

## Usage of ATM for banking in urban and rural areas - a study with reference to UT of Dadra and Nagar Haveli

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**Abstract:** *The research paper intends to understand the frequency of usage of Automated Teller Machines (ATM) in urban and rural areas. For the development of financial sector and economy, participation of urban as well as rural residents is necessary in the banking sector. To increase the deposit base of banks and augmentation of credit creation in the economy, tapping of saving potential of rural residents is essential. ATM services has the great capacity to increase the participation of rural residents in banking sector and connecting them to mainstream. The results of the study reveal that one third of rural respondents are not using ATM at all and there is a need to increase the usage of ATM among non-users. It also reveals the need for installation of ATM infrastructure in rural areas.*

**Keywords:** ATM, banking sector, rural residents, usage.

### Introduction

Involvement of rural area residents in the usage of modern technology is necessary for balanced regional growth. Banks also need to tap their unused potential and bring them into mainstream by extending benefits of technology. Upliftment of rural people along with urban population is of utmost importance for development of economy. All the technological innovations should reach them, only then they can become true contributors of the growth of economy and country.

Rural people using the ATMs increases the customer base of banks as banks have less branches in rural areas as compared to urban areas, so the residents of rural areas remain unbanked. By facilitating them with ATMs, they can be involved in the banking sector. ATMs have the essential feature of cash withdrawal which is not available in internet banking. Empowering rural population with anywhere anytime cash withdrawal through ATMs greatly substitutes branch banking even though it cannot replace branch banking.

Generally, in rural areas where there is no bank branch, people do not open bank account and even if they open, they do not operate these accounts and also do not deposit money in these branches because of the problems of time and distance. Also, unavailability of cash withdrawal facility in vicinity reduces their liquidity. There is huge untapped saving potential in rural residents which can be tapped by giving them the security of cash withdrawal anytime through ATMs. This will certainly motivate them to open and operate bank accounts and deposit their savings in banks. Increase in deposit base of banks will lead to enhanced credit creation in the economy resulting into strong banking sector and financial sector. It will boost economic development and thus, significant for development of economy.

This paper, based on primary data, aims to understand the frequency of usage of ATMs by bank customers residing in urban and rural areas in the Union Territory of Dadra

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and Nagar Haveli. More than half of its population is residing in villages, thus their participation in financial sector and economy is very important for the development of this region. So, this paper aims to find out their participation along with urban residents, in the financial sector and the economy.

### **Literature Review**

Kibona Lusekelo and Mgaya Gervas, (2015), conducted a study in Tanzania related to Automated Teller Machine (ATM). The aim of this study was to examine the attitude of customers towards the use of ATM services. A total of 110 customers holding ATM cards were considered regarding the services offered by bank's ATM. Collected data were analyzed to identify the key contributors towards customer attitude. The study revealed that, there is great connection between gender, age, marital status, occupation, and location of the ATM towards the attitude customers hold on the use of ATM services.

Erol Genevois et. al. (2015), conducted a study to find out the optimum location for ATMs for their maximum usage by bank customers. As per this study, Automated Teller Machines (ATMs) are considered as one of the most important service facilities in the banking industry. The banks take into consideration many factors like safety, convenience, visibility, and cost in order to determine the optimum locations of ATMs. The results of the study reveal that the location and the cash management problem should be considered together. For this purpose, research proposed two stage solution procedures; first stage is site selection and the second stage are cash management as these two problems are linked together.

A study conducted by Nagamani and Nandhini, (2015) aims to find out awareness levels educated women regarding e-banking. Convenient sampling technique was applied and Simple Percentage Analysis has been used to analyse the data. The study finds that Younger generation of women are more efficient in handling new technology and are more aware of e-banking. All the respondents are aware of ATM/Debit card services more than any other e-banking service rendered by banks.

A study conducted in Africa by Adeniran and Junaidu, (2014) 100 customers of United Bank for Africa of Sokoto Metropolis to find their satisfaction levels on ATM services; and found that easy to use, low transaction cost and safety are associated with levels of satisfaction of ATM services. The results of the study revealed that the impact of ATM services in terms of their perceived ease of use, transaction cost and service security is positive and significant. However, the impact of ATM services in terms of availability of money is positive but insignificant.

