

SATISFACTION LEVEL OF CUSTOMERS USING ATMs: A COMPARATIVE STUDY OF PRIVATE AND PUBLIC SECTOR BANKS

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Abstract:

The study seeks to analyse the inconveniences faced by the public while using ATMs and to compare the ATM services rendered by private and public sector banks. Cash is an important medium of exchange in India and thus, requirement of ATMs become indispensable. The study therefore evaluates the performance of ATMs in Dehradun City along with a comparative study of private and public bank ATMs. The study is based on quantitative research design, where primary data is collected and analysed. For the purpose of the study, convenience sampling technique was used. The sample was composed of two categories of banks: private and public sector banks and included a total of 412 respondents. The data was collected by direct interview method using structured questionnaire based on five point likert scale. The study reveals that there is still a persistent requirement of cash and ATMs can provide 'Any Time Money' facility to the public. The study highlights the inconveniences faced by the public when using ATMs along with below the mark delivery of ATM service by the public sector banks. A prominent finding that came up is that people have started keeping more cash reserves at home due to a feeling of uncertainty about getting the cash when required. The study highlights present reality of ATMs from which almost everyone is affected. The study takes into account the inconveniences faced by the public with a view to bring the matter to the notice of the concerned authorities. The comparative study between private and public bank ATM performance throws light on the low quality of public sector banks when it comes to delivering ATM services.

Index Terms- ATM performance, customer satisfaction, inconveniences, public banks, private banks

1. INTRODUCTION

Automated Teller Machine (ATM) is an electronic device that enables customers to perform financial transactions, such as cash withdrawal, obtaining account balance, deposits, at any time without direct contact with the bank staff. Customers of financial institutions can operate ATMs with the help of plastic cards along with the use of their personal pin number. ATM machine are known by many different names like 'Automated Banking Machine (ABM)', 'Cash Point', 'Cash Dispenser', 'Cash Machine', 'Minibank' etc. ATMs were originally developed as cash dispensers but, have now advanced to deliver many other banking functions such as deposit of cash, updating passbooks, printing of bank statements, cheque processing, payment of routine bills, fees and taxes etc. ATM machines were developed with an idea to make cash available at any place.

ATM machines have major relevance when it comes to India, being a cash intensive economy. Hongkong and Shanghai Banking Corporation (HSBC) introduced the concept of ATM in India by setting up the very first ATM machine in Andheri East Mumbai in 1987. Cash being the major mode of payment in India, ATM services gained popularity. As per statistics provided by Reserve Bank of India 2018, at present there are more than one lakh ATMs in India. Despite the growth of cards and other payment

system, the market for cash still exists in India. The requirement of ATMs in relation to the population in India is still below global norms¹, leaving plenty of scope to expand.

Despite the efforts of the NDA Government to reduce the dependence on paper currency could not entirely divert the working of Indian economy towards cash less modes of payment. Therefore, need of ATM machines still exists and is growing in India. Although ATMs are one of the most convenient way to withdraw money in India, their withdrawal amounts are limited. This step is again taken by the Government to curb the cash transactions by the public and to promote other digital modes of payments. Imposition of transaction cost is another tactic by the Government to reduce the volume of cash withdrawals. But, the reality persists that India has a long way to become an entirely cash less economy, and therefore need of efficient working ATMs become indispensable.

1.1 THE PRESENT SCENARIO

In the light of recent status of parallel economy in India, Government of India took steps to curb the same. Demonetisation was one such step which aimed at achieving the objective of curbing unaccounted wealth and black money along with putting a stop on the terror activities and exceeding levels of corruption. This even gave birth to rise in digital payments which was further supported by the implementation of digital based taxation system- GST. Though the digital payments in India gathered momentum still cash problems prevail simultaneously among the public. There is no doubt that India is a cash oriented economy and major business transactions are being carried out through cash. RBI report in May 2018, states a 7% increase in the demand for cash confirms the above. The need for cash still sustains among the public of India and has therefore come up as a major problem, especially after demonetisation. The perceived objective of ATM machines is 'Any Time Money' which in recent past has not been able to fulfill the same. Absence of proper working of the ATMs has made public to face inconveniences in withdrawing their own money leading to a feeling of frustration and distrust.

