# POST DEMONITIZATION EVALUATION OF ATM SERVICES IN RURAL KERALA: A STUDY WITH SPECIAL REFERENCE TO SBI, PALAKKAD.

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### INTRODUCTION

Banks are the reservoirs of the financial resources. They store nation'swealth. These banks have made continuous improvement and development in theiroperations. Diversification and innovations are introduced in the functioning of banks with a view to improve their performance and to meet the developmentalneeds of the economy. Apart from traditional banking functions such as lending and borrowing banks provide a number of value added services.

### SIGNIFICANCE OF THE STUDY

The evolutionary trend from cash economy to cashless economy andonwards to plastic card economy is witnessed in the introduction of ATMs. ATM is a device that allows customers to have an ATM card to perform routine bankingtransactions like withdraw of deposited funds, check account balances, transfer fundsand check statement information. ATM cards are known by a variety of names suchas bank card, MAS (money access card), client card, key card or cash card. Inbanking networks, two functions of ATM cards and debit cards are combined into a single card simply called debit card. Any ATM on the road side can provide cashneeds of customer. The ATM services has achieved noticeable acceptance by thebank customers. All people irrespective of rural or urban deals with banking institutions and day by day popularity and uses of ATM are increasing among people. With the arrival of different utilities of ATMs, customers migrated from routine bank transactions of teller counters to automated teller machine.

### REVIEW OF LITERATURE

In order to have better understanding about the present study in its proper perspective, the researcher has undertaken to present the corresponding studies through review of what has already been done in the field.

**R. Renuka et al (2014),** in the study "Customers satisfaction towards ATM" focuses on customer satisfaction towards ATM services offered by the banks and tries to suggest ways to improve services. Amongst other suggestions, the authors have suggested increasing awareness about various facilities and enhancing the withdrawal limit of cash per day. Hourly access got the first rank while quality of receipt got the second rank for level of satisfaction. To find out the level of satisfaction respondents were provided a list of fourteen factors which were to be ranked. Likert scale was used for the purpose. The study considers only customer perceptions towards ATMs. However, staff perceptions have not been considered.

**Sisat S. et al (2014),** in the paper "Secured Automatic Teller Machine (ATM) and Cash Deposit machine (CDM)" has segmented ATM threats into three types of attacks: card and currency fraud, logical attacks and physical attacks. The papergives an idea about the basic ATM and its major security issues and basic requirements. Since, ATMs deal with currency notes, focus should be on note security while designing ATM. This paper is more theoretical in nature and is not backed by primary data.

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**Dr. Giridhar et al (2013),** in their research paper "A study on customer satisfaction towards services provided through ATMs in Malnad rural regions of ShimogaDistrict with special reference to SBM", have collected primary data of customers from only one PSB i.e. State bank of Mysore in TirthalliTaluka of Shimoga District. Though this study is based on collection of primary data, it does not consider theperceptions of bank staff. The study does not focus on different types of problems faced by customers while using ATMs. The study concludes that "Despite the drawbacks in ATMs, it is still preferred as it benefits bank, employees and customers". Unlike the present study, this study considers only one PSB bank but has not considered private sector banks, cooperative banks.

Tuli et al (2012), in the research paper "A comparative study of customer attitude towards ATM of SBI and ICICI bank" the authors have made sincere efforts to compare the attitude of people towards ATM of SBI and ICICI Bank. The study aimed at finding out the factors influencing the use of ATMs and the problems faced by customers. Customers of both banks used ATM as it was convenient, availability of machines easily and due to security aspects. The problem faced by SBI customers was that ATMs dispensed old currency notes while that of ICICI bank customerswas that ATM was out of cash. This study provides a comparison between public sector banks and private banks. However, Co-operative banks have not been considered in this study. Also, staff perceptions about ATM has not been considered.

**Wu & Wang**(2007), Tong (2009), Khan(2010) identified that the ATM is aninnovative customer service delivery tool that offers diversified financial services, such as cash withdrawal, funds transfer, cash deposits, and payment of utility bills, among other financial enquiries. Thus for technology-based delivery channels, such as the ATM, the satisfaction of users is an essential determinant of technological success.

