

CUSTOMER SATISFACTION OF CREDIT CARDS AND ATM SERVICES OF SBI IN COMBATORE

Dr. S.R.Choodambigai*

*Associate Professor in Economics, Avinashilingam Deemed University, Coimbatore, India

Introduction

The Reserve Bank of India is the centralized body identifying the discrepancies and shortcomings in the financial system. Since the nationalization of banks in 1969, the public sector banks have acquired a place of prominence and has since then shown tremendous progress. The need to become highly customer focused has forced the slow-moving public sector banks to adopt a fast track approach. Since 1991, financial sector reforms were initiated as part of overall economic reforms in the country and reforms relating to financial markets have been carried out since mid 1991. The most significant achievement of the financial sector reforms are marked by improvement in the financial health of commercial banks in terms of capital adequacy, profitability and asset quality and greater attention to risk management. Technology brings fundamental shift in the functioning of banks. It would not only help them bring improvements in their internal functioning but also enable them to provide better customers services and technological advances have influenced and facilitated the operations of banking transactions. The recent technological advancement is the internet technology that has transformed the entire business of financial markets With the help of the Internet, we can communicate interactively and instantly over vast distances, receive a wide array of informations, conduct business from remote without human assistance (Burt and Sparks, 2003). One area of the application of the latest technology is credit cards and ATM/Debit cards. Credit card is an Automatic advanced card. Credit card is a widely used source of conventional credit for restaurants, as well as telephone and television advertised products. In short credit cards act as a short – term loan. Along with the benefits some disadvantages are also attached with the credit cards (<http://EzineArticles.com>). ATMs have become the order of the day in banking. Though they were evolved as novel cash dispensers, now they are emerged as a marketing tool to target the masses through off-site, and on-site ATMs. ATMs of many banks are nothing but virtual branches, as customers can conduct any transactions, through the touch screens. They are user friendly and they have mass acceptability.

They can effectively reach out a large customer base at low cost. At present most banks have networking systems for their e-banking services like ATMs. A network connected ATMs of various banks had resulted in the improvement of customer services. ATMs are used to cross-sell other products as well as to meet the varied requirements of the customers. Banks have started dispensing Railway tickets, Airway tickets, Movie tickets etc through ATMs. Voice activated ATMs, ATMs with fingerprint scanning technology etc., are on the move. HSBC installed the first ATM in 1987 at Calcutta. Indian bank was the first public sector bank to install an ATM in India. These were all stand alone ATMs. In February 1977, the Indian banks association promoted a network of ATMs in Mumbai called 'SWADHAN' providing facility of cash withdrawal at ATMs of any of the member banks.

With this background an attempt was made by the investigator to do a study on "Customer Satisfaction of Credit Cards and ATM Services of SBI in Coimbatore" with the following objectives.

- To study the awareness and use age of ATM services.
- To examine the difficulty faced by the samples in using ATM cards.
- To identify the association between age and purpose of using ATM cards
- To rank the reasons to choose the ATM card facility among the selected samples
- To locate the factors influencing the possession of credit cards.
- To quantify the attributory elements towards the expenditure of credit cardholders.
- To evaluate the factors influencing the attitude of the credit card holders.

Database of the study

The current study was carried out during July 2010 and it was based on the primary data. Random sampling technique was adopted to select 100 samples from SBI of R.S Puram Branch of Coimbatore. The information pertaining to their social economic indicators and information about the cards concerned were collected for which one interview schedule was administrated and the results were arrived at.

Tools of Analysis

1. Frame work of the model explaining the interrelationship among the variables pertaining to the capacity of the credit cards

Since holding of the credit cards is only a qualitative aspect, which cannot be quantified, the capacity or value of the credit cards is taken as the dependent variable. The capacities of the cards depend upon several socio-economic and demographical factors. The capacity of the card greatly depends upon the income of the card holder. The occupation of the card holder forms the basis of security for the possession of the card in most of the cases. The family size and the total family expenditure have an influence on the capacity of the card. Greater the family size, higher will be the expenditure. In such cases the credit card serves its purpose to the fullest extent possible. The notations of the model are explained below.

CC = Capacity of the card; CY = Card holders income; FS= Family size; TFE = Total Family Expenditure; OC = Occupation of the cardholder; OC = 1 = Private employee; OC = 2 = Business; OC = 3 = NBFI; OC = 4 = Government employee; EQ = Educational qualification of the cardholder.

2. Discriminant Analysis

The discriminant analysis technique was used to classify the samples into one or more mutually exclusive and exhaustive groups on the basis of a set of independent variables (Kothari, 2001). Endorsing the view of Kothari (2001) the study adopted the discriminant Technique to find out the variables which significantly discriminated the two groups. The variables chosen for this analysis are explained below.

$$Z = f(X_1+X_2+X_3)$$

Where

Z = Total Family Expenditure; X_1 = Capacity of the card; X_2 = Income of the card holders; X_3 = Attitude of the card holder towards the possession of the card; $X_3 = 1$ = Positive attitude; $X_3 = 2$ = Negative attitude.