II. REVIEW OF LITERATURE

Vineshkumar and Bhatt (2018) in their study titled "An Emperical Study on Customer Satisfaction of ATM Services in Ahemdabad City" analysed the opinion of the customers towards the ATM services of two banks namely Bank of Baroda and Yes Bank; examined the various problems faced by the customers; and also studied the awareness level of customers towards ATM services provided by Banks. The authors highlighted the contribution of e-banking services towards the banking sector. The problems faced by the customers were also highlighted along with mentioning some of the major problems and provided ranks to the mentioned problems. The authors provided the scenario of ATM services in context to an Indian city and customer along with appropriate suggestions.

Arachchige, Kosala and Koththagoda (2017) in their study entitled "The Impact of Automated Teller Machines (ATMS) Service on Customer Satisfaction". The researcher analysed the impact of ATM service quality towards the customer satisfaction in Sri Lankan state banking sector. The major objective of the study was to investigate the ATM service qualities and their impact on customer satisfaction and also examined the impact of demographic factors for the relationship between ATM service quality and customer satisfaction. The examination has utilized the essential information of consumer loyalty review (N=385). The information was gathered utilizing an organized survey intended to find out the fulfillment levels. Regression, ANOVA and T-test were utilized to distinguish noteworthy variables and recurrence examination was utilized to investigate consumer loyalty. The ATM benefit characteristics positively affect the consumer loyalty and the statistic factors like age and instructive capability moderate the connection between ATM benefit quality and consumer loyalty. This paper distinguished the huge variables which the banks may take care to upgrade the consumer loyalty.

¹ Batiz Lazo Professor of Business History, Bangor University, United Kingdom in an interview with Economic Times <https://economictimes.indiatimes.com/industry/banking/finance/banking/how-atms-became-holy-shrines-overnight-post-demonetisation/articleshow/55504313.cms>

Mwatsika (2016) in his study titled “**Impact of ATM Banking Performance on Customer Satisfaction with the Bank in Malawi**” examined that banks that keep on putting resources into new and productive innovations that can deal with more capacities and incorporate money saving to draw in more clients and accomplished consumer loyalty. 353 respondents took part in this examination to survey the effect of automated teller machine managing an account execution on consumer loyalty with banks. The study included all the five service quality dimensions quoted by Parasuraman. The results showed that service quality dimensions significantly correlate with customer satisfaction and that reliability is the most important dimension followed by responsiveness, empathy, assurance and then tangibles. It was concluded that newer technologies added to the competitive advantage of the ATM services provided by different banks.

Chattopadhyay and Saralelimath (2012) in their study entitled “**Customer Satisfaction of ATM Services: A Study with the Reference to Indian Bank at Tiruchirappalli Corporation**” look at the connection between statistic variable and inclination to utilize ATM. The information was gathered from 300 clients from three cooperative banks in Pune city through an organized poll. Frequency and Percentage examination and chi-square tests are used for information investigation and interpretation. The investigation uncovers that a dominant part of the clients are very happy with ATM administrations and essential administrations. The clients are inclined toward ATM with time and cost-utility which gives effective administrations.

III. OBJECTIVES

The present paper attempts to achieve the following objectives:

- (i) To analyse the inconveniences faced by the public while using ATMs.
- (ii) To compare the ATM services rendered by private and public sector banks.

IV. HYPOTHESES

Keeping in view the objectives of the study, the following hypotheses were formulated:

H₀₁= There are no inconveniences faced by the people while using ATMs

H₀₂= There is no significant difference between the basic features of ATMs of private and public sector banks.

H₀₃= There is no significant difference between the ATM services of private and public sector banks.

V. RESEARCH METHODOLOGY

The study was conducted in Dehradun city of Uttarakhand state. The study aims at understanding and analyse the inconveniences faced by the general public while using ATMs and to compare the ATM services rendered by the private and public sector banks.

5.1. Sample Profile

For the purpose of the study, two categories of banks were made i.e.; public sector banks (SBI, PNB, Canara Bank etc.) and private sector banks (HDFC, Axis Bank, ICICI Bank etc.) . A total of 232 respondents from public banks and 180 respondents from private sector banks were taken. Table 1 below shows the sample profile.

Table 1

BANKS	NUMBER OF RESPONDENTS
PUBLIC BANKS	232

PRIVATE BANKS	180
TOTAL	412

5.2. Data Collection

The study is based on primary data. The data was collected through survey method where face to face interview was sought to. Structured questionnaires were used as a tool for data collection. After the review of literature, support of previous studies was taken for the formulation of the questionnaire. The questionnaire was then subjected to expert review to check the validity of the questionnaire. The next step was the pilot study, which included 60 respondents and provided more insights on the topic of the study. The language of few questions were changed for better understanding by the respondents, as per the reviews of the pilot study. The final questionnaire was then used for the purpose of the study, which produced a response rate of about 82%. The questionnaires were distributed to the respondents and were contacted outside the ATMs.

