## Customer Satisfaction With Plastic Money in Tirupur

\* S. Tamilselvi \*\* V. Karpagavalli

#### Abstract

The development of plastic money is one of the recent phenomenon in the banking sector. Plastic money is a charge card; it is a direct charge against the limit sanctioned. It is a debt instrument issued by some specialized companies. It is one step forward towards cashless and cheque-less society. The operation is through Electronic Fund Transfer (EFT) and inter- bank network. Credit cards are the key to opening of bank accounts for daily payments by card holders. Credit card has been rightly called plastic money. The objective is to provide convenience and security. It eliminates cash transactions and protects from the danger of pick pocketing. There is usually interest free credit for 30 to 45 days. This paper attempts to find out the satisfaction of customers with plastic money with reference to Tirupur.

Keywords : EFT, network, plastic money

#### I. INTRODUCTION

The system of trade through barter is as old as the human civilization. Barter system is a system in which people sell goods and services in order to obtain other goods and services through direct exchange. The functioning of a barter economy was however, cumbersome and inconvenient due to double coincidence of wants. Difficulties of barter led to the introduction and development of money. Money deserves to be ranked among the outstanding inventions of the entire history of humankind. The birth of money came as a multi-fold blessing to human kind. Money is defined in various ways. Some say, "Money is what money does" (walker). In other words, anything that performs the functions of money is money. Economics makes it clear that money places an important role in the economic system. Modern life is very complicated and even a non-professional is aware that money plays an important role in modern life. It is impossible to carry on modern production and solve the problems of distribution without the intervention of money. In short, money facilitates the working of an economic system [1][2]. Money deserves to be ranked among the outstanding inventions of the entire history of humanity.

As the civilization grew with the development of

economic systems, the development in money concept was also inevitable. This paved the way for the development of paper money, bills of exchange, cheques, and other incidental transactional areas. Credit is considered an important instrument of promoting and sustaining economic growth of modern economics. Money is the basis of credit creation.

A number of innovative products for making payment have been developed in recent years, taking advantage of swift technological steps forward and financial market development. Transactions refined using these innovative products are used in accounting for a mounting proportion of the dimensions and value of domestic and cross-border retail payments. Plastic money is the alternative to cash or standard 'money'. It refers to credit cards or debit cards that may be used to make purchases in everyday life. Plastic money is much more convenient to carry around, as one does not have to carry a huge sum of money.

## **II. STATEMENT OF THE PROBLEM**

Plastic money is a suitable alternative for cash payment or credit payment or deferred payment. It is used to execute transactions which are compiled through electronic devices like a card swiping machine, computer

\*\* V.Karpagavalli is Assistant Professor with Department of B.Com (CA), Tiruppur Kumaran College For Women, Tirupur, Tamilnadu, India - 641687. (email: <u>karpagavanthana82@gmail.com</u>)

DOI: 10.17010/ijcs/2018/v3/i3/129624

Manuscript received March 5, 2018; revised April 12, 2018; accepted April 16, 2018. Date of publication May 6, 2018.

<sup>\*</sup> S. Tamilselvi is with Maharani Arts and Science college, Dharapuram, Tamilnadu, India-638657. (email: tamilsundar@gmail.com)

with internet facility etc. Plastic money facility provided by a bank or non-banking financial company which gives its customer a preference to borrow funds usually, at the point of transaction [3][4]. This study mainly focuses on the attention on usage and its impact on plastic money holders in Tirupur city.

## **III. OBJECTIVES OF THE STUDY**

> To analyse customer satisfaction on using plastic money.

- > To study the purpose of using plastic money.
- > To find the problems faced by plastic money users.
- > To know the impact of using plastic money.

## **IV. RESEARCH METHODOLOGY**

Research in common parlance refers to a search for knowledge. It is a systematic and scientific search for pertinent information on specific topics. In fact, research is an art of scientific investigation.

A research design is the arrangement of condition and analysis of data in a manner that aims to combine relevance of the research purpose with the accuracy in procedure [5][6][7]. In a view of considerable data from various secondary sources, the project was conducted in descriptive research method, which was considered to be most suitable.

## V. SAMPLE DESIGN

Sample refers to the number of items to be selected from the universe. Sample is a smaller representation of a large unit. In order to carry out the current research work, convenient sampling was used. Here, plastic money users were selected as samples. This study was confined to Tirupur city. Sample size was 200. Convenience sampling was used for this study. Period of the study covered six months from July 2017 to January 2018.

