



## An Inquiry Into the Usage of Automatic Teller Machine (ATM) Services and Involved Convolutions

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### ABSTRACT

*In Recent years Automated Teller Machine services have been one of the major channels of modern banking services to reach its customers. Branchless banking has gained momentum and is impacting the working of every process of banking industry. This paper focuses on the perceived utilization of comprehensive services offered by ATMs. Data for this study is primary in nature and collected through a survey conducted on 200 respondents across Pune city. The results confirm ATM services are not fully availed and there is a need for understanding the complications as customers are apprehensive about using value-added services.*

**KEYWORDS :** Automated Teller Machine, ATM Services, Customers usage.

### INTRODUCTION:

Indian banking took a major shift from the regular branch banking to the branchless banking with the setup of the Automated Teller Machines (ATM) in the country. It is considered one of the major innovations after the core banking services which have changed the face of the banking industry all over the world. Automated Teller Machine Services have been one of the major channels of modern banking services to reach its customers. Thus, the study is an attempt to study its utilization for more than two decades of its existence.

### REVIEW OF LITERATURE:

The review of literature highlights that most of the customers used Automated Teller Machine only for cash withdrawal and checking account balances rather than a comprehensive service. The findings bring to a close that those who were not using ATM services preferred human contact because of personalization [Lewis (1991); Rugimbana & Iversen (1994); Chattopadhyay, et.al (2012)].

Some of the surveys, conclude, customers are apprehensive about using other services such as utility payments, mobile recharge, etc. for lack of trust in the online payment system. ATMs are not fully utilized as the customers still depend on bank branches for services which can be provided by the ATMs. [Krishnan (2013); Kani, et.al (2014)].

Few of the studies put forward that there is an association between the age and preference for using ATM services by customers, evidence specifies that younger customers prefer using ATMs rather than traditional banking. Although the usage is high, the young customers are not aware about the fees charged, minimum-maximum withdrawals permitted through ATM services. [Joshua, et.al (2011); Kumar (2014); Chaudhari, et.al (2014)].

Against this setting, the present study is undertaken in different areas (of different public and private banks) of Pune city. Research studies on Automated Teller Services especially of Pune district are rare in nature.

### OBJECTIVES OF STUDY

The study was undertaken with the following Objectives:

- To study the level of access and usage of Automated Teller Machine services in Pune city.
- To explore the complexity/ convolutions in availing the ATM services.
- To examine the association of demographic factors and Automated Teller Machine Services.

### METHODOLOGY

The research design is exploratory and descriptive in nature. Sample size consisting of 200 respondents from different banks was considered. Primary data is collected through questionnaires from different bank customers using Purposive sampling method for the period January – March 2015. Variables taken to understand different considerations are identified from pilot study and literature reviews.

The data analysis was done by using the simple percentage analysis (descriptive statistics) and Chi-square Test.

The following is the hypothesis formulated for the study:

- There is significant difference amongst demographic features and the Usage of ATM Services.

Considering the limited geography and number of respondents the findings of the study may have their own limitations in their applicability to other parts of the country.

### ANALYSIS AND DISCUSSION:

Table 1 presents the respondents' socio-demographic characteristics. It confirms that young people dominated the sample. Specifically, those that fell within the age group 18-30 years constituted 48 percent while those that fell within age category 51 and above years constituted the least (15.5 percent). This may be an indication that young people who are more inclined to experimenting new technology may be using this machine than the older people. Also, the result showed that 67 percent were males while 33 percent were females.

As regards the occupation of respondents, result showed 49 percent indicated they were private sector employees, 27 percent were students, 15 percent were self-employed/in business while merely 9 percent were public employees. One can infer from this that the ATM has attracted acceptance from wide spectrum of the society.

**Table 1: SOCIO-DEMOGRAPHIC PROFILE OF RESPONDENTS**

| Sl.No. | Characteristics      | Number of Respondents | Percentage to Total |
|--------|----------------------|-----------------------|---------------------|
| I      | GENDER:              |                       |                     |
|        | Male                 | 134                   | 67                  |
|        | Female               | 66                    | 33                  |
| II     | AGE:                 |                       |                     |
|        | 18 to 30 years       | 96                    | 48                  |
|        | 31 to 40 years       | 37                    | 18                  |
|        | 41 to 50 years       | 36                    | 18                  |
|        | 51 years & above     | 31                    | 15.5                |
| III    | OCCUPATION:          |                       |                     |
|        | Government Sector    | 18                    | 9                   |
|        | Private Sector       | 98                    | 49                  |
|        | Business             | 30                    | 15                  |
|        | Students             | 54                    | 27                  |
| IV     | ANNUAL INCOME:       |                       |                     |
|        | Less than 2.5 Lacs   | 76                    | 38                  |
|        | 2.5 to 5 Lacs        | 49                    | 24.5                |
|        | 5 to 10Lacs          | 59                    | 29.5                |
|        | Greater than 10 Lacs | 16                    | 8                   |