The study sample was drawn between August 2018 and October 2018 using convenience sampling technique. A total of 500 questionnaires were distributed of which around 412 questionnaires were found suitable for the study and was used for further analysis. The sample size was used on the basis of previous studies (Sekaran, 2003). The previous studies, on an average included sample size between 300-500 respondents (Mwatsika). Different ATMs were visited to avoid repetition of the respondents. The intention was to cover as many ATMs as possible to have a representative sample for the purpose of the study.

The sample consisted of 65.05% males and 34.95% females. The volume of businessmen was more when it came to using of ATMs, followed by people in service. The volume of students using ATMs was again prominent. Spurt of colleges and schools in Dehradun city have attracted huge number of out-stationed students, which adds more to the cash requirement. Table 2 below shows the demographic profile of the sample.

Table 2

DEMOGRAPHICS OF RESPONDENTS		
GENDER	MALE	65.05%
	FEMALE	34.95%
	TOTAL	100.0%
OCCUPATION	SERVICE	23.06%
	BUSINESS	44.42%
	STUDENT	22.08%
	OTHER	10.44%
TOTAL		100.0%

5.3. Data Analysis

The data collected was quantitative in nature and the hypotheses were tested using statistical tools. The objective of the study is to analyse the inconveniences faced by the public while using ATMs and to compare the ATM services rendered by the private and public sector banks. The statistical working of the same is as follows:

1. Need For ATM Cards

In the present era of digital payments, debit and credit cards have become the very necessity of all. Respondents were asked whether ATM cards are useful. Around 98.54% of the respondents agreed that ATM cards are useful as they serve the basic need for cash and even makes paying easy and hassle free.

Table 3

QUESTION	YES		NO		TOTAL
	Number	%	Number	%	
Do you think ATMs are useful?	406	98.54%	6	1.46%	100%

2. Inconveniences Faced By The Public While Using ATMs

For achieving the first objective, review of the past literature along with the responses noted by direct contact with the respondents provided us with some of the major inconveniences faced while using ATM services. The structured questionnaire framed was based on five point likert scale. The average responses of all the 412 were analysed using independent t-test in SPSS. Test value of 30 was considered as it indicates that the respondents were neither satisfied nor dissatisfied. Average score of below 30 was considered to be dissatisfactory whereas average score above 30 was considered to be satisfactory in terms ATM services provided by the banks. Table 4 and table 5 below shows the results of the analysis.

Table 4
One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Total	412	27.7184	4.14733	.20432

Table 5
One-Sample Test

	Test Value = 30					
	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Total	-11.166	411	.000	-2.28155	-2.6832	-1.8799

Table 4 shows the overall average value to be 27.7184, which is below the average value of 30. This implies that the public scored the ATM services to be dissatisfactory. Table 5 shows whether the average score of 27.7184 is significant enough. Here, the test value is taken to be 30 i.e.; the ATM services rendered by the banks are neither satisfactory nor dissatisfactory. The analysis showed significant result giving p-value to be .000 which is below 0.05 at 5% level of significance. It implies that the public is not satisfied with the ATM services provided by the banks and faced a lot of inconveniences.

Hypothesis testing

HYPOTHESIS	t-value	p-value	ACCEPTED/REJECTED
There are no inconveniences faced by the people while using ATMs	-11.116	.000	Rejected

The t-value from the above analysis came up to be -11.116 which is much more than three times of the standard error (.20432). The p-value of the same is .000 which is less than 0.05 at 95% confidence interval, thus rejecting the null hypothesis: There are no inconveniences faced by the people while using ATMs.

Problems Faced By ATM Users

To know some of the repetitive and prominent problems faced by the public while using ATMs review of literature, pilot study and direct interview with the respondents revealed these problems. Table 6 indicates the significant problems faced by the respondents regarding use of ATMs. Here weighted average mean is used and subsequently ranks were given to find which problems affect public the most.