The results of the study conducted by Franklin and Vellimalarruby, (2014) on 50 respondents from Ramanathapuram city found that T.V. and radio play important role in creating awareness regarding ATM and very few respondents rely on newspapers and posters. It also revealed that 84% of the respondents are having Two banks ATM cards, where 8% of them are having Three banks cards and 8% of the respondents are having Four banks cards. They suggest for the banks to improve their performance for the ATM facilities, provision of the safety measures for ATM centres, provision of new card promptly in case of missing cards. It also revealed that the bankers are increasing awareness of their customers about ATM, Debit Cards and Credit cards.

A study was conducted in Nigeria by Dawodu Bamidele Friday and Osondu Mary C, (2013) to understand the adoption of automated teller machine in Nigerian banks: use enhancements and limitations. Data is collected from 200 respondents through structured questionnaires. Results of the study reveal that the attributes of diffusion (relative advantage, complexity, compatibility, triability and observability) as a whole have substantial impact on the adoption of ATM. Respondents found the ATM to be of more useful than traditional

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human tellers because of ATM's speed, efficiency, availability and relative safety of personal information (e.g. personal identification number, PIN and account balance). It also found that initially most people had problems in understanding the number of options on the ATM, persistence by some users led to successful use of the machine. Compatibility is also an important feature that has impact on the adoption of the ATM. Use of the ATM accommodates the lifestyles, activities and past values of the respondents.

The results of the study conducted by Tavishi and Kumar, (2013) reveals that to increase use of ATM banking, creating awareness and providing more security is essential. The study is conducted in NOIDA on 400 respondents. Their study identifies the factors influencing the consumer's adoption of ATM banking services in India and hence examines the influence of perceived usefulness, perceived ease of use and perceived risk on use of ATMs. Their study recommends that the banks should ensure higher security and create technical awareness to encourage customer to use ATMS.

Pijush Chattopadhyay and S Saralelimath, (2012) in their study analyse the relationship between demographic variable and preference to use ATM. The study is conducted in Pune city on 300 bank customers from three sample cooperative banks. Data is collected through structured questionnaires. Various statistical tools such as Frequency and Percentage analysis and chi square tests are applied for data analysis and interpretation. The results of the study reveal that the customers prefer ATMs with time and cost utility which provides efficient services. It is preferred by the bank, its employees and customers. Banks should ensure that undisrupted and efficient ATM service is provided to customers for increasing the usage of ATMs.

Pahwa and Saxena (2011) found in the study on 120 ATM card holders of ICICI Bank in Udaipur City that speedy delivery of ATM cards and correctness in cash withdrawal through ATMs has important connection with customer satisfaction levels of bank customers. This study aims at analyzing the satisfaction levels of the customers of ICICI Bank holding ATM cards in Udaipur City with respect to some aspects such as the service quality of ATM personnel, location, sufficient number of ATMs in city, regularity in working of ATMs, their impact on overall performance and their opinions on various other related issues. It suggested for the management of ICICI Bank to reflecton the recommendations made by their customers and take all necessary steps to follow the same.

### **Objectives of the Study**

The objective of the research paper is to understand the frequency of usage of ATMs by the bank customers in the Union Territory of Dadra and Nagar Haveli with a view to find out the usage of ATM by bank customers residing in urban and rural areas.

### **Geographical Area**

The focal area of the study is Union Territory of Dadra and Nagar Haveli. This region represents people from the whole country, as people from all states of India constitutes its non-tribal population Also, rural population constitutes more than half of its total population. It constitutes of 11 village panchayats comprising of 65 villages and 6 urban areas including capital Silvassa. Thus, results of this research can be applied to whole country.

### **Research Hypothesis**

The hypothesis for the present research, tested on the basis of primary data is:

$H_0$  = There is no significant difference in frequency of usage of ATM between bank customers residing in urban and rural areas.

### Methodology

The present study is sourced from primary data which is collected from the UT of The Dadra and Nagar Haveli. Sample size for this study is 382 respondents. Data is collected from them through well-designed structured questionnaires. Data is collected from all village panchayats and urban areas.