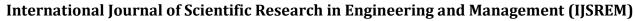
Wole Michael Olatokun(2009) tested the attributes of the theory of diffusion of innovation empirically, using Automatic Teller Machines (ATMs) as the target innovation. The population comprised banks customers who used ATMs. From the factor analysis, it was revealed that the respondents believed in their safety in using ATM; that ATMs were quite easy to use and fit in with their way of life; that what they observed about ATMs convinced them to use it and that ATM was tried out before they use it. To increase the diffusion of ATMs, it was recommended that banks should ensure enhanced salience of ATM to customers needs, greater compatibility of ATM to customers banking norms and lifestyle, less complex and

easy to use system and opportunity for adopters to experiment with the system before using ATM"S.

Manager FSDNCR Corporation India Pvt. Ltd. (2008) in his article, "ATMs: Changing Fundamentals" stressed that he Indian ATM industry has seen explosive growth in recent times and Banks have committed to substantial capital outlays on ATM deployment, recognizing the significance of the 3 Ms – Maintenance, Monitoring and Management – of the ATMs to make the self-service channel a reliable and profitable one. KaulUrvashi(2007) in his article, "ATM: The Power of Cash" explained the importance and benefits of ATM, the players in the Indian market and presented various statistical data concerning the growth of ATM.

### **ATM Industry Status in India**

In India ATM is still a new technology. With the emergence of private sector Banks like ICICI Bank, IDBI Bank, HDFC Bank etc. the number of ATM centers has increased tremendously. There are presently all types of Banks offering ATM services. For example State Bank of India (a Public Sector Bank), ICICI Bank (a Private Bank), Citibank (A Foreign Bank), Greater Bombay CO-OP Bank (a co-op Bank). The Banks are offering various services like Cash withdrawal, fund transfer, Balance enquiry etc. The Banks have tie-ups in between them for sharing of theirservices this may be bilateral or multilateral by way of consortium like SWADHAN.





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### **Automatic Teller Machines (ATMs) Shared By a Consortium of Banks**

Each bank provides its own computer to maintain its own accounts and process transactions against them. Cashier stations are owned by individual banks and communicate directly with their own bank's computers. Human cashiers enter account and transaction data. Automatic teller machines communicate with a central computer that clears transactions with the appropriate banks. An automatic teller machine accepts a cash card, interacts with the user, communicates with the central system to carry out the transaction, dispenses cash, and prints receipts. The system requires appropriate record-keeping and security provisions. The system must handle concurrent accesses to the same account correctly. The banks provide their own software for their own computers; you are to design the software for the ATMs and the network. The cost of the shared system is normally apportioned to the banks according to the number of customers with cash cards. In India very good example of such consortium is SWADHAN NETWORK. SWADHAN NETWORK is a network of various public sector Banks, Private Banks and Co- operative Banks with nationwide coverage.

### **SWADHAN**

SWADHAN, India's FIRST Shared Payment Network Service is unsurpassed in offering countrywide access to the banking operations at more than 1000 ATMs in and around 64 cities. It has 55 member banks in the network, which includes nationalized, private and foreign banks. SWADHAN provides convenient banking, 24 hours a day and 7 days a week through the Automated Teller Machines to the participating bank's customers across the country. WithSWADHAN, the bank customers are never far away from an ATM. The member bank's customer can withdraw money anytime from any of the ATM irrespective of the bank with which the customer has an account. It offers services beyond cash withdrawals, like utility bill payment, fund transfer and deposits. SWADHAN widens the scope of ATM usage in the country in a cost effective manner. A member bank of SWADHAN can increase its geographical presence without deploying ATMs in all the locations; instead it can share and use ATMs of other banks, thereby saving a substantial amount. Likewise, the customer of the bank is highly benefited by having a nation-wide access to the card, without holding multiple accounts in different banks. The average transaction per day in the SWADHAN network is around2500. The largest and only Shared Payment Network System (SPNS) in India, SWADHAN is posting a very impressive growth rate since its inception. In 1997, at the start of the network, the number of ATMs in SWADHAN Network was only around 24, whereas today it is grown close to 1000 ATMs. Today, in the country, 25% of the ATMs are networked to SWADHAN. Every day brings new ATMs and banks to the network. Being the leading light in Shared Payment Network System for debit cards in India, it has auspicious plans to provide connectivity to the international payment networks, such as master card and visa in a very formidable way. It is poised to enable the existing system for e-payments thereby helping the banks excel in an empowered service.

