PLASTIC MONEY: THE RISE OF E-MONEY

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ABSTRACT

This study aims at analyzing how far the plastic money (i.e. credit cards and debit cards) as a medium of payment instrument benefits the customers and the business community in India. It traces out the origin and growth/development of plastic money during the period 2000-2009; examines the procedural and policy implications; studies the legal and regulatory framework and the problems confronted by both cardholders and business community in the plastic money dealings. It also examines the present status and future prospects for plastic money in India and the precautions to be taken in using the same.

Key Words:

Analyzing, Implications, Instrument, Payment, Plastic Money.

INTRODUCTION

Plastic Money represents currency and near currency. It is not the currency itself and cannot be converted into currency. Plastic Money is the most convenient way to smoothen the exchange process of economic activity. The plastic money since it is made of plastic, is the use of plastic card for the purpose of purchase, exchange, shop, withdrawal, payment, etc., The simplest and easiest expression of plastic money is credit & debit cards. Often credit & debit cards and plastic money are used interchangeably. The term plastic money has been used in different settings to describe a wide variety of payment systems and technologies.

WHAT IS PLASTIC MONEY?

"Plastic money is a term that is used predominantly in reference to the hard plastic cards we use everyday in place of actual bank notes"

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The plastic money generally a credit or debit card with a magnetic strip many people carry in their wallets is the end result of a complex banking process. Holders of a valid card have the authorization to purchase goods and services up to a predetermined amount, called a credit limit.

BIRTH OF PLASTIC MONEY: ORIGIN

- 1920: It all began in this year in USA. A buy now, pay later system by introducing SHOPPER'S PLATE.
- ✤ 1946: New York based bank called FRANKLIN NATIONAL BANK started providing cards CHARGE IT.
- 1950: The first DINER'S CLUB CARDS by American Express changed all that with the first card made of plastic.
- ✤ 1958: BANK OF AMERICA introduced BANK AMERICARD.

BIRTH OF PLASTIC MONEY : INDIA

- ✤ 1969: CITI BANK introduced DINER'S CLUB CARDS.
- ◆ 1981: ANDHRA BANK is the first bank to introduce PLASTIC MONEY in INDIA.
- ◆ 1992: The HONG KONG BANK entered with international cards like VISA & MASTER.

DEVELOPMENT OF PLASTIC MONEY

Plastic money is gradually strengthening its position with the potential of further growth in the future. It is worthwhile to observe how plastic money will evolve in the future in a competitive environment in terms of safety, efficiency and convenience.

The use of plastic money has been expanding quite rapidly. It is becoming prominent means of retail payment. There are many evident advantage of an electronic mode of transfer as compared to conventional clearing house because banks are increasingly turning to technology for managing their payments. Some of the value attributes include secure payments, cost-cutting, payment on due date and easier cash management compared to conventional system. Plastic money in recent years is

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gaining momentum in India as merchant establishments and customers are realizing the safe mode of making payments compared to conventional payment. Financial institutions have realized the acceptance of traders and customers, which has motivated them in leveraging on these systems.

NEED FOR THE STUDY & RESEARCH GAP

During the last few years, attempts have been made to visualize the use of plastic money in the developed countries like United States and other advanced countries. But research is still lacking in case of developing countries like India. So, there is a need to conduct such type of research in India. The proposed study will try to find out spending habit pattern of consumers and the importance of use of plastic money in their lives. The finding of the proposed study may prove useful for users, authorities concerned and persons dealing with plastic money. There is a great need to find out the speed at which these new technological capabilities are accepted and to know the continually changing consumer and social attitudes to 'plastic' technology.



OBJECTIVES OF THE STUDY

SAMPLE FRAME: DATABASE & METHODOLOGY

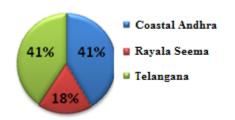
Primary data was collected using two different sets of well structured and pre-tested questionnaires. The questionnaires were drafted by having discussion and interactions with customers, merchants and **professionals**.

