Analysis of Customer Satisfaction with reference to ATM Services in Vellore District

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Today ATM machine is just like a boon for every one. This is one of the best services provided by the banking industry to every one having an account in a bank There is a direct relationship between the quality of ATM services and the level of customer satisfaction. Customer satisfaction is very important in the present world. To analyse the relationship between demographic variables and the level of satisfaction, a structured questionnaire was used to collect the data from a convenience sample of 200 customers of the various banks Percentage analysis and chi square tests are applied for analysis, charts are prepared, cross tabulations are done to show the relationship between the age, educational level and occupation with the using of ATM services.

Key words: Customer satisfaction, various dimensions of satisfaction level

Introduction

The banking has undergone a major change due to the adoption of E-banking. One of the latest channels of distribution to be used in the financial services organizations is electronic banking; this method was established in the mid 1990s, thereafter steadily becoming more important (Allen et al, 2001). E-banking can offer speedier, quicker and dependable services to the customers for which they may be fairly satisfied than that of manual system of banking. E-banking system not only generates latest viable return, it also offers its better dealings with customers (Jannatul Mawa Nupur, 2010). The most widely used e-Banking instrument is the automatic teller machine (ATM) card. The Indian ATM industry has seen explosive growth in recent times. ATMs represent the single largest investment in the electronic channel services for the Banks. In India, HSBC set the trend and set up the first ATM machine here in 1987. Since then, they have become a common sight in many of our metros. ATMs have gained prominence as a delivery channel for banking transactions in India. Banks deploy ATMs to increase their reach. As far as the customer satisfaction is concerned with regard to e-banking services, ATM services play an important role as they make easy of banking transactions for customers. The major objective of this research is to identify and analyze the satisfaction level of ATM services by customers of their respective banks

Literature Review

Recent advances in technology have created a surge in "technology-based self-service" (Dabholkar et al. 2003) Literature related to customer satisfaction and ATM services are reviewed and explained in this paper. Richard L. Oliver defines customer satisfaction, as "Satisfaction is the customer's fulfilled response. It is a judgment that a product or service feature, or the product or service itself, provides a pleasurable level of consumption-related fulfillment".

Yi (1990) in his study titled 'A Critical Review of Consumer Satisfaction' stated that customer satisfaction is a collective outcome of perception, evaluation and psychological reactions to the consumption experience with a product and also states that many studies found that customer satisfaction influences purchase intentions as well as post-purchase attitude"

Johnson A.Edosomwan (1993) says in his book that 'a satisfied customer will recommend excellent products and services to their friends and help the enterprise to increase its market share and profitability'.

Davies et al., (1996) examined the factors that influence customers' satisfaction on ATM services include costs involved, and the efficient functioning of ATM.

Anderson et al. (1976) and Laroche (1988), the researchers of customer satisfaction said that the bank's ability to deliver the factors like convenience and accessibility will probably impact on customer satisfaction.

Moutinho (1992) argued that ATM facility resulted in speed of transactions and saved time for customers.

Lovelock (2000) identified that secured and convenient location, adequate number of ATMs, user-friendly system, and functionality of ATM are the important factors for the customer satisfaction.

Based on the prior studies, *Al-Hawari et al. (2006)* compiled a list of five major items about ATM service quality that include convenient and secured locations, functions of ATM, adequate number of machines and user-friendliness of the systems and procedures. Most early studies found location convenience influences most on bank selection *(Kaynak & Kucukemiroglu, 1992)*

Khan (2010) said that the key dimensions of automated banking service quality include reliability, ease of use, privacy, convenience and responsiveness.

Wolfinbarger & Gilly, (2003) argue that reliability is the strongest predictor of customer satisfaction

Much of the researches say that there is an association between customers' usage pattern and the demographic profiles. (Hood 1979, Murphy 1983)

Mr. Ajay Bimbhit (2008) in his study on "Technology led customer service" has found that the customers would expect security of money, growth, safety and respectful listening from their banks. ATMs are used no longer for dispensing money only but also offer more information and services.

In' Customer Relationship Management in Banking *Sector' Dr. A. Sarangapani and T. Mamatha (2008)* found that the introduction of ATMs, Internet banking and Credit cards

help the customers to carry out their transaction in an easy way. ATM helps the customers to transact within a short time.

Malavizhi 2011 mentioned that age is the main factor that determines ATM services in Coimbatore City.

