PLASTIC MONEY: PROSPECTIVE AND CHALLENGES

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Abstract:
In present era, it is impossible to imagine modern bank transactions, commercial transactions and other payments without using the plastic cards. Plastic currency is now gradually becoming a necessity across the globe as more and more developed countries are opting for plastic compared to paper as there are several inherent advantages. The growing involvement of smart phones has made technology applications much more accessible to users. The Government also move forward for a “Digital India” and its focus on growing electronic payments is significant drivers of growth in replacing physical payments with technology-backed solutions. India is at the stage of an amazing shift towards electronic money from traditional cash. For instance the Pradhan Mantri Jan Dhan Yojana (PMJDY), is slowly building recognition among people to move from paper to electronic money. The PMJDY alone has seeded over 150 million Rupay cards in the last year, in addition to the 400 million debit cards already in circulation. There is still emergence for significant increase in the usage of debit cards in the years to come as card. This paper focus on the challenges and future prospects of plastic money in India.

Keywords: Credit Card; Debit Card; Future Prospects; Plastic Money.

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1. Introduction

Plastic money as the name suggests the money made out of plastic, an easy way to make payment in exchange of goods and services to reduce the usage of cash. The concept plastic money came into 1900’s and the first plastic card was used in USA. The idea behind using plastic money was to make payment system cashless. Plastic money includes ATM cards, credit cards, debit cards etc.

2. Plastic Money in India: An Overview

The Plastic Money in the form of cards has been actively introduced by banks in India in 1990’s. But, it was not very popular among Indian consumers at the time of its introduction. The change in demographic features of consumers in terms of their income, marital status, education level etc., and upgradation of technology and its awareness has brought the relevant changes in
consumers' preferences. These changing preferences have also modified their outlook and decision regarding the acceptance and non-acceptance of particular product and services in the market. Thus, the Plastic Cards are gaining popularity among bankers as well as customers and getting accepted in the market place. It can be imagined that the Plastic Cards market is growing at a large pace in India yet, it has long way to go if compared to the usage trends of other countries. Hence, it has become important that the payment system in India has to be modernized enough to be at par with the systems prevalent in other countries, since our domestic financial markets are increasingly getting integrated with markets abroad. (Survey of India, 2005) Reserve Bank of India (RBI) is taking important steps to enhance Plastic Card's usage and popularity through initiatives like regulating card market to maintain the security levels and to build up confidence of bankers and customers. Despite the strong advances in E-Payments, an estimated 90 percent of personal consumption expenditure in India is still made with cash (Country Survey - India, 2005) which indicates the tremendous growth potential of this business. So, this can be considered as just a beginning which indicates the bright future prospects of Plastic Card market in India. It clearly indicates that the Indian banking sector is accepting the challenge of information technology as all the groups of bankers have now recognized it as essential requirement for survival and growth in future.

3. History of Plastic Money

3.1. 1900-1950’s

The Beginnings
With a history of “plastic money”, you cannot ignore charge cards. Charge cards laid the groundwork for debit and credit cards. Company-issued charge cards can be found as far back as the early 1900’s. These cards mainly just kept customers loyal to the company.

Charg-it
“Charg-it” was the first actual bank card and was issued in 1946. The card was invented by a banker in Brooklyn, by the name of John Biggins. However, only local purchases could be made.

The Diners Club Card
The concept of the credit card was initially acted upon by Frank Mcnamara. After dinner with a fellow business associate, Frank found himself short on cash after forgetting his wallet. What followed was an epiphany that led him to think of a charge card. This card, later known as the “Diners Club Card”, could be used at multiple locations. This novel idea became the first true model of the multipurpose charge card.

American Express
American Express issued their first credit card in 1958. Due to their international presence, the Green Charge Card was globally accepted. This became the first internationally available credit card.

Bank Americard
In 1958 Bank of America introduced a unique card that could be used to purchase anything at participating merchants. In other words, it was a universal card so the cardholder did not need
multiple cards for specific destinations. This card also set industry standards such as 25-day grace periods, credit limits, and floor limits. The pilot program in 1959 initially had 60,000 customers and was a huge success. The program was then rolled out state wide in California.