Data collected from **900 Cardholders** was covered in the study. It includes 300 card holders each of debit, credits and both. The heads of merchant establishments covered under the sample were personally interviewed and obtained their responses with the help of another set of interview schedule developed for the purpose.

SCOPE OF THE STUDY

- ANDHRA PRADESH is the biggest among the South Indian states both in area and population. The state is divided into three prominent regions based on both historical and geo-physical factors, namely, Coastal Andhra, Rayalaseema and Telangana comprising 9, 4 and 10 districts each and hosting population share of 41%, 18% and 41% respectively.
- The present study aimed at analyzing how far plastic money as a medium of payment instrument benefits the cardholders and the merchants establishments in business dealings in Andhra Pradesh.

AP POPULATION



STATISTICAL TOOLS FOR ANALYSIS & SELECTION OF SAMPLING TECHNIQUES

MULTI-STAGE SAMPLING was adopted for selection of the respondents for the study.

SIMPLE RANDOM SAMPLING (SRS) has been chosen where each element in the population has

a known & equal probability of selection.

The following tests were used:

- 1. Chi-Square test
- 2. Analysis of Variance (ANOVA)

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- 3. Weighted Mean
- 4. Percentage

LIMITATIONS OF THE STUDY

- ✤ The large members of population are not technology savvy.
- The main disadvantage of conducting a primary survey is that respondents may be unable or unwilling to provide the desired information.
- Some of the respondents might not have stated honest responses for the purpose of maintaining the confidentiality of their record.
- As such sample is drawn by using randomized sampling technique; it may represent but not provide clear information of all population.
- The secondary data used in the study is limited to few specific reports from the RBI publications which do not hold a universal truth about the exact figures.

REVIEW OF LITERATURE

A number of empirical studies have been conducted on the subject of 'Plastic Money' in India and abroad. The major emphasis of research has been on various issues like frauds, security, usage pattern, new method of e-payment, etc. The previous work done on plastic money needs perusal. It has been reviewed to indicate in a general way the type of work done on this subject in India. It is expected that the critical examination of the studies would give focus to our problem and help to indicate the areas which have remained neglected at the hands of the researchers. From the review of literature, it was found that hardly there was a study which examined the perception of both users and traders on the usage of plastic money. Also, many studies concentrated on individual cards, for instance, credit or debit card and neglected the joint effect and new innovative cards like smart cards, charge cards etc.

A review of theoretical and empirical literature pertaining to the topic of the study is an integral part of any research work. Hence, an attempt has been made in this chapter to present a review of various studies relating to 'Plastic Money', as reported by experts, professionals and researchers at national and international level.

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IRREGULARITIES AND THE REGULATORY ARCHITECTURE

Fraud can be defined as wrongful or deceit or trickery or criminal deception intended to cheat others.

Types of Fraud

- 1. **Application Fraud:** The fraudster obtains all information of a person who would be eligible to get a card. He then applies to the .issuer, with that person's information except for the address
- 2. **Multiple Imprints:** The fraudulent merchant may ask the card holder to sign on more than one charge slip on some pretext such as print is not clear on the present charge slip.
- 3. **Sold Paper:** When merchants submit consecutive charge slips for the same cardholder at an interval of few weeks or even months.
- 4. Altered credit card: The altered credit card is one which was originally genuine card manufactured and issued by proper authority. The original card is lost or stolen
- 5. **Duplicate Card:** The duplicate fraudulent credit cards are those where the defrauders have made sincere efforts to duplicate the original cards through photo-mechanical processes.
- 6. White Plastic: 'White Plastics' are imitations of credit cards in general aspect. The forger does not make any serious effort for exact replications of dimensions, sizes or shapes of letters, graphics, etc.
- 7. **Terminal Takeover Fraud:** In this fraud, the fraudster does not collude with the merchant, instead he poses as the acquirer's employee and proceeds to examine the working of the terminal
- 8. **Shave and Paste:** Any number of alpha or numeric characters are sliced from the card other characters are attached to the card surface utilizing fast drying epoxy-type glues
- 9. **Identity Theft:** One of the boom fraud type is identity theft. The simple fact, however, is that identity theft existed long before the internet
- 10. Lost/stolen card: A card holder can genuinely lose his card when he forgets to collect it from the ATM machine