Many studies had investigated the effects of demographic profile such as age, educational qualification, sex on the customers attitude towards the acceptance of the new technologies *(Al Somali et al., 2008)*

The research on the relationship among young people and financial institution established that these people have their accounts in more than one bank, because of need for convenience, requirement of more services offered, and 24- hours' availability of ATM and location Initially they were required to focus more on perception of a customer, whether he is willing to adopt the technology or not.(Dabholkar, Pratibha A 1994).It has been established through research that customer's response to a specific technology depends upon the service quality that is provided (Parasuraman, A., Zeithmal, V. A & Berry, L.L.1994)

OBJECTIVES OF THE STUDY

1) To know the socio-demographic variables of the customers
2) To analyse the satisfaction level of customers towards ATM services in Vellore district
3) To study the convenience of using the ATMs by customers, their attitude towards the safety, assurance and flexibility of using ATM services

HYPOTHESIS OF THE STUDY

The hypotheses have been developed to identify the relation between age, gender, education level, occupation of the customers with their satisfaction level

1. There is no significant association between the age and various dimensions of satisfaction level of customers
2. There is no significant difference between gender with regard to various dimensions of satisfaction level of customers

3. There is no significant differences among Educational qualification of the respondents and satisfaction level of customers

4. There is no significant difference among Occupation of respondents with regard to satisfaction level of customers

RESEARCH METHODOLOGY

SECONDARY SOURCES The various secondary information sources used for the present research include the journals and magazines and also include websites of banks.

PRIMARY SOURCES: A well-structured questionnaire was prepared and distributed to the customers of various banks in Vellore District at the ATM terminals. The five point likert scale is used for data collection.

TOOLS USED FOR DATA ANALYSIS: The data collected was analyzed through Percentages, frequencies and chi - square tests are applied for the analysis of data. Charts are also prepared.

PERIOD OF STUDY: The study was conducted during January 2011 to October 2011

ANALYSIS AND INTERPRETATION OF DATA

Frequency Table

Table 1 Distribution of Age of respondents using ATM services of their banks

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 25	28	14.0	14.0	14.0
	25 - 35	48	24.0	24.0	38.0
	36 - 45	50	25.0	25.0	63.0
	46 - 55	62	31.0	31.0	94.0
	Above 55	12	6.0	6.0	100.0
	Total	200	100.0	100.0	

From the cumulative percentage it is clear that 94% of the respondents use the ATM services. Only 6% who fall under the category of above 55 years use very less.

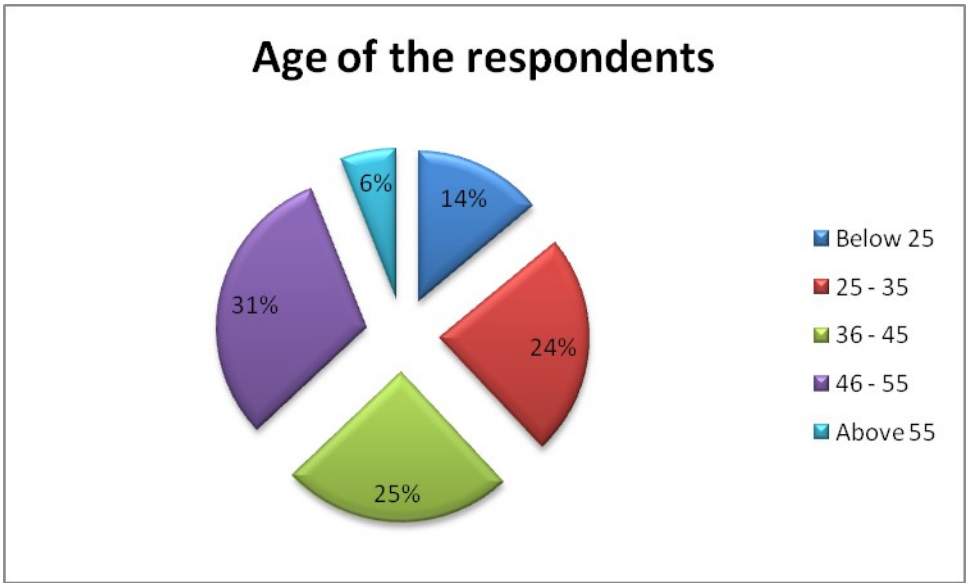

Table 2 Distribution of Gender of respondents using ATM services of their banks

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	104	52.0	52.0	52.0
	Female	96	48.0	48.0	100.0
	Total	200	100.0	100.0	

