

## AN EMPIRICAL INVESTIGATION OF ATM SERVICE QUALITY AND CUSTOMER SATISFACTION: AN INDIAN PERSPECTIVE

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### ABSTRACT

Providing improved customer service has come to be imperative for banks to stay alive and develop, in the evolving liberalized banking sector, under reforms. The three thrust areas for the banking industry are size, speed and service. Central to the acceleration of speed of delivery of service in banking system is adoption of banking technology. The banks have recognized that they need to offer the conveniences of newer technologies to retain their existing customers. The ATM is the most visible and perhaps the most revolutionary element of virtual banking. The focus of this study has been on the satisfaction of the respondents availing ATM services provided by the banks. The present study depended both on primary and secondary sources.

### Keywords

ATM, service quality, customer satisfaction,

### 1.0 Introduction

The three thrust areas for the Indian banking industry at this state of its development are size, speed and service. Size includes mergers and amalgamations. Central to the acceleration of speed of delivery of service in banking system is technology. But it is important to remember that technology is only an enabler. Banks have to develop innovative measures to address their present customers, acquire new ones, retain existing ones and at the same time initiate procedures to win back lost customers. Improved customer service has become very important for banks to survive and grow, in the emerging deregulated banking sector, under reforms. The banks have recognized that they need to offer the conveniences of newer technologies merely to retain their existing customers. The banking sector reforms that were initiated in the early 1990s and the globalisation and liberalisation measures brought in a completely new operating environment to banks. The emergence of the foreign and the new private sector banks with superior state-of-the-art technology based services created competitive environment and pulled the banking industry to rise to meet the challenge of adoption of new technology, new paradigms, and new ways of doing business. The banks now compete with one another to offer value added services to

customers, to expand their customer bases. The Government of India enacted the IT Act 2000 to provide legal recognition to electronic transactions. The Vision Document for 2011-2017 released by the RBI envisages banks to work towards utilising technology for cost reduction of small value transactions and improved customer services.

### 1.1 Focus of the Study

The present study focuses on the satisfaction of the respondents availing ATM services provided by the banks from which the customers benefit as the services enable them to avail themselves of banking facilities at any time and from anywhere without the assistance of the bank employees.

### 1.2 Objectives of the Study

The major objective of this study has been an analysis of the satisfaction of the customers availing ATMs in Dakshina Kannada (DK) district of Karnataka state in India. However, the specific objectives of the study have been-

- a. To analyse the service quality of ATMs in Indian Banking Sector.
- b. To analyse the satisfaction the customers availing of ATMs in India.

### 1.3 Hypotheses

In order to achieve the objectives this study has set the following hypotheses for testing/ verification.

1. The hypothesis that the preference for ATM services is more with younger people.
2. The customers are satisfied from the ATM services provided by the banks.

### 1.4 Sources of Data

The present study depended both on primary and secondary sources. The primary data were gathered through a field survey, using structured interview schedules, from bank customers drawn from public sector, old private sector and new private sector banks residing in DK district of Karnataka State in India. Of the total respondents 154 (38%) are of the Public Sector Banks, 149 (36.8%) are of the Old Private Sector Banks and 102 (25.2%) are of the New Private Sector Banks. Old private sector banks are those which are operating before 1991. New generation banks are that setup after 1991.

### 1.5 Review of Literature

A review of the existing literature on the subject has been useful in getting an insight into the topic of study. However, the review made cannot be claimed to be an exhaustive one.

The study of Thamaraiselvan Natarajan, et.al (2010) on customers' choice amongst self-service technology channels in retail banking, revealed that on the whole ATM is found to be the most preferred channel followed by internet banking and mobile banking with more or less equal weights. The study opines that the benefits perceived equal, amongst the SST channels, the patronage for internet banking

and mobile banking can be improved if the risk perception is reduced.

In a joint study Kulwanth Singh Pathania and Mamatha Sharma (2010) examined the adoption rate of the banking technologies and found that the awareness of ATM is quite higher, as compared to the other banking channels. The results of the study showed that the SBI leads in almost all the attributes of the quality of banking services, followed by the ICICI bank and the PNB. According to the study 56 per cent of the respondents are somewhat satisfied; whereas 26 per cent are extremely satisfied from the banking services. ATM was the only channel that was extensively used followed by personal visit to banks.