3. Logit Model

Logit model is a form of regression analysis used when the dependent variable happens to be qualitative in nature and binary dummy variable is assigned to the independent variable. The variables are expressed in the logarithmic form.

The investigator had used the logit model to analyse the influence of the independent variables on the attitude of the Credit card holder where

Y = Attitude of the card holder towards the possession of the card; $Y = 0$ Negative attitude; $Y = 1$ positive attitude; X_1 = Income of the card holder; X_2 = Capacity of the card; X_3 = Age of the card holder; X_4 = Sex; $X_4 = 0$ = Female; $X_4 = 1$ = Male; X_5 = Total Family Expenditure; X_6 = Family size; X_7 = Educational qualification;

To examine the association between the age and the purpose in using the ATM cards are used, χ^2 Test was applied

4. χ^2 Test

$$\chi^2 = \frac{\sum(O-E)^2}{\sum E}$$

Where,

‘o’ is the observed frequency in each category and

‘E’ expected frequency in each category.

The degrees of freedom are given by $(c-1) - (r-1)$

Where,

‘c’ denotes number of columns and ‘r’ denotes number of groups. The obtained value is compared with the critical value at the given degrees of freedom to draw inference about the sample (Gupta, 2007).

5. Likert’s five point rating scale ‘Strongly agree’, ‘Agree’, ‘Neutral’, ‘disagree’, and ‘Strongly disagree’ was prepared to elicit the problems of the respondents on using the ATM services. These scales were given scores as 2, 1, 0, -1, -2, respectively and average scores were obtained to calculate the result.

FINDINGS

Awareness and Usage of ATM Service

With regard to the convenience in using ATM cards it was happy to note that 99 respondents found it convenient to withdraw money by using ATM cards.

A discussion on the frequency of using ATMs cards showed that 47 respondents had used ATMs regularly, 27 respondents used ATMs occasionally, 18 respondents used ATMs during emergency and 8 respondents used ATMs to withdraw salary. It could be inferred that majority of the respondents used the ATMs regularly.

Table I shows the reason to prefer ATM services of SBI Coimbatore.

TABLE I
REASON TO PREFER ATM OF SBI COIMBAOTRE

S. No	Reasons	Number of respondents
1.	Withdrawal	71
2.	Withdrawal and statement receipt	2
3.	Withdrawal and balance enquiry	24
4.	Withdrawal and statement receipt and balance enquiry	3

Source: Based on primary data

An attempt to study the reasons to prefer the ATM services shows that 71 persons prefer ATM for withdrawal purpose and 3 samples prefer to use the ATM cards for the 4th purpose i.e withdrawal, statement receipt and balance enquiry.

Another finding of the study is that 98 respondents used the ATM card with proper guidance and only 2 respondents had no proper guidance to use the cards and he was often helped by the security of the ATM stations.

94 respondents expressed that there should be security guard at ATM centres and only 6 respondents said that there is no need for security guard at ATM centres.

Fifty two respondents preferred both on-site and off-site services rendered by the State Bank of India. 34 respondents preferred only on-site services and 14 respondents preferred off-site services.

Table II shows that the problems faced by the respondents in using ATM cards.

TABLE II
PROBLEMS IN USING ATM SERVICES

S. No	Problems of ATM	SA	A	N	D	SD	AS
1	No privacy	10	8	17	28	37	-.77
2	Soil currency notes	4	4	19	28	45	-1.15
3	In adequate	5	6	27	26	36	-.83
4	Non-functioning of machines	50	24	14	7	5	1.08
5	Shortage of amount	16	17	22	23	22	-.19
6	Standing in long queue	32	30	18	5	15	.78
7	Lack of ATM centres	41	28	19	6	5	.92

Source: Based on primary data

Table II examines the problems faced by the respondents while using ATM services. The majority of the respondents faced the problems of non-functioning of machine while using ATM services. It is important to note that most of the respondents had chosen the option that strongly disagree of bad currency notes while using ATM.

To examine the association between the age and purpose in using ATM among the respondents, chi-square test was applied and the results are given Table III.

TABLE III
ASSOCIATION BETWEEN THE AGE AND PURPOSE IN USING ATM SERVICES
OF RESPONDENTS OF SBI COIMBATORE

Age	Deposit and withdrawal	Withdrawal	Withdrawal and statement receipt	Withdrawal and balance enquiry	Availability of loan facility	Withdrawal, statement receipt and balance enquiry	Total
Below 25	1	14	1	1	–	3	20
25-35	–	17	–	6	–	–	23
35-45	–	16	–	12	–	–	28
45-55	–	19	–	4	–	–	23
55 and above	1	3	1	1	–	–	6
Total	2	69	2	24	0	3	100

Age is the function of purpose of using ATM services

Ho: There is no association between age and purpose of ATM

Ha: there is association between age and purpose of ATM

$$X^2 = 38.96$$

$$\text{Degrees of freedom} = (c-1) (r-1)$$

$$= (6-1) (5-1) = 20$$

The table value of X^2 for 20 degrees of freedom at 5 percent level of significance is 31.4. Comparing calculated and table values of X^2 , the calculated value is less than the table value confirming the association between the age and purpose using ATM services. Thus, the null hypothesis is rejected, and it is statistically significant.