Table 2 shows that out of the total respondents, the percentage of males using ATM services 52%. The percentage of females using ATM services is 48%

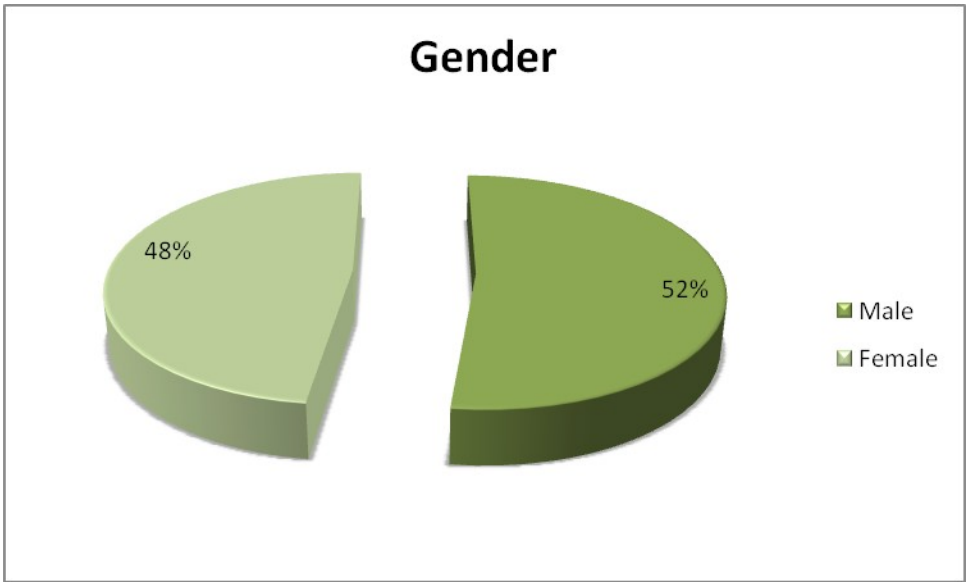

Table 3 Distribution of Educational Qualification of respondents using ATM services of their banks

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hr.Sec	46	23.0	23.0	23.0
	Under Graduate	144	72.0	72.0	95.0
	Post Graduate	10	5.0	5.0	100.0
	Total	200	100.0	100.0	

Table 3 discloses that data regarding educational level of respondents indicate that maximum users (72%) are under graduates and 5% of the total respondents are post graduates.

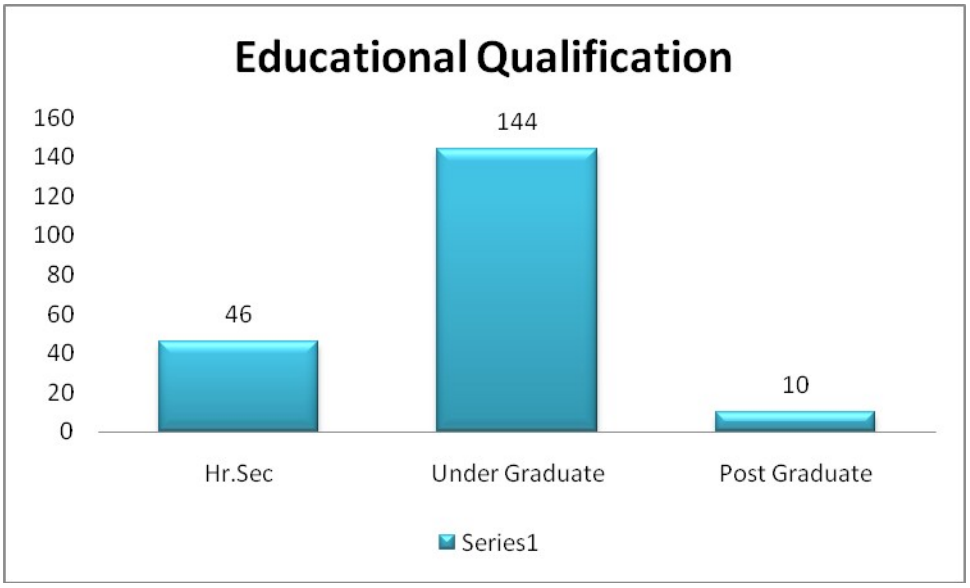

Table 4 Distribution of Occupation of respondents using ATM services of their banks