In an empirical investigation Sefer Gümüş et.al (2015) concluded that the general expectations of common ATM users are higher than the perceived service, and that such satisfaction is not maintained in full. For monitoring the expectations through ATMs and thus reducing the number of personnel, it is recommended for banks to measure periodically their customer satisfaction levels through updated questionnaire screening operations.

In a study Chhemanand Joshi (2019) found that ATM services have positive impact on the customer satisfaction; if proper functioning is ensured by the banks, there will be significantly higher customer satisfaction. Availability of cash has highest impact on customer satisfaction.

## 1.6 Analysis and Discussion

With the introduction of ICT in the banking sector, the customers are fast moving away from traditional branch banking system to the convenience and comfort of remote electronic banking services. The ATM is the most visible and perhaps the most revolutionary element of virtual banking. The ATM is an electronic self-service vendor machine, which is operated by the customer himself, which allows customers who have an ATM card to perform routine banking transactions at convenient places without interacting with human teller on 24X7X365 basis. The advent of the ATM has made the concept of round the clock banking a reality. To avail the ATM services, the customer is provided with an ATM card which is small magnetic strip plastic card containing information about the bank name, customer name, card number and signature panel. The magnetic strip contains information about the customer which enables the bank servers to verify the identity, when the card is inserted/ swiped at the slot provided in the ATM kiosks.

The number of respondents availing ATM services of the different banks is presented in Table 1

**Table 1: Number of Respondents Availing ATM Services**

| Service | Type of Bank            | No. of Respondents |
|---------|-------------------------|--------------------|
| (01)    | (02)                    | (03)               |
| ATM     | Public Sector Bank      | 140 (90.91%)       |
|         | Old Pvt. Sector Bank    | 124 (83.22%)       |
|         | New Private Sector Bank | 100 (98.03%)       |
|         | Total                   | 364 (89.88%)       |

In the total sample of 405, a high of 364 (89.98%) respondents are availing themselves of ATM service of which 140 are of the public sector banks, 124 are of the old private sector banks and 100 are of the new private sector banks which shows that ATM is one of the E-banking facilities widely used by the respondents as the largest number of respondents i.e., 89.9 per cent, is availing themselves of the same. Table 2 shows the proportion of the respondents of different age groups availing themselves of ATM services.

**Table 2: Proportion of Respondents of Different Age-Groups Availing ATMs**

| Particulars   | Age-category (years) |            |           |           |           |
|---------------|----------------------|------------|-----------|-----------|-----------|
|               | 18-25                | 26-35      | 36-45     | 46-55     | Above 55  |
| (01)          | (02)                 | (03)       | (04)      | (05)      | (06)      |
| Availing ATMs | 93 (93.9)            | 129 (97.0) | 64 (90.1) | 53 (77.9) | 25 (73.5) |

Among the respondents in the age group of 18-45 years a high of more than 90 per cent is availing themselves of ATM services as against the proportion in 46 years and above. This shows that the preference for ATM services is more with younger people than with elderly people. **The hypothesis that the preference for ATM services is more with younger people is proved and accepted.**

The customer satisfaction depends on the service quality of the ATMs of the bank with which they are frequently transacting. The opinions of the respondents regarding the quality of service are summarised in Table 3.

**Table 3: Descriptive Statistics on Ratings for Quality of Service of ATMs**

|      | Type of bank   | N    | Minimum | Maximum | Mean | Std. Deviation | Median |
|------|--|------|---------|---------|------|----------------|--------|
| (01) | (02)   | (03) | (04)    | (05)    | (06) | (07)           | (08)   |
| ATM  | Public Sector Bank                                       | 140  | 3.00    | 5.00    | 4.09 | .69            | 4.00   |
|      | Old Pvt. Sector Bank                                     | 124  | 3.00    | 5.00    | 4.34 | .65            | 4.00   |
|      | New Private Sector Bank                                  | 100  | 3.00    | 5.00    | 4.55 | .52            | 5.00   |
|      | Total  | 364  | 3.00    | 5.00    | 4.30 | .66            | 4.00   |
|      | Kruskal-Wallis' test Value =27.416, p= 0.000, d. f=2, HS |      |         |         |      |                |        |