FINDINGS ON CREDIT CARDS

Locating the Factors Influencing The Possession of Credit Cards

The estimated equation of the model (as discussed earlier) applied is given below.

$$CC = 8242.2 + 0.591*_{CY} + 1.75_{FS} + 1.282*_{TFE} + 4261.34_{OC} - 621.78_{EQ}$$

(2.82) (0.98) (2.61) (1.02) (0.51)

Figures in the bracket indicate the Z value of the estimated parameters

* Significant at 5 percent level.

$$\begin{aligned} R &= 0.812 \\ R^2 &= 0.659 \end{aligned}$$

The result of multiple regression analysis showed that 59 percent of the variation and 28 percent of variation in the capacity of the card was explained by the cardholder's income and total family expenditure respectively. The analysis of the section indicated that the cardholder's income and the total family expenditure were the significant variables influencing the possession of Credit card.

Measuring the Relative Contribution of Chosen Factors Towards the Expenditure of the Credit Card Holder

In order to understand the impact of various parameters on the expenditure pattern of the credit cardholders, Discriminant Analysis was adopted for which samples were divided into two groups based on their total expenditure. The total samples were classified into two groups, Group I Expenditure below the mean expenditure and, Group II Expenditure above the mean expenditure.

Table V shows the Wilk's Lambda (U-Statistics), its equivalent univariate F test and the significant levels of the three variables. (Capacity of the card X_1 income of the card holder X_2 and attitude of the cardholder towards the possession of the cards X_3).

TABLE V

WILK'S LAMBDA AND UNIVARIATE F TEST OF THE VARIABLES

VARIABLES	WILK'S LAMBDA	SIGNIFICANCE LEVEL
Capacity of the card	0.812	0.031
Card holder's income	0.712	0.318
Attitude	0.931	0.517

The F test indicated significant difference for two variables at 5 percent level. The canonical correlation which is the measure of the degree of association between the discriminant score of the group was 0.82. To test the significance of Lambda it was transformed into chi-square equivalent. The value of the chi-square was 3.918.

The estimated pooled Fisher's linear discriminatory function was as follows;

$$Z = 0.0000813x_1 + 0.001024x_2 + 10.234x_3 - 12.02.$$

Relative share of the variables in determining the expenditure pattern of the Credit card holders

Discriminating power of the capacity of the card (X_1) was 8.12 and the income of the cardholder (X_2) was 2.3 and it exhibits the predominant role played by these two variables as far as Credit card is concerned.

Factors influencing the attitude of the credit cardholders towards the possession of the card

Since the attitude is qualitative aspect, the binary logit model with the attitude of the cardholder towards the possession of the credit card as dependent variable was adopted. The estimated equation of the model is given below:

$$Y = 1.86 + 0.000046x_1 + 0.000028^*x_2 + 0.050x_3 + 0.0162x_4 - 0.1092x_5 - 0.06011x_6 + 0.2304^*x_7$$

(0.017) (0.0264) (0.16) (0.612) (0.514) (0.178) (0.0237)

Figures in the bracket indicate the Z value of the estimated parameters

*Significant at 5 percent level.

The result of the function shows that, among the chosen explanatory variables the cardholder's income and the sex of the card holder contribute more towards the attitude of the card holders in possessing the credit cards.

Conclusion

It was found that both ATM services and credit card facility of SBI Coimbatore were well received and utilized by the customers. It was revealed withdraw in cash through ATM was very convenient and majority of the respondents had used ATM services regularly. With regard to purpose more weightage was given to 'withdrawal' facility of ATM. It was delightful to note that the samples had enough and adequate guidance to use ATM cards and they were satisfied with the security facility made at the ATM stations. Non-functioning or the failure of the ATM machine was the negative remark made by the ATM users. The positive association between the age of respondents and purpose of using ATM cards was well accepted by the study.

In the field of the credit card, both credit card holders income and the total family expenditure had ranked as 1 on 2 in influencing the possession of credit cards. Touching the area of relative the share of the variables in determining the expenditure pattern of credit card holder showed that capacity of the card led fist followed by income of the card holder. It was exhibited that the attitude of the card holder was explained well by card holders income followed by sex of the card holder. The well organized and planned performance of the SBI in the arena of Credit and ATM Cards is clearly supported by this study.

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