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	44	22.0	22.0	22.0
	Businessman	97	48.5	48.5	70.5
	Unemployed	4	2.0	2.0	72.5
	Professional	36	18.0	18.0	90.5
	Retired	14	7.0	7.0	97.5
	House wife	5	2.5	2.5	100.0
	Total	200	100.0	100.0	

Table 4 exhibits that by collecting data of respondent as per occupation, it has been

observed that maximum users are Businessmen whose percentage is 48.5 of the total .The retired persons' usage of is only 7% and unemployed people form only 2%.

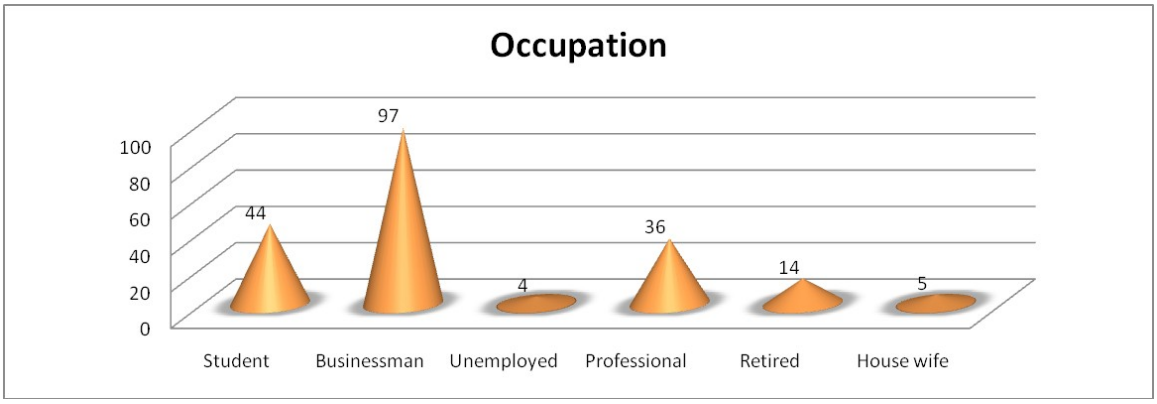

Table 5 Distribution of Monthly Income of respondents using ATM services of their banks

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 5,000	4	2.0	2.7	2.7
	5001 - 10000	18	9.0	12.3	15.1
	10001 - 15000	28	14.0	19.2	34.2
	15001 - 20000	28	14.0	19.2	53.4
	20001 - 30000	26	13.0	17.8	71.2
	30001 - 40000	12	6.0	8.2	79.5
	40001 - 50000	14	7.0	9.6	89.0
	Above 50000	16	8.0	11.0	100.0
	Total	146	73.0	100.0	
Missing	System	54	27.0		
Total		200	100.0		

Table 5 shows that out of the 200 respondents, 146 had given their income. Out of the various income groups, respondents who come under Rs.10,000-15,000 and Rs. 15,000-20,000 have the same percentage.

Table 6 Distribution of Customers of various Banks

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	City Union Bank	18	9.0	9.0	9.0
	IOB	14	7.0	7.0	16.0
	Canara	4	2.0	2.0	18.0
	HDFC	2	1.0	1.0	19.0
	Karnataka	6	3.0	3.0	22.0
	Indian Bank	86	43.0	43.0	65.0
	Axis	4	2.0	2.0	67.0
	SBI	66	33.0	33.0	100.0
	Total	200	100.0	100.0	

Table 6 shows that 43% of the respondents are the Indian Bank customers. 33% have their account in SBI and only 1% has the account in HDFC

Table 7 Respondents Frequency of visit to banks before introducing ATM services

	Frequency	Percent	Valid Percent	Cumulative Percent
Every day	14	7.0	7.0	7.0
Once in a week	70	35.0	35.0	42.0
Once in a fortnight	33	16.5	16.5	58.5
Once in a month	36	18.0	18.0	76.5
As & when required	47	23.5	23.5	100.0
Total	200	100.0	100.0	

Table 7 shows that out of 200 respondents 35% of them visited the bank once in a week, 23.5% visited as and when required and only 7% visited everyday before the introduction of ATM services by their banks,

Table 8 Respondents Frequency of visit to banks after introducing ATM services

	Frequency	Percent	Valid Percent	Cumulative Percent
Every day	2	1.0	1.0	1.0
Once in a week	19	9.5	9.5	10.5
Once in a fortnight	83	41.5	41.5	52.0
Once in a month	92	46.0	46.0	98.0
As & when required	4	2.0	2.0	100.0
Total	200	100.0	100.0	

Table 8 shows that 46% respondents visit once in a month and 41.5% respondents visit once in a week and only 1% visit the bank every day after the introduction of ATM services by their banks.