The assessment of the quality of the ATM services is done on the basis of the mean score, where if the mean score is equal to 3 the customers are assumed neutral, if mean is less than 3 the quality of service is poor and if mean score is greater than 3 it is assumed that the quality of service is good. Further if the mean score is greater than 4 it is assumed that the quality of service is excellent. The rating of the quality of the ATM services by the respondents was  $4.30 \pm 0.66$  which shows that the quality of such services has been excellent. In public sector banks the rating of the ATM services was  $4.09 \pm 0.69$ , and in the old private sector banks it was  $4.34 \pm 0.65$ , and in the new private sector banks it was  $4.55 \pm 0.52$ . Kruskal-Wallis test shows that there is a highly significant difference in the quality of the ATM services among the banks as  $P = 0.000 < 0.01$ . The quality of the ATM services of the new private sector banks was the most superior followed by the old private sector banks and then the public sector banks. The level of satisfaction of the respondents availing themselves of ATM services is done with the help of mean score. The details of the analysis have been presented in Table 4.

**Table 4: Descriptive Statistics of Customer satisfaction from ATM facilities**

| Services | Type of bank  | N    | Min. | Max. | Mean | Std. Deviation | Median |
|----------|---|------|------|------|------|----------------|--------|
| (01)     | (02)  | (03) | (04) | (05) | (06) | (07)           | (08)   |
| ATM      | Public Sector Bank                                      | 140  | 2.00 | 5.00 | 4.31 | .66            | 4.00   |
|          | Old Pvt. Sector Bank                                    | 124  | 3.00 | 5.00 | 4.38 | .65            | 4.00   |
|          | New Private Sector Bank                                 | 100  | 3.00 | 5.00 | 4.43 | .57            | 4.00   |
|          | Total   | 364  | 2.00 | 5.00 | 4.37 | .63            | 4.00   |
|          | Kruskal-Wallis' test Value =1.520, p= 0.468, d. f=2, NS |      |      |      |      |                |        |

As per Table 4, assessment of satisfaction is done on the basis of the mean score, where if the mean score is equal to 3, the respondents are assumed to be neutral, if the mean score is less than 3, they are not satisfied and if mean score is greater than 3, they are assumed to be satisfied. Further, if the mean score is greater than 4, they are assumed to be highly satisfied and if mean score is less than 2, they are highly dissatisfied. The level of satisfaction of ATM services by the respondents is  $4.37 \pm 0.63$ , which shows the customers are highly satisfied. In the public sector banks the level of satisfaction has been

$4.31 \pm 0.66$ , and in the old private sector banks it has been found to be  $4.38 \pm 0.62$  and in the new private sector banks it has been  $4.43 \pm 0.57$ . Kruskal-Wallis test shows that there is no significant difference in the customer satisfaction of the respondents availing themselves of the ATM services of the different bank groups. The hypothesis that the customers are satisfied from the ATM services provided by the banks is proved and accepted.

### 1.7 Problems Encountered

The major problem encountered by 62.2 per cent of the respondents is non-availability of ATM services especially in the rural and semi-urban areas. The other major problem as opined by 26.2 per cent of the respondents is insecurity, 20 per cent of the respondents consider it as complicated and 16.8 per cent of the respondents consider it as inconvenient. A few others have complained non dispatch of cash, out of service problem with ATMs and connectivity problem as some other problems that they have encountered.

### 1.8 Suggestions for Improvement of ATM Services

Few suggestions have been given for the betterment of ATM services-

1. Widening the Geographical Spread: Many respondents complained regarding the non-availability of ATMs especially in the small towns and rural areas. Therefore, there is a need to expand the network of ATMs especially in rural areas and mobile ATMs may be pressed into service to overcome the problem of minimum hits required in such areas.
2. Prompt Services: The problems such as non-operational ATMs, non-availability of cash especially during continued holidays, power failure, network failure and others need to be addressed as well ensuring promptness in providing services always.
3. Uniformity of ATMs: The Indian Banks' Association may take up the responsibility of standardization of ATMs to remove the problems of diversity in the ATM machines of different banks, standardized messaging and other technology solutions.

### 1.9 Conclusion

In the case of ATMs many studies, including the present one, found that the awareness, adoption and satisfaction rates are very high. The study proved that there is higher preference for ATM services with younger people. Further, the customers are satisfied from the ATM services provided by the banks. Therefore, the efforts should be in the direction of wider geographical spread of ATMs.

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