**Mag Stripe**
Credit and debit cards would not be what they are today without the Mag Stripe. This momentous leap in card technology arrived when the CIA hired IBM to attach a magnetic stripe to their identity cards. The technology was already available; however, the main problem was permanently attaching the stripe to the card without wrinkles. While working on this problem, Forest Perry came home from work to find his wife ironing his clothes. When he mentioned the problem about the stripe, Forest’s wife asked to see the prototype card. Using the iron, she managed to melt the stripe to the card wrinkle-free. This solved the entire problem, which allowed IBM to go into full production with the Mag Stripe on all their cards.

**Automated Teller Machine (ATM)**
One of the most convenient aspects of plastic money is the all-serving ATM. The ATM (Automated Teller Machine) was brought into existence in the 1960’s by John Shepperd-Barron. After an unfortunate and unsuccessful trip to the bank, John had to wait until the next day when it opened again. That night, while reportedly taking a bath, John thought of a self dispensing cash machine. Along with the invention of what was soon to be the ATM, he also invented the 4-digit international standard pin code. John first wanted a six-digit army serial; but his wife convinced him four digits would be easier to remember.

### 3.2. 1970s – 1990s

**VISA**
Originally the Visa card started as the BankAmericard program and was never intended to go national, or international for that matter. In 1965 BankAmerica begin a licensing program with banks around California. After enough banks subscribed to the program, BankAmerica was able to create a joint venture bank association. This eventually rolled out on an international scale and BankAmerica changed the name of their card to VISA International. They also created a domestic America version named VISA U.S.A. This two card system allowed VISA International to be more easily accepted across other countries due to having no association with America. The acronym VISA stands for Visa International Service Association; BankAmerica felt the name change was appropriate since VISA would be instantly recognized in many different languages. Their success continued and eventually they joined the Plus ATM network becoming even more accessible to customers around the world. These strategic branding choices allowed VISA to become one of the most recognizable and successful consumer brands today.

**Mastercard**
While the BankAmericard was gaining precedent around California, in Kentucky their competition was also gaining strong ground. Crocker National Bank, Wells Fargo, and Bank of California came together and launched the Interbank Card Association (ICA) in 1966. Three years later, Mastercard changed their logo and came out with the iconic red and orange overlapping circle. However, it was not until ten years later when Mastercard became the Mastercard we know today. The 80s were also a revolutionary decade for MasterCard. They
released their emergency card replacement program; they entered the Pacific Rim, and acquired Cirrus which was the largest ATM network in the world. After such a successful decade, MasterCard capitalized on their advancements and became the other key player in the market along with VISA.

**Discover Card**
The Discover Card was a revolutionary card in the 1980s. It specifically presented Sears and Roebuck & Co. customers with a new credit card option. This card was the first of its kind to have no annual fee, cash back, and high credit limits. The only problem was that since it was associated with Sears, other retailers were ready to accept it, as they would be helping their competition. Eventually Discover realized that their brand needed to completely separate from Sears and so they proceeded to do so. Separating from Sears made Discover more attractive for other merchants to adopt the card. By the early 1990s, Discover became incredibly successful and was regarded as a competitor of merit to Visa and MasterCard.

**1990s – Today**
To compete in technological world, credit and debit cards have become more efficient and instantly accessible across multiple mediums. With new technologies such as mobile platforms, this presents numerous opportunities for vendors and consumers alike.

**Chip and Pin**
One of the more disruptive changes to plastic money came with the adoption of chip and pin technology. This system has become a standard with credit and debit cards and is preferred to the magnetic stripe. Chip and Pin technology makes cards much more secure and personal information is very hard to steal because of the encrypted chip. A cloned chip can also be immediately recognizable as a fraudulent card, as each individual chip is specifically encrypted for each individual card. Even though this card technology has been around since the 1990’s, it has become nationally used across Canada, and will become mandatory in the United States by October, 1st 2015.