## **VI. COLLECTION OF DATA**

The task of data collection begins when a research problem has been defined and research designed out, which decides the method of data collection to be used for the study [8]. The researchers should keep in mind two types of data, that is, primary data and secondary data.

#### PRIMARY DATA

Primary data are collected afresh and for the first time, and thus, happen to be original in character. These are collected through questionnaire/interview schedule.

#### SECONDARY DATA

The secondary data on the other hand are those which have already been collected by someone else and which have already passed through the statistical process, it is the nature of the data.

## **VII. TOOLS FOR ANALYSIS**

Tools used for data collection

- Simple percentage
- Point analysis
- ✤ Rank analysis
- ✤ Chi square test
- ✤ ANOVA

## VIII. ANALYSIS AND INTERPRETATION

#### A. Age Group

Table I shows the age wise distribution of the respondents.

TABLE I. AGE WISE DISTRIBUTION OF RESPONDENTS

AGE GROUP	NUMBER OF RESPONDENTS	%
Below 20	18	9
20- 30	56	28
31 - 40	94	47
Above 40	32	16
TOTAL	200	100

Table I shows that 47% of the respondents are 31-40 years, 28% of the respondents are between 20-30, 16% of the respondents are above 40 years, and 9% of the respondents are below 20 years of age. Most of the respondents belong to the age group between 31-40 years.

#### B. Gender

Table II shows the distribution of gender of the respondents. It shows that 64% of the respondents are male and 36% of the respondents are female. Most of the respondents are male.

TABLE II. GENDER DISTRIBUTION OF RESPONDENTS		
GENDER	NUMBER OF RESPONDENTS	%
Male	128	64
Female	72	36
TOTAL	200	100

#### C. Family Income

Table III shows family income of the respondents.

TABLE III.		
FAMILY INCOME OF RESPONDENTS		
FAMILY INCOME (₹)	NUMBER OF RESPONDENTS	%
Below 20000	38	19
20000-30000	50	25
30001-40000	30	15
Above 40000	82	41
TOTAL	200	100

The table III indicates that family income of 41% of the respondents is above ₹ 40,000 and family income of 25% of the respondents is between ₹ 20,000- 30,000 and 19% of the respondents family income is below ₹ 20,000, and 15% of the respondents family income is between ₹ 30,001- 40,000.

Most of the respondents' family income is above  $\mathbf{E}$  40,000.

#### D. Educational Qualification

Table IV shows the educational qualification of the respondents.

TABLE IV.
EDUCATIONAL QUALIFICATION OF RESPONDENTS

EDUCATIONAL QUALIFICATION	NUMBER OF RESPONDENTS	%
School Level	18	9
Diploma	36	18
Degree	86	43
Professional	60	30
TOTAL	200	100

From table IV, it can be inferred that the educational qualification of 43% of the respondents is degree, 30% of the respondents are professionals, 18% of the respondents are diploma holders, and 9% of the

respondents have passed school. The educational qualification of most of the respondents is degree.

#### E. Occupational Status

Table V shows the occupational status of the respondents.

TABLE V.
OCCUPATIONAL STATUS OF RESPONDENTS

OCCUPATIONAL STATUS	NUMBER OF RESPONDENTS	%
Student	34	17
Professional	56	28
Business	44	22
House wife	28	14
Employee	38	19
TOTAL	200	100

Table V shows that 28% of the respondents are professionals, 22% of the respondents have their own business, 19% of the respondents are employees, 14% of the respondents are housewives, and 17% of the respondents are students. Most of the respondents are professionals.

#### F. Awareness About Plastic Money

Table VI depicts the awareness of the respondents about plastic money.

TABLE VI. AWARENESS MEDIUM

AWARENESS THROUGH	NUMBER OF RESPONDENTS	%
Bank	120	60
Friends	50	25
Self-Learning	30	15
TOTAL	200	100

Table VI shows that 60% of the respondents get awareness through bank, 25% of the respondents get awareness through friends, and 15% of the respondents get awareness through self-learning. Most of the respondents get awareness through bank.

