

PLASTIC MONEY IN INDIA – BENEFITS, ISSUES AND ITS SECURITY MEASURES

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Abstract: The Government of India announced the demonetisation of all Rs.500 and Rs.1000 bank notes on 8th November, 2016 in order to control the deep-rooted “disease” of corruption and black money. Central bank’s core objective is to move people away from holding cash to the plastic money or virtual world (online banking) where it becomes easy to monitor the source of transaction. Likewise, the demonetization drive has made people cashless on their hands and forced them to go digital and then use alternative payment modes such as plastic money - credit and debit cards to meet their financial needs. A recent survey shows that there is 60% rise on overall growth in usage of plastic money in India and 70% rise in usage of debit cards in our nation. According to the winter survey of Yatra.com, there has been a rise in inclination to use credit or debit cards post demonetisation, as 37.4 per cent Indian travelers choose plastic money over cash for making bookings and during travel. There are various forms of plastic money includes credit cards, debits cards, ATMs, smart cards, charge cards, gift cards, etc. Plastic money has an advantage of eliminating the need for carrying huge cash, which is risky and inconvenient. It also minimizes the risk of loss or theft. In the case of plastic money like debit/credit card, people can report any issue of theft or loss to the bank and block the card immediately for avoiding misuse. This paper highlights the introduction, types, benefits, issues and security measures of plastic money in our nation.

Index Terms - Plastic Money, Debit card, credit card, digitalization.

I. INTRODUCTION

Plastic money or polymer money, made of plastic, is a new and easier way of paying for our goods and services. Plastic money was introduced in the 1950s. Now it is an essential form of ready money which reduces the risk of handling a huge amount of cash in hand. Plastic Money includes credit cards, debits cards, ATMs, smart cards, gift cards, customer card or store card, etc. Plastic money is the substitute to the cash or the standard 'money'. Due to demonetisation and awareness of Government’s Digital payment, people started to use plastic money as casual as money on buying their products and services.

II. TYPES OF PLASTIC MONEY

Plastic money is a term that is used primarily in reference to the hard-plastic card in place of actual bank cash notes. Plastic money is available in many different types/forms such as cash cards, credit cards, debit cards, pre-paid cash cards, gift cards and store cards. The followings are the various forms of plastic money and its advantages & drawbacks. Figure No.1 shows the number of plastic cards on usage in the market on bank-wise.



Figure.1 No. of Plastic Cards on usage

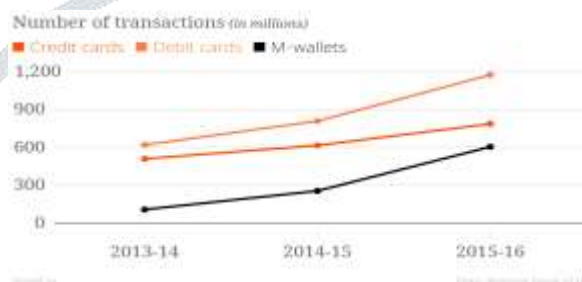


Figure.2 No. of Transactions using plastic Money in India

Figure No.2 shows the number of transactions using the plastic money in India for the years 2013-14, 2014-15 and 2015-16 respectively. It clearly explains the tremendous rise in the transactions using the plastic cards.

The followings are the various types of plastic money in the market to fill out the financial needs of the customers.

2.1 CREDIT CARD

- ✓ Cashless payment with some spending limit
- ✓ Payment takes place after the purchase of Goods/Service
- ✓ Great flexibility and Long period of repayment
- ✓ Most well-known credit cards are American Express, Mastercard, Visa

The advantages of using credit cards are good protection against fraud and it provides an easy way to pay for the unexpected purchases. The drawback of using credit card is that if you don't pay back the full amount there's usually heavy interest rate on the money we have borrowed.