### **OBJECTIVES OF THE STUDY**

- 1. To examine the perception of respondents on the usage of ATM services of SBI after Demonetization.
- 2. To identify facilities and services provided by SBI through ATM to its customers.
- 3. To identify the level of usage of selected ATM services of SBI among selected respondents.
- 4. To examine the level of satisfaction on facilities and services of SBI ATMs among selected respondents.
- 5. To examine the problems experienced by selected customers on the ATMservices of SBI.



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### **SCOPE OF THE STUDY**

Today normally all people have bank account and majority of the people using ATM for speedy and timely transaction. But many of the customers do not make use of all products and services offered by the ATM. So, my study is concentrated on "customer evaluation on ATM services of SBI, Palakkad post Demonetization" and the study is also in tensed to different utilities of ATM, level of awareness ATM services, usage of ATM services, satisfaction of different services of ATM, problems of ATM and compare the effect of ATM services after demonetization amongcustomers with special preference to Palakkad branch.

### STATEMENT OF THE PROBLEM

ATM services are commonly in banking industry. ATM services comprise ofmultiple elements like withdrawal facility, transfer of fund, fast cash, bill payment, SBI life premium payment, mobile banking registration, payment of electricity bill etc...even the services are many in number a large majority of them are not used by customer. As such, it is of great significance to study the level of awareness, usage, satisfaction, problem experienced in the use of ATM services. The demonetization policy of government of India affected to large extent the usage of ATM almost everywhere. The study intends to examine level of awareness, uses and perception of customers on usage of ATMs after demonetization.

### RESEARCH METHODOLOGY

Source of data collection: The primary data are collected through well-structured questionnaire and the sources of secondary data comprises of journals, magazines and websites etc.

Period of study: The study titled "customer evaluation on ATM services of SBI, Palakkad" has been conducted for a period of 21 days.

**Tools of analysis:** The tools of analysis used in the study are non- parametric test-KruskalWallis Test.

Sample size: The respondents of the study comprises of customers of SBI branch. Usingrandom number table 50 numbers of customers are selected by simple random sample.

**Sampling technique:** This study mainly using the random sampling technique.

### LIMITATIONS OF THE STUDY

- 1. Duration of the study is limited
- 2. Only small portion of population is taken as sample for study
- 3. Response errors from people affect the study
- 4. As it was a study post demonetization the respondents were limited

### **DATA ANALYSIS AND INTERPRETATION**

The analysis is presented in five parts.

- 1. Usage of common services of ATM.
- 2. Availability of services at ATMs
- 3. Accessibility of ATMs
- 4. Problems while using ATM services.
- 5. Customer perception about ATM services before and after demonetization.

The first three parts are tabulated as follows:



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Table No. 1 Frequency of ATM usage by the respondents

Frequency of visit to ATM	No. of Respondents	%
Daily	2	4%
Weekly twice	9	18%
Once in a week	11	22%
Once in a month	16	32%
Once in a fortnight	7	14%
Total	50	100%

## Table No. 2 Availability of Services at the ATM Counter

Level of satisfaction	No. of Respondents	%
Excellent	12	24%
Good	22	44%
Satisfactory	16	32%
Poor	0	0
Very Poor	0	0
Total	50	100%

### Table No.3 Accessibility to ATM counters

Level of satisfaction	No. of Respondents	%
Excellent	12	24%
Good	25	50%
Satisfactory	6	12%
Poor	7	14%
Very Poor	0	0
Total	50	100%

# Table No.4 Problems faced at ATM counters

Frequently faced problems	No. of Respondents	%
Lack of operating knowledge	9	18%
Machine out of cash	10	20%



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Poor visibility of statement	5	10%
Forgetting PIN	5	10%
Machine out of		
order	9	18%
No printing of		
statement	8	16%
Card get swallowed	4	8%

### **Interpretation:**

Majority of the respondents (44 per cent) selected for the study comprised of 15-30age group. 28% belonged to the 30-45 age group and 24% belonged to 45-60 agegroup. Most of the respondents use their ATM cards monthly (32%). 4% use daily. 22% use weekly twice. 28% use weekly. 14% use once in a fortnight. Most of the respondents rate the accessibility of ATM counters as good(50%). 24% as excellent, 12% as average, 14% as poor and no one respond to verypoor. Most of the respondent faces the problem of machine out of cash 20% andmachine out of order (18%). Lack of knowledge (18%). No printing of statements (16%) etc.