#### G. Type of Plastic Money

Table VII shows the type of plastic money used by the respondents. It shows that 65% of the respondents are using debit cards, 20% of the respondents are using credit cards, and 15% of the respondents are using gift card. Most of the respondents are using debit cards.

TABLE VII. DISTRIBUTION OF TYPE OF CARD		
TYPE OF CARD	NUMBER OF RESPONDENTS	%
Debit Card	130	65
Credit Card	40	20
Gift Card	30	15
TOTAL	200	100

#### H. Duration of Use of Plastic Money

TABLE VIII.		
DURATION OF USE OF PLASTIC MONEY		
NUMBER OF YEARS	NUMBER OF RESPONDENTS	%
Less than 5 years	40	20
5-10 years	92	46
More than 10 years	68	34
TOTAL	200	100

Table VIII indicates that 46% of the respondents have been using plastic money for 5-10 years, 34% of the respondents have been using plastic money for more than 10 years, and 20% of the respondents have been using plastic money for less than 5 years.

Most of the respondents have been using plastic money for 5-10 years.

#### I. Number of Cards Used

Table IX depicts the number of plastic money cards used by the respondents.

TABLE IX.
DISTRIBUTION FOR NUMBER OF PLASTIC CARDS
USED BY RESPONDENTS

NUMBER OF CARDS USED	NUMBER OF RESPONDENTS	%
Less than 3	180	90
3-5 cards	20	10
TOTAL	200	100

Table IX shows that 90% of the respondents are using less than 3 cards, 10% of the respondents are using 3 to 5 cards. Most of the respondents are using less than 3 plastic money cards.

#### J. Frequency of Using Cards

Table X shows the frequency of using card per month by the respondents. From table X it can be inferred that 43% of the respondents use cards weekly once, 30% of the respondents use cards rarely, 18% of the respondents are use it twice a month, and 9% of the respondents use

TABLE X.					
FREQUENCY OF USAGE OF PLASTIC CARDS					
USAGE OF CARD PER MONTH	NUMBER OF RESPONDENTS	%			
Daily	18	9			
Weekly	86	43			
Twice a month	36	18			

cards daily. Most of the respondents are frequently using card weekly.

#### K. Opinion About Plastic Money

Table XI shows the usage of card per month by the respondents. It shows that 52% of the respondents feel

TABLE XI.				
<b>OPINION ABOUT PLASTIC MONEY</b>				

OPINION ABOUT PLASTIC MONEY	NUMBER OF RESPONDENTS	%
Necessary	60	30
Essential	104	52
Luxury	26	13
Avoidable	10	5
TOTAL	200	100

plastic money is essential, 30% of the respondents feel it is necessary, 13% of the respondents feel it is luxury, and 5% of the respondents feel that plastic money may be avoidable. Most of the respondents opinion about plastic money is that it is essential.

#### L. Purpose of Plastic Money

Table XII shows the reasons of use of plastic money by the respondents. It shows that 59% of the respondents use plastic money for the purpose of withdrawal, 23% of the respondents use plastic money for the purpose of online payment, and 18% of the respondents use plastic money for the purpose of payment of bills. Most of the respondents use plastic money for the purpose of withdrawal.

TABLE XII.	
PURPOSE OF PLASTIC	MONEY

PURPOSE	NUMBER OF RESPONDENTS	%
Withawal	118	59
Online payment	46	23
Payment of bills	36	18
TOTAL	200	100

TABLE XIII.					
RATE OF INTEREST					
RATE OF INTEREST NUMBER OF RESPONDENTS %					
No charge	90	45			
2-3%	68	34			
3-4%	24	12			
Above 4%	18	9			
TOTAL	200	100			

#### M. Rate of Interest

Table XIII shows the rate of interest and usage of card per month by the respondents. Table XIII shows that 45% of the respondents are not paying an charge, 34% of the respondents pay between 2-3%, 12% of the respondents pay 3-4% and 9% of the respondents pay above 4% as rate of interest for their plastic money. Most of the respondents fall under the category of no charge.

#### N. Satisfaction of Respondents With Plastic Money

Safety, recognition, add on card facility, protection from fraud, online payment, timesaving, interest, and credit restrictions are generally targeted as the factors of plastic money. An analysis was done on the extent of satisfaction with plastic money.