**Square**
As able to accept transactions through a mobile device is a game changer for businesses. This was largely made possible by a company called Square. Square allowed a cell phone to be used as a point of sale system and accept card payments anywhere. The device simply plugs into the headphone jack and has a card slot for the customer to swipe their card. Introduced to the market with a 2.75% flat rate fee, mobile card readers have definitely a significant contribution to plastic money. Square has opened the door for many small businesses across the world that can now offer their consumers more ways to pay.

**YesCard**
The YesCard is a new way of accessing online loans and getting money instantly. The old ways of taking loans in the form of a cheque or cash, having to wait days for processing and then taking the time to deposit the money are gone! The Yes Card allows you to access and use your loans any time any place and faster than anywhere else.
4. Future Prospects

In present technological world, we need secured payment options. Smooth, simple and secure payment processes will help bring about behavioral changes and faster adoption of digital payments and banking among un-banked segments. When new players enter the market, each with a slightly different take on the market and with differing business models, the increased competition will help the environment and offer more options for consumers to choose from. A larger pie with more players is definitely good for the changing dynamics of the payments industry, which is still nascent in India. Indian consumption is still dominated by cash, with cards contributing only 5 per cent of the personal consumption expenditure. In developed countries, 30-50 per cent of spends happen through cards. So there is huge growth opportunity. The rapid growth of smartphones, Internet penetration and e-commerce is complementing these; card payment volumes have been growing in excess of 25%. We expect this trend to continue, aided by the continued increase in debit card activation and usage; debit card transactions have been growing at 31 per cent each year. Intense competition and strategic collaboration among existing and new market participants like the payments and small banks and wallets will help scale up acceptance and foster more creativity, innovation and consumer choice. According to him, the future holds exciting times for the payments industry in India, as all stakeholders and regulatory authorities come together to achieve a “less-cash dependent” and eventually “cashless” society. The credit card industry in India sees greater acceptance among consumers this year. According to Worldline India Card Payment Report 2014-15, the credit card base grew at 9.8 per cent in the past year. Worldline India is a leader in the payment and transactions services in the country. Alternative methods like mobile wallets and prepaid cash cards accounted for 3 per cent of digital transactions. This industry has been growing steadily over the past few years. Card transactions, both by debit and credit cards, are on an upward trajectory. There are interesting dynamics at play in the Indian payments industry.

5. Growth of Plastic Money

Growth of plastic cards with different banks and in past few years is shown here. We can see that number of transactions and cards is outstanding. We can imagine the future of plastic cards in our country.
6. Statement of the Problem and Need for the Study

There has been a drastic change in the banking products and the services by use of new technology. Usage of Plastic Money such as Debit Cards and Credit Cards started increasing in India over a period of time. Most banks now issue Debit Cards, where they have already converted all their ATM Cards into Debit cards or ATM - cum - Debit Cards. The reason behind this is to deduct bank costs. But the customers are in confusion about its usage. Such cards have overcome the delayed payment process of cheques due to which sometimes merchants have to suffer. Still, there are lot of technical problems involved in transactions, PIN and other operational aspects. It is an excellent step to remove problem of cash. It has changed the buying habits of customers. From psychological standpoint, human need for money is proportional to what each specific person is interested in buying and what they think is within range. Credit card facility helped people in estimating their future expenses. During the past few years (2005 - 2010) of Credit Card debt signals a deep economic trouble that goes far beyond consumer irresponsibility. Since Credit Card transactions carry a higher risk, it is necessary to encourage the use of Debit Cards, RBI said. Credit Card fraud is a wide - ranging term for theft and fraud committed using a Credit Card or any similar payment mechanism as a fraudulent source of funds in a transaction. ATM frauds and bank card fraudulent activities are increasing resulting in crime rates and affecting the society very badly in the state. Increased consumer spending ultimately leads to business growth. It serves as an important driving force and facilitator for economic and business growth through capital accumulation, increased consumer spending, enhanced tax revenues, preventing money laundering and black money. Traditionally, Indian business transactions are mostly carried out by using liquid cash. But, with the emergence of information technology, growth of internet, improved payment structure, E - Commerce (Electronic Commerce) and E - Banking development, entry of foreign banks and new generation banks, high level of competition, easy availability of credit, increase in affluence levels and income of middle group, greater amount of consumerism, fast changes with regard to life style etc., the Indian economy witnessed the growth of Plastic Money - credit cards and debit cards - in terms of usage by customers and acceptance by merchant establishments. In this background, present research aims to understand the Impact of Plastic Money focusing on different dimensions among the selected bank customers. The Impact of Plastic Money on the Bank Customers in Karnataka State tries to make analysis of the Impact from three dimensions.
viz, economic dimension (financial aspects), socio-cultural dimension and psychological dimensions. It is observed that very little work is carried out in the area of Credit and Debit cards covering Public and Private sector banks in Karnataka state focusing on the Southern Zone (selected sample area). The present study focuses on to understand how the Plastic Money affect the lifestyle, standard of living, saving habits, spending trends among the selected bank customers, tries to analyse the impact on the socio-cultural changes, passion towards usage of credit cards, economic influences such as disposal of income by use of Plastic Money, increase in the purchasing power, use of updated technology by bank customers and their influential factors, such as psychological factors which is affecting the healthy relationship between the family members and spouses. It also makes an attempt to make a comparative study between the public and private sector banking services specifically towards credit and Debit Cards. 01. To study the impact of Plastic Money, and economic (financial aspects) dimensions with the time duration of holdings; [short, medium and long term];