### Data Analysis and Interpretation

The present study intends to find out frequency of usage of ATM by urban and rural population. Various statistical techniques used for analysing and understanding the data is discussed in this part of the paper. In the study, percent analysis and Independent Samples T-Test are used for examination of data with the help of SPSS software.

### Demographical Variable: Residential Area

The major component of the sample size are rural residents as they constitute 69 percent of the total sample size. Urban residents constitute 31 percent of total sample size. Thus, sample size is dominated by rural respondents.

### Residential Area and Frequency of Usage of Internet Banking

This section discusses the frequency of usage of ATMs by urban and rural population which is also presented in Table 1. The analysis reveals that percentage of rural residents not using ATM is very high as almost one-third of total rural respondents are not using it. As many as 36 percent of rural respondents are not using ATM at all, not even once in a month. This is very high figure as compare to urban respondents which is only 6 percent, who are not using ATM even once in a month. Respondents using ATM 1 to 3 times in a month are 38 percent in case of urban residents and 40 percent in case of rural residents. However, percentage of respondents who are using ATMs 3 to 8 times in a month is 42 percent in case of urban area while it is only 11 percent in case of rural residents. Percentage of respondents using ATM 8 to 12 times in a month is double at 12 percent in case of urban residents, which is 6 percent in case of rural residents. However, percentage of respondents using ATM more than 12 times in a month is higher among rural respondents than that of urban respondents. In rural areas this percentage is 7 percent and in urban areas this percentage is only 2 percent.

**Table 1: Frequency of Usage of ATM among Urban and Rural Residents**  
(Figures are in percentages)

Area / No. of Times	Nil	1 to 3	3 to 8	8 to 12	Above 12	Total
Urban	6	38	42	12	2	100
Rural	36	40	11	6	7	100

Source: Primary Data

To understand existence of probable differences in frequency of usage of ATMs between urban and rural respondents, it is explored through testing of hypothesis. Independent Samples T-Test was applied on the data collected from UT of Dadra and Nagar Haveli, resulted into Table 2 and 3.

**Table 2: Group Statistics**

Area	N	Mean	Std. Deviation	Std. Error Mean
Urban	117	2.65	.834	.077
Rural	265	2.07	1.141	.070

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Table 2 reveals that mean value of urban bank customers is 2.65, which is higher than mean value of rural bank customers at 2.07. This shows that urban bank customers are more frequently using the internet banking services as compare to rural bank customers. This was also substantiated by percentage analysis.

**Table 3: Residency and Usage of ATM - Independent Samples T-Test**

Usage of ATM	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Equal Variances Assumed	2.762	0.047	4.927	380	0.00	0.578	0.117
Equal Variances Not Assumed			5.547	297.692	0.00	0.578	0.104

As per Table 3, sign. value (2-tailed) is 0.000 which is less than 0.05 (at 95% confidence interval). It signifies that there exists significant difference in frequency of usage of internet banking by urban and rural respondents. Thus,  $H_0$  stands rejected.

### Suggestions

There is a need to increase the usage of ATMs especially among rural residents. For this purpose, making ATMs available in rural areas is a matter of urgency. ATMs installed in rural areas will give the rural residents an opportunity to take the benefit of banking through teller machines. Installation of ATMs in rural areas will increase the participation by rural residents in the development of financial sector and economy. It provides an assurance of availability of cash anytime to them through cash dispensing mechanism of ATMs, so they will not hesitate to deposit their savings into banks and will help in increasing the deposit base of banks. Also, they can be given demonstrations for using ATMs and can be educated to keep their passwords safe. Thus, installation of ATMs in rural areas will be important for increasing cash circulation in economy and also help in credit creation. Thus, it is very significant for development of economy.

### Conclusion

The present research reveals that one-third of rural respondents are not using ATM at all, there is a need to increase the usage of ATM among non-users. Installation of ATMs in rural areas will help in increasing customer base of banks and enhancement of credit creation. It will help in economic development. Usage of ATMs will increase the participation of rural residents in banking sector and connects them to mainstream. It will also increase the deposit base of banks and expand the process of credit creation in the economy.

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