TABLE XIV. LEVEL OF SATISFACTION - DESCRIPTIVE STATISTICS

	Ν	MINIMUM	MAXIMUM	MEAN	INDICATOR
Safety	200	2	5	4.48	Highly Satisfied
Recognition	200	2	4	3.84	Satisfied
Add on card facility	200	3	5	4.32	Highly Satisfied
Protection from fraud	200	3	4	4.43	Highly Satisfied
Online payment	200	3	4	4.22	Highly Satisfied
Time saving	200	2	5	4.46	Highly Satisfied
Interest	200	3	4	4.14	Satisfied
Credit restrictions	200	3	4	4.16	Satisfied

Table XIV shows that accepted levels have been assigned maximum mean value of 5 and the minimum mean value of 1, and the satisfaction level has been rated from highly satisfied to highly dissatisfied.

• Highly dissatisfied in the range of 1.00 - 1.80 with an assigned value of 1.

• Dissatisfied in the range of 1.81 - 2.60 with an assigned value of 2.

• Neutral in the range of 2.61 - 3.40 with an assigned value of 3.

• Satisfied in the range of 3.41 - 4.20 with an assigned value of 4.

• Highly Satisfied in the range of 4.21 - 5.00 with an assigned value of 5.

Table XIV shows that safety, time saving, protection from fraud, add on card facility, online payment are the factors that respondents are highly satisfied with. Credit restrictions, interest, and recognition are the factors that respondents that respondents are satisfied with.

## *O. Agreeability Level of Respondents on The Impact of Using Plastic Money*

Satisfies all needs, useful for all age group, helpful during travelling, no need to maintain cash in hand, make use of offers, save time, easy and extended purchase, more discount and bonus, chance for small denomination are considered as the impacts of using plastic money.

TABLE XV. AGREEABILITY LEVEL ON PLASTIC MONEY -DESCRIPTIVE STATISTICS

	Ν	MINIMUM	MAXIMUM	MEAN	INDICATOR
Satisfies all needs	200	3	5	4.16	Agree
Useful for all age groups	200	2	4	3.84	Agree
Helpful during travelling	200	3	5	4.32	Strongly agree
No need to ma cash in hand	aintai 200	in 3	4	4.43	Strongly agree
Make use of offers	200	3	4	3.72	Agree
Save time	200	2	5	4.46	Strongly agree
Easy and exter purchase	nded 200	3	4	4.16	Agree
More discount and bonus	t 200	2	2	2.98	Moderate
Chance for sm denomination		3	4	4.14	Agree

Table XV shows that 'helpful during travelling', 'no need to maintain cash in hand', and 'saves time' are strongly agreed factors. 'Satisfies all needs', 'easy and extended purchase', 'chance for small denomination', 'useful for all age groups, 'make use of offers' are the agreed factors, more discount and bonus are the moderate factors in agreeability level of plastic money.

### TABLE XVI. AGREEABILITY LEVEL ON PROBLEMS OF PLASTIC MONEY - DESCRIPTIVE STATISTICS

	Ν	MINIMUM	MAXIMUM	MEAN	INDICATOR
Over budget	200	3	4	4.16	Agree
Penetrate the	:				
society	200	3	4	4.14	Agree
Misuse	200	3	4	4.32	Strongly agree
Extra					
charges	200	3	4	4.22	Strongly agree
Card block	200	2	5	4.48	Strongly agree
Renewal due	to				
non -usage	200	3	5	4.32	Strongly agree
Limited					
acceptance	200	2	5	4.46	Strongly agree
More process	than	cash			
transactions	200	2	2	2.98	Moderate
Mechanical o	ff-line				
problems	200	2	4	3.84	Agree
Increased					
debt	200	3	4	3.71	Agree

### TABLE XVII. CHI SQUARE TEST - 1

#### OCCUPATIONAL STATUS AND TYPE OF PLASTIC MONEY

		UNLI		
OCCUPATIONAL STATUS	DEBIT CARD	CREDIT CARD	GIFT CARD	TOTAL
	F			
Business	29	5	12	46
Professional	38	14	9	61
Employee	19	4	14	37
House wife	16	1	6	23
Student	15	2	16	33
TOTAL	117	26	57	200
	1 10	500		

Calculated Chi-square value =19.509

Table value @ 5% level = 15.507

Degree of freedom = 8

Result = Not Satisfied

## P. Respondents' Agreeability Level on Problems of Plastic Money

Over budget, penetrate the society, misuse, extra charges, card block, renewal due to non usage, limited acceptance, more process than cash transactions, mechanical off-line problems, increased debt are the

## **Q.** Respondents' Occupational Status and Type of Plastic Money

 $H_{01}$ : There is no significant association between occupational status and type of plastic money.