The result of the study also showed that the sample used in this study were of different income level. 38 percent of them received less than 2.5 lacs per annum. (Probably the maximum respondents are freshers who have just started their career). 24.5 percent and 29.5 percent belong to income category of above than 2.5 lacs till 10 lacs respectively. Very few 8 percent belonged to greater than 10 lacs annual income category. The predominance of the respondents is young people.

**Table 2: ACCESS AND USAGE OF ATM SERVICES**

| Sl. No. | Details                             | Variables   | Number of Respondents | Percentage |
|---------|-------------------------------------|---|-----------------------|------------|
| 1       | Regular User of ATM Services        | Yes   | 176                   | 88         |
|         |                                     | No  | 24                    | 12         |
|         |                                     | Total   | 200                   | 100        |
| 2       | Number of years using ATM Services  | Less than 2 Years                                   | 27                    | 14         |
|         |                                     | 2 to 5 Years  | 101                   | 50         |
|         |                                     | 5 to 7 Years  | 52                    | 26         |
|         |                                     | Greater than 7 Years                                | 20                    | 10         |
|         |                                     | Total   | 200                   | 100        |
| 3       | Frequency of Using ATM Technology   | Daily   | 18                    | 9          |
|         |                                     | Weekly  | 110                   | 55         |
|         |                                     | Fortnightly   | 50                    | 25         |
|         |                                     | Monthly   | 22                    | 11         |
|         |                                     | Total   | 200                   | 100        |
| 4       | Preferences of ATM in times of need | On-site only  | 68                    | 34         |
|         |                                     | Off-site is also preferred                          | 78                    | 39         |
|         |                                     | Any Bank ATM as far as transaction limit is reached | 54                    | 27         |
|         |                                     | Total   | 200                   | 100        |

  

| DEMOGRAPHIC FEATURES vs. USAGE OF ATM SERVICES |     |                             |                   |                         |                                |
|--|-----|-----------------------------|-------------------|-------------------------|--------------------------------|
| Factor   | N   | Chi-Square Calculated Value | Degree of Freedom | Accept. Sig. (2-tailed) | Hypothesis Accepted / Rejected |
| Gender   | 200 | 6.42                        | 3                 | .090                    | Rejected                       |
| Age  | 200 | 25.4                        | 9                 | .003*                   | Accepted                       |
| Occupation                                     | 200 | 73.6                        | 9                 | .000*                   | Accepted                       |
| Annual Income                                  | 200 | 40.1                        | 9                 | .000*                   | Accepted                       |

Source: Computed Data. (\*) - denotes Statistically Significant.

**ACCESS AND USAGE OF ATM SERVICES:**

Table 2 presents the level of access and usage of ATM by the respondents. Results showed that 88 percent are regular users of ATM. Nearly 50 percent of the respondents are availing this technology for more than 2 to 5 years. Also, 55 percent and 25 percent indicated that the frequencies of using ATMs are on either weekly basis or fortnightly respectively. Very few are observed to use either daily (9 percent) or Monthly (11 percent).

It is interesting to note at the same time almost 34 percent of the respondents preferred on-site what so ever may be. Whereas, 39 percent agreed that their preference for ATM is also off-sites in times of need and 27 percent even preferred any bank ATM. The implication here is that even if the ATMs are available in the bank premises, it is not enough because they be crowded thereby limiting the level of access some customers may have. The analysis also confirms that most users of teller machine are young people and who most likely are students and the highest frequency is on weekly basis.