Cross tabulation on Association between age and various dimensions of Satisfaction

Table 9 discloses that there is a significant relationship between age and convenience and safety of the ATM services. Hence the null hypothesis is rejected.

Age	Satisfaction level		Statistical Inference
	Low	High	
Tangibility			
Below 25	14	14	$\chi^2 = 18.338$
25 - 35	18	30	df =4
36 - 45	32	18	Significant
46 - 55	28	34	
Above 55	0	12	
Reliability			
Below 25	14	14	$\chi^2 = 12.674$
25 - 35	12	36	df =4
36 - 45	18	32	Significant
46 - 55	26	36	
Above 55	0	12	
Convenience			
Below 25	10	18	χ 2 =1.399
25 - 35	22	26	df =4
36 - 45	22	28	Not Significant
46 - 55	24	38	
Above 55	4	8	
Assurance			
Below 25	16	12	$\chi^2 = 14.438$
25 - 35	8	40	df =4
36 - 45	18	32	Significant
46 - 55	24	38	
Above 55	6	6	
Accuracy			
Below 25	14	14	
25 - 35	8	40	$\chi^2 = 10.325$
36 - 45	18	32	df =4
46 - 55	24	38	Significant
Above 55	4	8	

Easy of Use Below 25 25 - 35 36 - 45 46 - 55 Above 55	12 6 10 20 0	16 42 40 42 12	$\chi^2 = 15.485$ df =4 Significant
Responsiveness Below 25 25 - 35 36 - 45 46 - 55 Above 55	16 18 30 24 4	12 30 20 38 8	$\chi^2 = 8.843$ df =4 Not Significant
Safety Below 25 25 - 35 36 - 45 46 - 55 Above 55	10 22 28 18 4	18 26 22 44 8	$\chi^2 = 9.4$ df =4 Not Significant
Overall Satisfaction Below 25 25 - 35 36 - 45 46 - 55 Above 55	14 10 24 28 0	14 38 26 34 12	$\chi^2 = 18.542$ df =4 Significant

T test Gender versus satisfaction level

Table 10 shows that there is no significant relationship between the gender with regard to various dimensions of the satisfaction level. Hence the null hypothesis is accepted

	N	Mean	S.D	Statistical Inference
Tangibility Male Female	 104 96	 39.28 37.72	 4.892 4.911	t = 2.249 df=198 Significant
Reliability Male Female	 104 96	 47.20 45.86	 7.213 6.402	t =1.382 df=198 Not Significant
Convenience Male Female	 104 96	 35.11 33.84	 4.311 3.959	t =2.151 df=198 Significant
Assurance Male Female	 104 96	 35.74 35.09	 5.343 5.312	t =0.858 df=198 Not Significant
Accuracy Male Female	 104 96	 11.66 11.84	 1.716 1.743	t =0.737 df=198 Not Significant
Easy of use Male Female	 104 96	 11.75 11.69	 1.630 2.109	t =0.236 df=198 Not Significant
Responsiveness Male Female	 104 96	 22.58 22.02	 3.878 4.218	t =0.971 df=198 Significant
Safety Male Female	 104 96	 19.52 18.94	 2.910 2.546	t =1.5 df=198 Not Significant
Overall Satisfaction Male Female	 104 96	 222.84 217.01	 25.811 23.481	t =1.665 df=198 Not Significant

ANOVA
Educational Qualification versus various dimensions of Satisfaction

Table 11 explains that there is a significant difference among Educational Qualification of the respondents and their satisfaction level. Hence the null hypothesis is rejected