The chi – square test was used to analyze the association between occupational status and type of plastic money. Table XVII shows the result. The calculated value (19.509) is higher than the table value (15.507) at 5% level of significance. Hence, the hypothesis is rejected. So, there is a significant association between occupational status and type of plastic money.

## TABLE XVIII.

#### CHI-SQUARE TEST - 2

#### OCCUPATIONAL STATUS AND NUMBER OF YEARS OF USE OF PLASTIC MONEY

OCCUPATIONAL STATUS					
	LESS THAN	_			
	3 YEARS		5 YEARS		
Business	10	26	28	64	
Professional	6	18	20	44	
Employee	5	12	11	28	
House wife	7	18	17	42	
Student	9	8	5	22	
TOTAL	37	82	81	200	

Calculated Chi - square value = 9.293

Table value @ 5% level = 15.507

Degree of freedom = 8

Result = Satisfied

# R. Occupational Status and Number of Years of Use of Plastic Money

Chi – square test was used to analyze the association between occupational status and number of years using plastic money. Since the calculated value (9.293) is lower than the table value (15.507) at 5% level of significance, the hypothesis is accepted. There is no significant association between occupational status and number of years of using plastic money.

#### S. Family Income and Use of Plastic Money

 $H_{02}$ : There is no significant difference between family income and frequency of using plastic money.

		TABLE X	IX.				
		ANOVA	-1				
	FREQUENCY OF USE						
FAMILY INCOME	Below ₹ 20,000	₹20,000- 30,000	₹ 30,001- 40.000	Above ₹40,000	TOTAL		
Almost daily	8	7	2	1	18		
Weekly	31	28	6	3	68		
Twice a month	24	22	5	3	54		
Rarely	27	25	5	3	60		
TOTAL	90	82	18	10	200		
ANOVA TEST							
Sources of Variation	Sum Squa		Mean Square	F	Table Value		

Variation	Squares	-	Square		Value
Between Groups	366	3	122.10	0.9606	3.59
Within Groups	1524	12		127.11	
		1890		15	

TABLE XX. ANOVA-2									
<b>OPINION ABOUT PLASTIC MONEY</b>									
EDUCATIONAL NE TOTAL QUALIFICATION	CESSARY E	SSENTI	AL LUXURY A	AVOIDAB	LE				
School Level	3	12	13	2	30				
Diploma	6	21	20	3	50				
Degree	3	10	9	2	24				
Professional	12	39	38	7	96				
TOTAL	24	82	80	14	200				
ANOVA TEST									
Sources of Variation	Sum of Squares	df	Mean Square	F	Table Value				
Between Groups	798	3	266	1.64	4.76				
Within Groups	974	6		162.3					
		2064		9					

The calculated value of F (0.9606) is lower than the table value (3.59) as seen in table XIX. Hence, the hypothesis is accepted. There is no significant difference between family income and frequency of using plastic money.

### T. Educational Qualification and Opinion About Plastic Money

 $\mathbf{H}_{\scriptscriptstyle 03}{\textbf{:}}$  There is no significant difference between

educational qualification and opinion about plastic money.

The calculated value of F (1.64) is lower than the table value (4.76) as seen in table XX. Hence, hypothesis is accepted. There is no significant difference between educational qualification and opinion on plastic money.

## IX. RESEARCH IMPLICATIONS AND SUGGESTIONS

Most often plastic money provides convenience, but it can also land a person in debt through unwise choices or through no fault of own, such as an emergency. In order to overcome the risk of plastic money use, avoid accumulating and pay the debt off on time, read terms and conditions carefully, and take measures to avoid fraud. Remember to be aware of the dangers of the use of plastic money. Make budget and spending plan and stick with it.

The overall usage of plastic money and customer satisfaction with it is very good for its purchase protection, flexible credit, and quick money transaction etc.

The following suggestions are made for the consumer perception regarding plastic money in changing dimension and its impacts based on the findings of this study.