LEGAL AND REGULATORY FRAMEWORK

Credit card industry's legislative premises in India are primarily confined to:

1. Common Consumer Law i.e. the Consumer Protection Act, 1986.

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2. General criminal Law i.e. The Indian Penal Code, 1860.

In Addition, the related legislations:

- 1. Banking Regulation Act, 1949.
- 2. Income Tax Act, 1961.
- 3. RBI Guidelines etc. partially regulate the card business in India.

DATA ANALYSIS:

PERCEPTIONS OF CARD USERS : AN ANALYSIS

Types of payment instrument used for purchase:

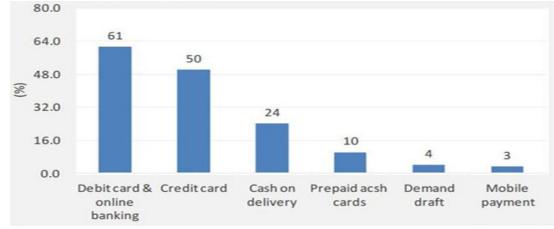
Payment instruments used for purchases were analyzed to know which payment instrument

was preferred by the cardholders for making payment for their purchases.

Payment instruments commonly used are:

- 1. Cash
- 2. Debit card
- 3. Credit card
- 4. Cheque

5. Demand Draft. Etc. MOST USED PAYMENT METHODS

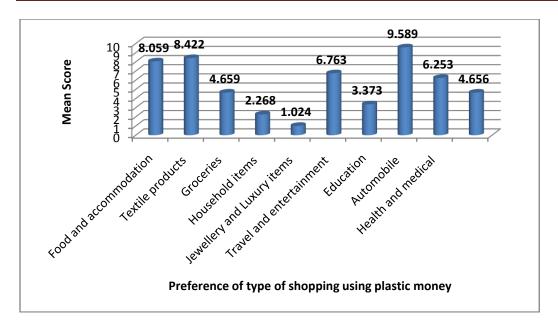


RISE OF E-MONEY

RISE OF E-MONEY The share (by volume) of non-cash transactions indicates customer behaviour is changing				
	2010-11	2011-12	2012-13	
CHEQUES	65 %	52 %	36 %	
ELECTRONIC PAYMENT	35%	48 %	64 %	
	Source: RBI			

PRODUCTS / SERVICES PREFERRED TO PURCHASE / AVAIL USING PLASTIC MONEY

Preference of type of shopping using plastic money	Mean Score	Rank
Food and		
accommodation	8.059	3
Textile products	8.422	2
Groceries	4.659	6
Householditems	2.268	9
Jewellery and Luxury		1.0
items	1.024	10
Travel and entertainment	6.763	4
Education	3.373	8
Automobile	9.589	1
Health and medical	6.253	5
Cosmetics, leather and beauty products	4.656	7



PERCEPTIONS OF MERCHANT ESTABLISHMENTS

Merchant establishments (MEs) mean any business establishment including company, corporation, firm or person, wherever located, with whom arrangements exist for acceptance and honour of plastic money in settlement of sale of goods and services.

Documents needed to be furnished by merchant establishments for getting merchant account along with enrollment fee are

- 1. Copy of Sales Tax Registration Certificate.
- 2. Authorised signatory proof.
- 3. Rent receipts/telephone bill/ electricity bill,
- 4. In case of partnership firm partnership deed
- 5. In case of limited company Memorandum of Association (MOA).