2.2 CHARGE CARD

- ✓ Cashless payment without a set spending limit
- ✓ Payment takes place after the purchase of goods and services
- ✓ No credit facility or installment facility
- ✓ Most well-known charge cards are American Express, Diners Club

The advantages of using these cards are that they often come with extra perks such as travel insurance or rewards, but usually at the price level of a high annual or monthly fee. The problem is that if you don't pay your bill the charges can be much higher than credit card interest rate and also your card might be cancelled.

2.3 DEBIT CARD

- ✓ Debit Card is directly linked to the cardholder's bank account.
- ✓ Amount is debited immediately from the bank account.
- ✓ No credit or installment facility available to the users.
- ✓ Most well-known debit cards are Maestro, Repay card, Visa card, Master card, Postcard, etc

The benefits of using this card are there is no borrowing involved but the drawback of using this card is having less fraud protection against unauthorised transactions on this card.

2.4 CUSTOMER CARD/STORE CARD

- ✓ Customer Card with payment and credit function
- ✓ Can only be used at specific retailers
- ✓ Well-known customer cards: my One, Globus, Media Market

The advantage is this card comes with deals and discounts in-store but the interest rate is usually much higher than a credit card, so it will cost you more if you don't repay in full each month.

2.5 PREPAID CARD/GIFT CARD

- ✓ Card is topped up with credit before use
- ✓ No credit or installment facility
- ✓ Open system (American Express, Visa, Mastercard) or closed system (can only be used at specific retailers)

The benefit of using this card is Safer than cash notes because you can cancel the card immediately once it gets lost or stolen by others. Also, the challenge is that it is not accepted everywhere and you may have to pay fees for using this card or for topping it up.

III. ISSUES OF PLASTIC MONEY

As a contribution of the technological advancements and demonetisation, every nation is making awareness on using the plastic money a lot but it cannot replace the paper money 100% since plastic money comes with lots of issues. Now In this Digitalisation world, we cannot avoid plastic money due to certain socio-economic, demographic, financial, technological and other environmental factors. With the increase in use of e-commerce and plastic cards, online frauds have also been increased due to loss or theft or misuse of plastic cards or involvement of the bank staff or employees at the purchase point of sale counter or their ignorance. Online thieves can easily hack our information from the bank statements or other office documents containing our cards information or even mobile phones or an opened email id in the browsing centre.

If a person lost his wallet, he can manage the loss of cash but loss of cards may lead to the higher risk of misuse. By holding so many cards in the wallet, the weight is increased which is dangerous for health too. Apart from the theft or misuse, use of plastic money also makes us extravagant as we like to pay within few seconds, to get discounts and attractive offers. Surfing the net long hours for schemes and online shopping separate us from our family and friends, turning us into short-lived behavior, impatient and a stressed lifestyle forgetting that these discounts and offers take much from our life which is unrecorded. We are losing or getting out of our traditional, sociable and peaceful life.

In case of stolen cards, cardholders are aware about the loss but in case of application fraud, the cardholders are not aware of it until the misuse of the cards by the forger. Our Plastic cards can be hoarded by the forger for a long time and it is quite difficult to find the source of theft. In that case cardholder has only the option to mitigate risk of fraud by regular checking of the account balances with Updated bank mini statements.

In a report of National Payment Council of India (NCPI), a malware had attacked the servers of HDFC, SBI, YES bank, Axis Bank, and ICICI and also affected more than 32 lakhs credit card which are mostly issued by Visa and Mastercard and some RuPay cards. Economic times claimed that malware was spread through the ATMs of Hitachi Corporation. Trak.in website announced that a malware was spread into ATM of Yes Bank in Himachal Pradesh and servers of other banks. In general, a malware in an ATM can enter in the server of the bank and can access all the details about the bank transactions, users' details and other information such as username, Password, PIN numbers, Aadhar card and Pan Card numbers, etc. Due to the networked branches, malware is further crept into other bank's servers and get affected there also.