### SATISFACTION REGARDING ATM SERVICES IN THE POST DEMONETIZATION PERIOD

Kruskal Wallis test is used to find the product and technological level of Satisfactionon ATM services and to test the following hypothesis.

H0: There is no difference in the product and technological level of Satisfaction onATM services among education category

H1: There is difference in the product and technological level of Satisfaction on ATMservices among education category

### **Descriptive Statistics**

			Std.		
Category	N	Mean	Deviation	Minimum	Maximum
PDT satisfaction	50	2.0314	0.4175	1.29	2.86
TECH satisfaction	50	1.935	0.614	1	3.25
Education	50	2.48	0.863	1	4

#### **Ranks**

Category	Education	N	Mean Rank
PDT Satisfaction	Illiterate	7	40.43
	High School	17	26.18
	Graduate	21	24.48
	Post Graduate	5	6.6
	Total	50	



TECH satisfaction	Illiterate	7	32.86
	High School	17	24.24
	Graduate	21	27.45
	Post Graduate	5	11.3
	Total	50	

<sup>\*</sup>Significant at 5% level of significance

### **Test Statistic**

Category	PDT satisfaction	TECH satisfaction
Chi-Square	16.077	7.141
D.f.	3	3
Asymp.		
Sig.	<0.01	0.068

### **Interpretation:**

The descriptive statistic table shows that the technological satisfaction of ATM services has the lowest mean value (1.9350). The mean rank table depicts that post graduates are highly satisfied with the technology based services of ATM(Mean value 11.30) and the post graduates are highly satisfied with the productbased services of ATM (Mean value 6.60). The hypothesis for the productsatisfaction are rejected as the 'p' values is 0.01 respectively. The hypotheses for

Technological satisfaction not rejected as the 'p' values is .068 respectively. Therefore it can be concluded that based on education there is significant differencesamong the product satisfaction of ATM services.

### PROBLEMS WHILE USING ATM SERVICES

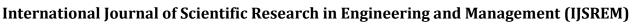
The problems while using the ATM services analysed with one way ANOVAto test the statistical significance of difference in the mean scores. The hypotheses inthis regard can be stated as follows:

H0: There is no significant difference in themean scores obtained for variables related to problems while using the ATMservices based on their education.

H1: There is significant difference in the mean scores obtained for variables relatedproblems while using the ATM services based on their education.

### **Descriptive Statistics**

Problems	Education	2	Mean Rank
Cards Get blocked	Illiterate	7	4.57
	High School	17	4.53
	Graduate	21	3.95
	PG	5	4.4
	Total	50	4.28





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	Illiterate	7	3.86
	High School	17	4.18
Machine out of cash	Graduate	21	3.71
	PG	5	4
	Total	50	3.92
	Illiterate	7	4.14
No mainting of	High School	17	4.41
No printing of statements	Graduate	21	3.33
Statements	PG	5	4.4
	Total	50	3.92
	Illiterate	7	4.43
	High School	17	4.06
Long waiting in queues	Graduate	20	3.9
queues	PG	5	4
	Total	49	4.04
	Illiterate	7	4.71
Reduction in balance	High School	17	4.35
without cash	Graduate	21	6.57
payments	PG	5	4.2
	Total	50	5.32
	Illiterate	7	4
Nat airing fact	High School	17	4.12
Not giving fast response	Graduate	21	3.95
гезропзе	PG	5	4.4
	Total	50	4.06
	Illiterate	7	2.86
Loguing the	High School	17	4.12
Leaving the operation incomplete	Graduate	21	3.76
operation incomplete	PG	5	4.4
	Total	50	3.82
	Illiterate	7	3.29
Too many processes	High School	17	3.76
Too many processes in transactions	Graduate	21	3.8
in transactions	PG	5	4.6
	Total	50	3.82
	Illiterate	7	3.86
Lack of security in	High School	17	4.53
transactions	Graduate	21	3.9
transactions	PG	5	4.6
	Total	50	4.18
	l	I _	