Articles of Association (AOA), company financial statements or Income Tax Returns etc.

MERCHANTS' OPINION ON BOOM IN CONSUMER SPENDING BY USING PLASTIC MONEY

Level of	Merchant	Percentage	58.7	
Boom	establishments	to total	60	
Very High	13	8.6	TR 50 32.7 32.7	
High	88	58.7	50 32.7 40 30 20 8.6 10 6	
Equal	49	32.7		
Total	150	100	Very High High Equal Level of Boom	

OPERATIONAL APPRAISAL OF PLASTIC MONEY

• The problems encountered by the users of plastic money and the precautionary and safety measures to be taken by both the cardholders and merchant establishments while dealing in plastic money.

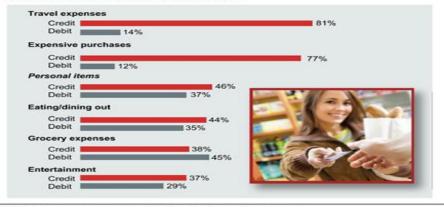
Type of cards	Experien on card f		
used			Total
Debit Cards	-	300 (100)	300 (100)
Credit Cards	15	285	300
	(5)	(95)	(100)
Debit and	7	293	300
Credit Cards	(2.3)	(97.7)	(100)
Total	23	889	900
	(2.5)	(97.5)	(100)

CREDIT CARD SPENDS IN POS TERMINALS

YEAR	NDING	CARD TRANSACTIONS AT POS		CARD TRANSACTIONS AT ATM	
	OUTSTAND CARDS	NUMBER (IN MN)	VALUE (IN Rs. Cr)	NUMBER (IN MN)	VALUE (IN Rs. Cr)
2009	190.58	21.58	3,133	301.65	98,564
2010	220.13	28.26	4,966	368.75	112,560
2011	255.56	30.52	5,591	449.87	123,410
2012	306.83	39.89	6,779	468.23	141,636
2013	374.19	54.94	8,686	551.66	171,308

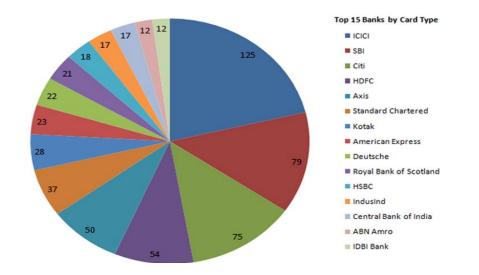
DEBIT CARDS vs. CREDIT CARDS

Here is a chart detailing the payment mode chosen by consumers for specific expenses in 2010. The stats are taken from a survey conducted by Compete.com of credit cardholders. The percentages do not equal 100, as the other choices not shown here are cash and personal check.

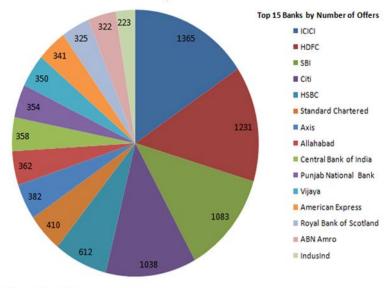


SOURCE: Chart was originally presented in "Wallet Wars - Part I" on the Compete com website

TOTAL NUMBER OF CARDS AVAILABLE BY BANK



TOTAL NUMBER OF OFFERS BY BANK



Total Number of Offers by All Banks: 10126

SUMMARY & SUGGESTIONS

- Plastic Money holders should strictly follow the guidelines and precautions suggested by the RBI, Banks and Card issuing Agencies with respect to card features, billing cycle, fee structure, interest calculations and other terms and conditions before accepting the cards.
- Cardholders should select the right kind of card that best meets their needs.
- Due consideration should be given to interest rate, fee, rewards and offers.
- Credit cardholders should make payments within the interest fee period of credit and ensure its regularity.