Table 6

S.No.	Problems	5	4	3	2	1	Sum	Weighted Average	Rank
1	There are sufficient number of ATMs in your area.	39	298	65	10	0	412	3.88	10
2	There is sufficient parking space where the ATMs are located.	0	89	27	296	0	412	2.66	7
3	There is no waiting time involved at the ATMs.	0	24	34	56	298	412	1.47	3
4	ATM machines are usually out of order	0	0	43	46	323	412	1.16	2
5	There is usually non availability of cash in ATMs	0	0	0	20	392	412	1.04	1
6	Transaction fees charged when using ATMs is expensive.	0	93	81	238	0	412	2.64	6
7	ATM machines are difficult to operate	0	207	112	93	0	412	3.31	9
8	Transacting through ATMs are secure.	0	217	111	79	5	412	2.49	5

9	There is efficient printing of slip by the ATM machine	12	54	182	113	51	412	3.27	8
10	Limit to daily withdrawal acts as a problem	0	8	156	248	0	412	2.42	4

The results of the above table indicates that there are ten major problems faced by the public while using ATMs. Every respondent gave score corresponding to each problem, of which weighted average was calculated. On the basis of the weighted average, ranks were given to know the most problematic issues that the public faces while using ATM services.

The ranks indicate that ‘ATMs out of cash’ and ‘ATMs out of order’ are the most basic inconvenience faced by the public. Long waiting time was again a problem for the people as only few ATMs worked, therefore the burden is shifted on few working ATMs. Daily withdrawal limit again was a major concern for many, especially the businessmen who require frequent and handsome volume of cash to sustain the daily working operations. Another major issue is the lack of security in these ATMs. The growing number of ATM frauds is a matter of concern for all. Lack of security measures by the banks, especially the public banks have forced the users to think before availing their ATM services.

3. Comparison Between Basic Features In The ATMs Of Public And Private Banks

The table below shows the comparison between public and private sector banks with regards to the attributes of the ATMs. Average score of the respondents were recorded on the basis of four parameters. They were cleanliness, guard availability, maintenance and functioning of air conditioner. Table 7 and Table 8 shows the results of the same.

Table 7
Group Statistics

	Banks	N	Mean	Std. Deviation	Std. Error Mean
Average	public banks	232	27.544	.42027	.02759
	private banks	180	41.831	.42403	.03161

Table 7 shows the overall average score of the attributes of all four parameters. The average score of public banks came up to be 27.544 and that of private sector banks came to be 41.831.

Table 8

		t-test for Equality of Means							
		F	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Average	Equal variances assumed	.395	34.091	410	.000	-1.42867	.04191	-1.51105	1.34629
	Equal variances not assumed		34.052	383.299	.000	-1.42867	.04196	-1.51116	1.34618

Table 8 shows the comparison between the average scores of private and public sector banks in terms of attributes of their respective ATMs. Here, two mean t- test is applied to check whether the difference between the mean score of the private and public sector banks differ significantly or not. The F-value came to be 0.395 and the p-value came up to be around .000, which is less than 0.05 at 5% level of significance. This shows that there is a significant difference between the attributes of ATMs of private and public sector banks.

Hypothesis testing

HYPOTHESIS	F- value	p- value	ACCEPTED/REJECTED
There is no significant difference between the basic features of ATMs of private and public sector banks.	0.395	.000	Rejected

From the above analysis, it is clear that there is a significant difference between the basic features of ATMs provided by the public sector banks and private sector banks. The F-value came up to be 0.395 and the corresponding p-value came up to be around 0.000 which is lower than the 0.05 at 95% confidence interval resulting in rejection of the null hypothesis: There is no significant difference between the basic features of ATMs of private and public sector banks.

4. Comparison Between the ATM Services Provided By Public and Private Banks

The second aspect of the study aimed at comparing the ATM services provided by both private and public banks. For the purpose of testing the hypothesis two mean t-test is applied. Table 9 and Table 10 below shows the statistical results of the same.

Table 9

Group Statistics

	banks	N	Mean	Std. Deviation	Std. Error Mean
Total	public banks	232	24.4397	1.81045	.11886
	private banks	180	31.9444	1.83608	.13685

		t-test for Equality of Means							
		F	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
total	Equal variances assumed	.467	41.476	410	.000	7.50479	.18094	7.86048	-7.14910

Equal variances not assumed	41.402	382.329	.000	7.50479	.18127	7.86119	-7.14839
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Table 10

Table 9 shows the calculated mean of the ATM services provided by public and private banks. The mean score of public banks come up to be 24.4397 and that of private banks is 31.9444. The mean scores were then compared to know if there was a significant difference between the services provided by public and private sector banks. Two mean t-test is applied to measure the difference. The F-value came out to be 0.467 and the p-value is 0.000 which is less than 0.05 at 5% level of significance, showing significant difference between the ATM services of private and public sector banks.