		Sum of Squares	Df	Mean Square	F	Sig.
Tangibility	***Between Groups***	233.463	2	116.732	4.951	.008(S)
	Within Groups	4644.357	197	23.575		
Reliability	***Between Groups***	255.285	2	127.642	2.768	.065(NS)
	Within Groups	9085.995	197	46.122		
Convenience	***Between Groups***	142.931	2	71.466	4.216	.016(S)
	Within Groups	3339.069	197	16.950		
Assurance	***Between Groups***	228.792	2	114.396	4.164	.017(S)
	Within Groups	5412.228	197	27.473		
Accuracy	***Between Groups***	30.223	2	15.112	5.285	.006(S)
	Within Groups	563.277	197	2.859		
Easy of use	***Between Groups***	18.962	2	9.481	2.757	.066(NS)
	Within Groups	677.358	197	3.438		
Responsiveness	***Between Groups***	35.248	2	17.624	1.078	.342(NS)
	Within Groups	3219.532	197	16.343		
Safety	***Between Groups***	31.217	2	15.608	2.087	.127(NS)
	Within Groups	1473.263	197	7.478		
Overall satisfaction	***Between Groups***	5476.973	2	2738.487	4.602	.011(S)
	Within Groups	117218.70	197	595.019		

ANOVA

Occupation versus various dimensions of satisfaction level

Table 12 shows that there is no significant difference among Occupation of respondents with regard to their satisfaction level. Hence the null hypothesis is accepted.

		Sum of Squares	df	Mean Square	F	Sig.
Tangibility	***Between Groups***	9.472	5	1.894	.075	.996(NS)
	Within Groups	4868.348	194	25.095		
	Total	4877.820	199			
Reliability	***Between Groups***	254.920	5	50.984	1.089	.368(NS)
	Within Groups	9086.360	194	46.837		
	Total	9341.280	199			
Convenience	***Between Groups***	103.140	5	20.628	1.184	.318(NS)
	Within Groups	3378.860	194	17.417		
	Total	3482.000	199			
Assurance	***Between Groups***	184.669	5	36.934	1.313	.260(NS)
	Within Groups	5456.351	194	28.126		
	Total	5641.020	199			
Accuracy	***Between Groups***	23.659	5	4.732	1.611	.159(NS)
	Within Groups	569.841	194	2.937		
	Total	593.500	199			
Easy of use	***Between Groups***	13.640	5	2.728	.775	.569(NS)
	Within Groups	682.680	194	3.519		
	Total	696.320	199			
Responsiveness	***Between Groups***	117.672	5	23.534	1.455	.206(NS)
	Within Groups	3137.108	194	16.171		
	Total	3254.780	199			
Safety	***Between Groups***	25.973	5	5.195	.682	.638(NS)
	Within Groups	1478.507	194	7.621		
	Total	1504.480	199			
Overall satisfaction	***Between Groups***	823.243	5	164.649	.262	.933(NS)
	Within Groups	121872.437	194	628.208		
	Total	122695.680	199			

FINDINGS

- It is clear that all the 200 respondents are the residents of Vellore District only.
- From the cumulative percentage it is clear that 94% of the respondents use the ATM services. Only 6% who fall under the category of above 55 years who use the ATM services very less.
- Out of the 200 respondents, the percentage of males using ATM services is 52% and the percentage of females using ATM services is 48%
- The data regarding educational level of respondents indicate that maximum users ie 72% are under graduates and 5% of the total respondents are post graduates.
- By collecting data of respondent as per occupation, it has been observed that maximum users are Businessmen .The retired persons' usage of is only 7% and unemployed people form only 2%.
- Out of the 200 respondents, 146 had given their income and they fall under different income groups. Out of these various income groups, respondents who come under Rs.10,000-15,000 and Rs. 15,000-20,000 have the same percentage
- 43% of the respondents are the Indian Bank customers. 33% have their account in SBI and only 1% has the account in HDFC
- Before the introduction of ATM services by their banks, out of 200 respondents 35% of them visited their bank once in a week, 23.5% visited as and when required and only 7% visited everyday for various reasons.
- After the introduction of ATM services, 46%of the respondents visit once in a month and 41.5% respondents visit once in a week and only 1% visit their bank every day for various reasons.

CONCLUSION

In view of the above study, overall satisfaction level of the customers of the various banks in Vellore District is good. But some of the customers felt that the ATM services of their banks have to be improved for their utmost satisfaction. The Researcher suggests that the bankers in order to retain the customers, they must improve the safety, provide accurate information and make easy for customers in using the ATM services. In general, majority of the customers are highly satisfied in using the ATM services of their banks

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