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- Banks should take necessary steps to maintain the ATM's and POS terminals to avoid its malfunction/defects to eliminate the inconvenience to the cardholders as well as merchants.
- Banks should avoid the issue of unsolicited cards, loans and policy to the cardholders and its activation without their consent.
- Banks should take necessary steps to conduct awareness programmes for the cardholders regarding the facilities of Banking Ombudsman and the Consumer Courts in addition to the Customer Grievances Redressal Cells for settling their disputes /grievances in using of plastic money.
- Banks should conduct intensive AWARENESS, TRAINING & EDUCATION programmes for promoting plastic money and its use.
- ♦ It should make arrangements for CREDIT COUNSELING & FINANCIAL PLANNING.
- Banks should set up CREDIT BUREAU within the banks which will help to analyze the credit worthiness and repayment capacity of the cardholders.
- In order to avoid high default rates and related BAD DEBTS from the credit cardholders banks must take precaution in the form of securities such as deposits, personal guarantees, title on goods purchased on credit, accepting bill of exchanges etc
- Banks should conduct awareness camps for merchants to establish POS machines in more business establishments working in urban, semi-urban and rural areas.
- Banks should also reduce the floor limits fixed for each category of merchants to increase the volume of business through card acceptance and also to offer reward packages to the merchants to promote the acceptance of plastic money.
- Merchants should be trained by banks for proper transaction processing through electronic devices for card acceptance and also to indentify the security features of cards, recognize card frauds.
- To avoid misuse of cards and reducing card frauds banks should set up a powerful identification system and encourage sound risk management practices.
- Interest rates on credit cards may be reduced because currently it is higher than other consumer loans. Interest rates should be charged according to credit ratings of the cardholders.

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- ♦ Make the transactions more transparent and simplify the proceedings. This will lead to attracting more customers and maintaining the existing ones.
- ♦ Card Associations such as Visa, Master Card etc. should act with greater responsibility while formulating rules, setting fee.
- Government should play an important role in encouraging the promotion of card payments through various concrete practicable measures like creating a favorable policy environment for it.
- ♦ Government should take steps to enact a National Usury Law, which are followed in developed countries for providing better consumer protection from excessive interest rates.
- ♦ Government should also take initiative to move from cash to cashless society. Widen the card usage by using it for utility payments such as payment of bills, taxes, insurance premium, fee etc. and also for payments where traditionally one has been paying by cheque or cash.

CONCLUSIONS

- ♦ Cardholders should use the cards wisely. They should avoid unnecessary purchases and be disciplined in spending.
- Credit cardholders should pay the credit card bills promptly and in full to avoid financial charges. Otherwise, pay at least the minimum amount due on time every month.
- ◆ Cash advance facility through ATMs by using credit cards should be avoided because the interest for this is more than the interest rate on personal loans.
- ◆ In order to reduce high interest rates on credit card bill outstanding, the better way is to convert it into personal loans. Personal loans carry low rate of interest.
- ✤ In order to satisfy the care holders, merchants may avoid the arbitrary fixing of minimum and maximum amount of purchases and levy of commission / surcharges.
- ★ Merchants are to be properly trained by the banks for proper transaction processing through electronic devices for card acceptance and also in handing the problems of cardholders at the sales outlets.
- ✤ The merchants should do appropriate diligence while accepting plastic money. They should take all necessary steps to data protection and cardholders' privacy.

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- Banks should take necessary measures to conduct cardholders meet to create awareness on the befits of using plastic money and also on various privileges of plastic money.
- In order to avoid the problems of cardholders, banks as well as merchants should take utmost care in preparing bills and other statements to avoid issuing of incorrect and incomplete receipts and bills to them.
- The dealings of DSAs/DMAs with the cardholders should be more cordial then only cardholders can be retained. It is also suggested to entrust the responsibility of collection of debt from cardholders to the employees of banks and also collection centers at each point.

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