector bank users and 92 per cent of the public sector bank users have opined that the bank should try to recruit employees in the ATM for giving guidance to the old age people, illiterates and rural people at the time of usage.
- ✓ Ninety six per cent of the private sector bank users and 93.2 per cent of the public sector bank users have suggested that the bank should try to establish an increased number of ATMs in the heart of the city, bus stand, railways station, market places, hospitals and nearer to educational institutions.
- ✓ Ninety six per cent of the private sector bank users and 86.8 per cent of the public sector bank users have recommended that the bank should try to minimize the formalities for issuing ATM cards to its account holders.
- ✓ Ninety nine per cent of the private sector bank respondents and 88.8 per cent of the public sector bank respondents expect that the bank should try to increase their customer service through ATMs. There should be proper maintenance of ATM centres.
- ✓ Ninety six per cent of the private sector bank ATM users and 84.8 per cent of the public bank ATM users have recommended that the bank should try to increase the withdrawal limit on ATMs.
- ✓ Ninety two per cent of the private sector bank ATM users and 84 per cent of the public sector bank ATM users have suggested that the bank should try to introduce the denomination facility in the ATMs.



- ✓ Ninety seven per cent of the private sector bank ATM users and 85 per cent of the public sector bank ATM users have recommended that the bank should try to enhance the ATM users, as most of the senior citizens are not using the ATM cards for their use.
- ✓ Ninety eight per cent of the private sector bank ATM users and 97.3 per cent of the public sector bank ATM users have suggested that, the bank should try to check whether ATMs are having fake rupee notes in the periodical intervals.

SUGGESTIONS

In the light of the above findings the following suggestions are offered to develop the ATMs for efficient utilization of every person especially rural, illiterate and old age people. The suggestions based on the study would be pertinent not only the district, but also the state and the nation as a whole.

- ✓ The bank should try to establish the ATM centers, not only near the premises of banks, but also in locations such as shopping centers, malls, railway station, grocery stores, petrol or gas stations, restaurants or anywhere frequented by large numbers of people.
- ✓ ATMs provide a practical demonstration of a number of security systems. The bank should try to protect ATM users from physical attack, and thieves attempting to steal etc.,
- ✓ The bank on their part should device easy to use means of communication on problems that may likely result in the use of ATM and how to resolve them.
- ✓ The bank should try to the strength of the personal identity security and try to use of multiple factors of authentication.
- ✓ In case of network coverage of ATMs the bank should try to give more ATM coverage should be provided for the convenience of the customers.
- ✓ The business persons suggested that the bank should try to increase the withdrawal limits on ATM per day.
- ✓ In case of operating system of the ATMs the bank should bring out new methodologies for operating ATMs to time, the bank should try to instruct the users through bulletins inside the ATMs.
- ✓ The absence of direct interaction with bank staff has increased customer's fear. The bank should improve the facility for interaction with the customers with a view to improve ATM service quality.
- ✓ Banks should develop strategies to motivate non-users through awareness, education, extending personalized service, and demonstrating the functions of ATMs.
- ✓ The banks should make preventive measures for ATMs and commitment to redress the service features of ATMs.
- ✓ The banks should formulate the preventive policy for maintaining the ATMs, it minimizes the malfunctioning of ATMs and out of order, etc.

- ✓ In ATM networks do go out of service, customer could be left without the ability to make transactions until the beginning of the next banking hours. This inconvenience should be minimized through appointing a bank staff for each and every ATM.
- ✓ Operation of an ATM differ from bank to bank, ATM shoves the ATM card in the machine and the customer feels nervous until the machine is giving out cash. The bank tries to change this procedure.
- ✓ Banking customers expect high reliability in their ATMs. This provides motivation to them. The banks should try to minimize machine failure and network failures.
- ✓ The incorrect machine operation creates a high degree of dissatisfaction; sometimes the machine debited the amount from their account without issuing banknotes. It creates stress to the card holder.
- ✓ Power failure is the major problem on ATMs at the time of transacting the ATM, the user struggle through power failure, the card locked inside the ATMs. The bank should try to provide alternative arrangements for power failure on ATMs.
- ✓ More damaging will be the cash out situation which will reflect the inefficiency of the banks, and the customer switching to another ATM at the time of emergency. The bank should try to avoid this situation.
- ✓ New technology and older people seem to be an inappropriate combination. The bank should try to motivate older people to learn new technologies and the bank must take it as a challenge.
- ✓ Security in the ATM is very important, the bank should try to establish multiple security cameras and security guards 24*7.

CONCLUSION

Users are mostly happy with the new technology they experience the devices are making life easier. The banking sector provides a platform to use innovative technologies to enhance operational efficiency and quality of service like getting a statement of accounts, fund transfer, deposits and withdrawal of cash, transfer of funds, payment of bills and premium, recharging of mobile phones, checking and purchasing of financial instruments to also attain and retain customers.

The rapid growth in the use of ATMs in Tiruchirappalli District offers opportunities to banks like reducing the workload of the employees, free from human errors, avoid overcrowding at the branches in the banking operations and extend their services twenty four hours and seven days a week and three sixty five days in a year to its customers. The banks should monitor the preferences of customers in advance for satisfying them. The bank should focus on the important aspects of security and privacy as well as the efficient operation of ATMs. Banks should also concentrate an old age people and rural people for utilization of ATMs at the maximum. Take necessary steps to minimize the fear, shyness, theft and the fear of fraud.

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Finally, the very important need of the hour is an alternative arrangement for power failure for all ATMs and security guard for each and every ATM.

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