IV. SECURITY MEASURES OF PLASTIC MONEY

One of the key securities to the plastic money thefts or frauds is the implementation of smart money by the use of smart phones as the consumption of smart phones is increasing rapidly in India, the market is huge for the smart phones in which manufacturer provide inbuilt security, biometrics system, passwords and other android application that are free of cost and can be downloaded easily.

The followings are the important security measures in order to safeguard our credit cards, Debit cards and other cards.

4.1 SET AN UNPREDICTABLE PIN NUMBER (LOG IN AND TRANSACTION) AND PROTECT IT

Do not set your name, date of birth, address, phone number or any other personal information when you are creating your new PIN for login and transaction of your bank transactions in mobile banking or online banking. Create a unique mix of numbers and memories it securely. You should not write it down anywhere. Generally, we should change our PIN periodically for further security. Also, when we use your cards at ATMs or supermarkets or stores, ensure that you are not being shoulder surfed by any others.

4.2 CREATE A STRONG AND UNJUDGED PASSWORD

Create a password using a long mix of alphabets, numbers, alphanumeric and special characters with upper and lower case so that it cannot be easily judged by others.

4.3 SWIPE CAREFULLY

Be aware of various forms of ATM theft through media. Watch out for some electronic devices like skimmers and scammers at your ATMs and bugged point-of-sale machine at shopping outlets, as your debit and credit card information can be stolen and misused later as the process of our cards takes a few seconds only, it often goes unnoticed by the card-holder. When you are using your cards, make sure that you use your cards at secure outlets and ATMs.

4.4 BEWARE OF MALWARE/VIRUS

Our electronic devices (Computer desktop, Laptop and Mobile phones) are the gateway to your banking account transactions. We should be careful about the files we download and install. By mistake, we may click any malware link that could potentially spy on your bank details and steal your personal data and bank account information like Aadhar card, Pan Card, Online bank username and Password, PIN numbers. Keep your operating system and antivirus software updated to battle the different digital vulnerabilities. If you log on to your bank account from a public computer, try to use the virtual keyboard in order to thwart key loggers Which may be installed on the electronic devices to steal keyboard inputs for login and passwords, PIN numbers, etc.

4.5 BEWARE OF FRAUDULENT ATTACKS

Stealing of sensitive information through fraudulent mobile calls or e-mails is regularly used to find out the OTP numbers, passwords, PIN number and other bank account details of a customer, which are then used to make unauthorised transactions or online purchases or any money transfers. So, customers should avoid responding to this fraudulent calls and emails from unofficial sources to prevent the misuse of our bank account. In addition, don't disclose your personal information, Mobile OTPs and PIN even if someone claims to be a bank staff.

4.6 BE VIGILANT WHILE DISPOSING OF DOCUMENTS

Your old bank statements, credit card bills and insurance premium details can be visible to the people who can use it wrongly. It may lead to misuse of your personal financial information and transactions details. You must dispose such personal documents or bank details immediately once you have done the transactions to avoid the identity theft.

4.7 REPORT MISUSE/LOSS OF CARD IMMEDIATELY

Contact the banker or card issuer immediately as you realize that your card has been lost or stolen or misused by anyone. Banker and Card-issuing companies should provide their toll-free numbers and 24X7 hour customer services for reporting missing or stolen or misuse of the cards. Once you report the stolen or loss or theft of your card to the banker, you won't have any additional responsibility for the charges you didn't transact.

V. CONCLUSION

As there is a need of digitalization and growth of our Indian economy, we have to change our traditional way of cash transactions (cash notes) to the modern way of cash transactions like using plastic money for our financial needs. Nowadays there are various forms of plastic money in usage especially debit cards and credit cards in the payment of mobile recharge, online purchasing, electricity bills, telephone bills, travel bookings, temple darshan bookings, room bookings and also even offline purchasing using our plastic money/cards. The use of plastic money has been using predominantly by the people as it is convenient and necessary to this digital world. Since the usage of cards is increasing, the misuse and fraudulent activities on these cards are increasing. People have to be well secured in using their cards in order to avoid the loss/theft of their hard-earned-money.

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