The chi-square test result confirms that there is statistically significant difference amongst demographic features viz., age, occupation and annual income and the Usage of ATM Services.

| Table 3<br>FACILITIES OF ATM TECHNOLOGY AVAILED BY THE RESPONDENTS |                    |      |                    |      |                 |                   |
|--|--------------------|------|--------------------|------|-----------------|-------------------|
| FACILITIES   | YES                |      | NO                 |      | TEST STATISTICS |                   |
|  | No. of Respondents | %    | No. of Respondents | %    | Chi-square      | Degree of Freedom |
| 1 Cash Withdrawal  | 194                | 97   | 4                  | 2    | 10.1            | 3                 |
| 2 Depositing Cash and Cheques                                      | 174                | 87   | 26                 | 13   | 3.77            | 4                 |
| 3 Transferring/Funds   | 160                | 80   | 40                 | 20   | 12.3            | 3                 |
| 4 Request for Cheque Book  | 151                | 75   | 49                 | 24   | 64.8            | 4                 |
| 5 Credit Card Instruments  | 128                | 64   | 72                 | 36   | 21.7            | 5                 |
| 6 Paying Utility Services Bills                                    | 135                | 67.5 | 65                 | 32.5 | 25.2            | 6                 |
| 7 Tax Payments etc.  | 87                 | 43.5 | 113                | 56.5 | 16.3            | 3                 |

  

| COMPLEXITIES IN ACCESSING ATM SERVICES    |                    |      |                    |      |                 |                   |
|---|--------------------|------|--------------------|------|-----------------|-------------------|
| COMPLEXITIES                              | YES                |      | NO                 |      | TEST STATISTICS |                   |
|   | No. of Respondents | %    | No. of Respondents | %    | Chi-square      | Degree of Freedom |
| 1 Target of Attack / Theft                | 118                | 59   | 82                 | 41   | 895             | 1                 |
| 2 Evade Money without using physical cash | 154                | 77   | 46                 | 23   | 372             | 1                 |
| 3 Program Network Failure                 | 95                 | 47.5 | 105                | 52.5 | .006            | 1                 |
| 4 No Sufficient Cash in ATMs              | 155                | 77.5 | 45                 | 22.5 | .043            | 1                 |
| 5 Over Crowded/Inconvenient               | 87                 | 43.5 | 113                | 56.5 | .006            | 1                 |
| 6 Not friendly for physically challenged  | 59                 | 29.5 | 141                | 70.5 | .052            | 1                 |

Source: Computed Data; (\*) - denotes Statistically Significant.

Table 3 presents the respondents' responses on availed facilities of ATM. The result shows the maximum 98 percent visited ATM for cash withdrawal. This further confirms that most users are young people and mostly students. It is evident 87, 80 and 79 percent availed the services of ATM technology for exclusively Depositing Cash and Cheque, Transferring of funds and Cheque Book request respectively. The add-on services like paying utility bills and tax payments are observed to be statistically significant with 57.5 and 41.5 percent respectively. However, most respondents acknowledged saving time rather than queuing up in the banking halls as one of the benefits of ATMs. From the above analysis, though the ATM has benefited most customers in a number of ways, respondents are not fully utilizing the range of facilities offered by ATM.

With regard to the Complexities, few annotations were put forth by the respondents. Almost, 89 percent opinioned on the lack of adequate security at location points. The fear of armed robbery attack in using ATM Technology/services is perhaps one among the reasons for not fully utilizing or availing the range of facilities. The second leading complex situations faced by respondents are in many cases ATM debits the account without issuing physical cash (77 percent substantiate the experience). Other complexities include ATM in both on-site as well as off-site remain overcrowded and besides witnessed service network failure (nearly 44 percent). This is recorded for different banks ATM locations. For few ATM services are not friendly. It is also to mention the survey on the complexities is not statistically significant to substantiate. Nevertheless, most respondents identified the Automated Teller Machine Services to be one of the plus points in saving time rather than queuing up in the banking halls.

**CONCLUSION:**

The study infers that though banks world-wide have been effectively deploying information technology as an innovative resource to achieve speed, efficiency, cost reduction, customer service and competitive advantage, this survey especially conducted for usages of automated teller services is yet to make a way into more and more people for their banking needs.

The exploration make out that ATM (Automated Teller Machines) are considered by many as only machine intended for Any Time Money. As per the findings, the adopted services of Automated Teller Machines were basic. Customers are not availing or aware of the full range of automated teller facilities offered by banks. Many consumers are hesitant of using ATM based services such as add on services because of the perceived convolutions. Comfort and convenience is very important in any business that majority of the respondents are dissatisfied with the lack of adequate security, insufficient cash and network issues. It furthermore indicates that young customers are the maximum associated with usage of ATM services.

Hence, Banks along with technology providers ought to identify the causes for low usage of ATM based services and strategize to mark up their use. Besides, it must do a lot in terms of either informing their clients and customers or adopting advanced services in case they have not adopted. Persuasion to move around for technological advancement services will gain a strong hold.

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