• Provide more customer care system may increase the usage of plastic money.

• Implementation of high security system may be implement.

• Daily withdrawal limit may be raised in order to avoid over congestion in banks.

• Create more awareness to reduce crowds in banks.

• Regular service of device may increase the use of plastic money.

• The bank may take steps to avoid running out of cash.

## **X. LIMITATIONS OF THE STUDY**

Every study has certain limitations; some of these are inherent in research design while some others become part of the study during various stages of the research process. The present study has the following limitations:

The study is restricted to Tirupur city.

✤ Time limit is a major constraint.

 $\bullet$  The sample size of the study is limited to 200 respondents.

Some respondents felt disturbed while answering the questionnaire.

## **XI. CONCLUSION**

Plastic money has become the order of the day. Whether it is a high end store, a restaurant, a café outlet, or even a grocery shop, people just buy what they like, proudly taking out their cards, and allowing the shopkeeper to swipe away a fortune of their hard-earned money. It might be claimed that with plastic money around, there is no need to carry cash and there is no fear of being robbed as well. It is easy to use. However, there are a large number of disadvantages associated with using plastic money. Still, use it wisely and maintain a balance between paper and plastic money.

### REFERENCES

[1] R. Y. Chan, "Demographic and attitudinal differences between active and inactive credit cardholders - The case of Hong Kong," *Int. J. of Bank Marketing*, vol. *15*, no. 4, p p . 1 1 7 - 1 2 5 , 1 9 9 7 . d o i : https://doi.org/10.1108/02652329710189375

[2] M. Cortiñas, M. Elorz, and J. M. Múgica, "The use of loyalty-cards databases: Differences in regular price and discount sensitivity in the brand choice decision between card and non-card holders," *J. of Retailing and Consumer Services*, vol. 15, no. 1, pp. 52-62, 2008. doi: https://doi.org/10.1016/j.jretconser.2007.03.006

[3] N. A. Omar, N. A. Aziz, and M. A. Nazri, "Understanding the relationships of program satisfaction, program loyalty and store loyalty among cardholders of loyalty programs," *Asian Academy of Manage. J.*, vol. 16, no. 1, pp. 21-41, 2011.

[4] V. Karpagavalli, and R. Mohanasoundari,

"Effectiveness of e-governance services at panchayat level in Tamil Nadu," *Int. J. of Marketing and Technol.*, vol. 5, no. 3, pp. 81-90, 2015.

[5] V. Karpagavalli, "E-filing of income tax returns," *Indian J. of Comput. Sci.*, vol. 2, no. 5, pp. 19-22, 2017. doi: 10.17010/ijcs/2017/v2/i5/118807

[6] V. Karpagavalli and R. Mohanasoundari, "Performance of e-governance in the rural development-Case study on Indian economy," *The Int. J. of Business & Manage.*, vol. 3, no. 1, p. 117, 2015.

[7] V. Karpagavalli, and R. Mohanasoundari, "E-governance in local authority–A pilot study with reference to Tirupur city, Tamil Nadu," *Indian J. of Comput. Sci.*, vol. 2, no. 1, pp. 8-15, 2017. doi: 10.17010/ijcs/2017/v2/i1/110140

[8] S. Tamilselvi, V. Karpagavalli, and B. Karthika, "Services provided by browsing centres with reference to Udumalpet taluk from clients' perspective," *Indian J. of Comput. Sci.*, vol. 2, no. 6, pp. 21-30, 2017. doi: 10.17010/ijcs/2017/v2/i6/120441

#### **About the Authors**



**Dr. S. Tamilselvi** is the Principal of Maharani Arts and Science College, Dharapuram. She has completed B.Commerce from Madurai Kamaraj University, M.Com from Annamalai University, M.Phil. from Madurai Kamaraj University, and PGDCA & Ph.D. from Bharathiar University. She has published many research articles in national as well as international journals. She has organised workshops, seminars, intercollegiate meets, and initiated many funding proposals for the welfare of students.



**Dr. V. Karpagavalli** is working as Assistant Professor with Department of Commerce with Computer Applications, Tiruppur Kumaran College for Women, Tirupur. She completed BCA, M.Com(CA), M.Phil, MBA, and Ph.D. from Bharathiar university, Coimbatore. She has qualified UGC NET and SET. She has published many research articles in national and international journals.