Illiterate

Lack of prompt

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4.29



service	High School	17	4.35
	Graduate	21	3.48
	PG	5	4.8
	Total	50	4.02

### **ANOVA**

Problems	Group	Sum of Squares	D.f.	Mean Square	F	Sig.
Cards Get blocked	Between groups	3.978	3	1.326	1.521	0.222
	Within groups	40.102	46	0.872		
	Total	44.08	49			
Machine out of cash	Between groups	2.067	3	0.689	1.002	0.4
	Within groups	31.613	46	0.687		
	Total	33.68	49			
No printing of statements	Between groups	12.839	3	4.28	4.82	<0.01*
	Within groups	40.841	46	0.888		
	Total	53.68	49			
Long waiting in queues	Between groups	1.463	3	0.488	0.829	0.485
	Within groups	26.455	46	0.588		
	Total	27.918	49			
Reduction in balance without cash payments	Between groups	57.626	3	19.209	0.355	0.786
	Within groups	2487.254	46	54.071		
	Total	2544.88	49			
Not giving fast response	Between groups	0.903	3	0.301	0.579	0.632
	Within groups	23.917	46	0.52		
	Total	24.82	49			
Leaving the operation incomplete	Between groups	9.749	3	3.25	4.726	<0.01*
	Within groups	31.631	46	0.688		
	Total	41.38	49			
Too many processes in transactions	Between groups	5.121	3	1.707	2.166	0.105
	Within groups	36.259	46	0.788		
	Total	41.38	49			
Lack of security in transactions	Between groups	5.278	3	1.759	2.373	0.082
	Within groups	34.102	46	0.741		
	Total	39.38	49			
Lack of prompt service	Between groups	11.631	3	3.877	3.473	<0.01*
	Within groups	51.349	46	1.116		
	Total	62.98	49			

<sup>\*</sup>Significant at 5% level of significance



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### **Interpretation:**

The results of one way ANOVA for the variables relating Non printing ofstatements, Leaving the operation unfinished, Lack of prompt service based on theireducation of the respondents gives 'f' values of 4.820, 4.726 and 3.473 respectively, which are found to be significant at 5 per cent level (p .005, .006 and .023 < 0.05). Hence the null hypothesis is rejected. In case of other problems of ATM P values arenot found to be significant at 5 percent level. Hence the null hypothesis is notrejected. This implies that there is difference in them mean scores obtained for the variables stated above based on education. As regards leaving the operationunfinished and non-printing of statement has the lowest mean value (Mean value 2.86 and 3.33) which means they are deriving major problems while using ATM.

### FINDINGS AND CONCLUSION

**Demographic profile of respondents -** Majority of the respondents belongs to (44 per cent) the age group of 15-30. Gender-wise classification shows that majority of the respondents were male (54 per cent). Education status shows that majority of the respondents are graduates (42 per cent). As tooccupation, majority of the respondents are students (32 per cent) followed byprivate employee (22 per cent) and the remaining comprising of other jobs(14 per cent), government employee (10 per cent) and house wives (8 percent), self-employee (6 percent). The average income classification of therespondents reveals that majority of them falls under the income group ofbelow 5000.

**Status of usage -** The majority of the respondents are using the SBI ATMservices for a period of 1-5 years (62 per cent), and least of them are usingthe ATM services for the period of less than 1 year (16 percent).

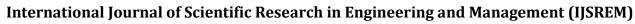
**Factors to opt for ATM services.** - The majority of therespondents (58 per cent) states that the services of the SBI bank as themain factor that made them to opt for their ATM services.

**Satisfaction of people regarding ATM services -** The level of product and technological satisfaction has been analyzed using Kruskal Wallis test and it is seen thatthe technological satisfaction has the lowest mean value. The mean rank tabledepicts that post graduates are highly satisfied with the technology basedservice of the ATM and also the post graduate are highly satisfied with the product based services of ATM.

**Problems while using ATM services -** The problems while using ATM services are analyzed with One-way ANOVA. As regarding leaving theoperation unfinished and non-printing of statement has the lowest mean value(Mean value 2.86 and 3.33) which means these are the major problems experienced by the customers while using ATM.

### **CONCLUSION**

The result of this study indicates that the banking industry has great potential among the customers. Majority of people are aware of the different utilities of ATM services. In case of usage of ATM services, people irrespective of educational qualification, occupation and place of residence, every one use ATM services. Themain reason for using ATM service is cash withdrawal. From school children to older people, all are aware about ATM. Even though detailed and technical knowledge on ATM among people is less, every people is aware about what is ATM service and its basic utilities. Nowadays ATM usage among people are increasing.Maximum number of people deal with bank through ATM. So the ATM is very popular among people especially after demonetization.





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