Hypothesis testing

HYPOTHESIS	F-value	p-value	ACCEPTED/REJECTED
There is no significant difference between the ATM services of private and public sector banks.	0.467	.000	Rejected

The F-value from the above analysis came up to be 0.467 and the p-value of the same is .000 which is less than 0.05 at 95% confidence interval, thus rejecting the null hypothesis: There is no significant difference between the ATM services of private and public sector banks.

VI. FINDINGS

- The above study reveals that bulk of the ATMs especially that of public banks suffered from the situation of 'machine out of cash' or 'machine out of order'. The perpetual non-functioning status of the ATMs have created a feeling of both frustration and distrust in the people with regards to the availability of cash. The study shows that people have started keeping more cash reserves than before (before demonetization) as a result of non-availability of cash and non-functioning of the ATMs. About 68.45% of the respondents agreed that the volume of withdrawal per transaction has increased as they face uncertainty with regards to availability of cash, when in need and/or to avoid regular visits to the ATMs.
- Another major finding that came up was that the private banks provided better ATM services as compared to their public sector counterparts. Private banks were able to render better quality of ATM services to the public. For this reason, it was noticed that account holders of public banks switched to ATMs of private banks to fulfill their cash requirements.
- It was found that majority of the people using ATM services were the businessmen. The requirement of the cash is indispensable for running the daily operations of the business. Businessmen contributes heavily to the GDP as well as the tax payments received by the Government. The inconvenience faced by them and scarcity of available cash has led to slow pace of running their business. It was noticed that even the students were among the majority to avail the ATM services. Dehradun being the hub of education, experiences a lot of incoming of out-stationed students. Their cash requirement was another reason for burden on the existing working ATMs. Volume of cash withdrawn by the students have also increased due to lack of cash in the ATMs.

VII. CONCLUSION AND SUGGESTIONS

The above findings lead to the following conclusions. These conclusions are drawn along with simultaneous suggestions:

- ✚ The quantum of non-functioning ATMs contributes to rising operating costs of the banks. The money required for the maintenance of ATMs along with its fixed cost adds to the burden of running the bank. Banks are already suffering from existing NPAs (Non-Performing Assets) and these non-functioning ATMs will add to their distress. The banks are required to maintain few but working ATMs so that the objective of ‘Any Time Money’ can be achieved without much burden on the banks. Cash withdrawals will also reduce as a result of regained trust that people will have in terms of access to their own money.
- ✚ The majority of recent ATM frauds have taken place in ATMs of public sector banks, especially of SBI. State Bank of India for this reason have reduced the daily withdrawal limit of the ATMs with a view to curb these frauds and encourage the concept of digital payments. These frauds have become a major concern for the account holders of the bank and a reason for their distrust in the banks as well as in using ATMs of public sector banks. Recent trends in ATM crimes indicate that frauds have taken place in ATMs where no guard was deployed or where people required help while operating the ATMs. Vigilant and trained guards are required to tackle with the situation of frauds and even help people to operate the machine. Here, a plausible manner to curb the frauds is to invest more on the security systems installed in the ATMs rather than reducing the withdrawal limits per day. The cash requirements of the public cannot be completely vanquished but rather needs support in a cash intensive country like India.
- ✚ The study concludes that there is a significant difference between the services provided by private and public sector banks. The public sector banks lie at the lower spectrum with regards to the customer satisfaction when it comes to providing ATM services. A very common practice noticed among the account holders in public sector banks was that they withdrew money from ATMs of private sector banks which indicated acute problem with the ATMs of public sector banks. The current scenario reveals the need for public sector banks to really look into the poor ATM facilities provided by them to the public.
- ✚ Account holders of the public banks use ATMs of private sector banks, which forces the public to pay transaction fees for using ATMs of other banks. The fact that the cash can be withdrawn from ATMs of other banks is acting as a safe cushion for the public sector banks, which otherwise would have created havoc for them. Transaction fees makes the maintenance of accounts a little expensive and adds to the frustration of the account holders. This indicates that the public sector banks focus more on increasing the quantum of customers rather than maintaining the quality of their services.
- ✚ The drive of ‘Digital India’ led by the Government still seems to go a long way. The lack of required support with regards to infrastructure, adequate network, security etc is making the public face a lot of inconveniences. Non-availability of their own hard earned cash when required becomes a major inconvenience that the public faces due to lack of required infrastructure for proper working of ATMs across their city.

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