Financial cards witnessed a robust growth in India in 2002-03. The number of cards in circulation increased by almost 50 per cent. The growth in transaction value, at 95 per cent, was even more spectacular. These results are attributable to the thriving economy which led to a large increase in disposable income for mid- and high-level income groups in urban and metropolitan areas. Consumers were not only more open to the possibility of owning a financial card but were also more than willing to use their cards to settle dues. The status symbol aspect of owning and using cards, too, played its part in bringing about such robust growth over the space of a single year. Debit cards, in particular, proved immensely popular. The number and transaction volumes of all types of financial cards grew substantially between 2002 and 2003. But it was debit cards that played the pivotal role. Consumers preferred debit cards because they were wary of winding up spending more than they could afford. Another contributing factor was the quiet but aggressive promotion campaign launched by key `producers' in this sector. The growth of credit cards in number and transaction volumes in India was low compared to other countries in the Asia-Pacific region. But there is definitely room for further growth. Debit cards, too, have yet to realize their full potential. Among the factors that limited growth was the comparatively slow rate of growth of ATMs in India. This is not the way most Indians perceive this issue, but cross-country statistics very definitely bear out the position as stated in the Executive Summary of a $1400-report on `Financial Cards in India'. It is, however, expected that this constraint to further growth will ease up in the near future as the advent of ever-new technologies drives down the costs of opening and operating terminals. In the meantime, the trend in India has been to greatly enhance the networking of ATMs. Cards issued by one bank, are increasingly accepted by ATMs owned and operated by other banks, on the payment of a small fee. This, incidentally, is true of debit cards as well; not only of credit cards. A large number of cardholders, however, remain unaware of this development. Debit cards issued by, say, HSBC, can be used at all `Visa electron' enabled ATMs, including those belonging to Citibank and HDFC bank. HSBC debit card drawals on HDFC Bank terminals cost only Rs 55. If, on the other hand, you merely wish to check the balance in your account, you can do so for a mere Rs 15. Credit cards are often used for `big ticket' spending in India, like dining at 5 star hotels, and purchasing (often reimbursable) air tickets. Industry sources believe that in future credit cards are also likely to be used in a big way for the payment of school fees, and hospitalization expenses. Projections for the 2003-2008 period, the number of financial cards in circulation will register a compounded annual growth rate of nearly 51 per cent. These estimate, however, seems conservative, representing as it does
only a 2 per cent increase over the growth between 2002 and 2003. Debit cards are expected to continue to spearhead the growth of financial cards in terms of the number of cards. Though, for a variety of reasons, this may not be the case in terms of transaction volumes.

7. Literature Review

The literature relating to the topic as under: ManideepKaur and KamalpreetKaur (2008), in their article, “Development of Plastic Cards Market: Past, Present and Future Scenario in Indian Banks” conclude that Indian banking sector is accepting the challenge of information technology as all the groups of bankers have now recognized it as essential requirement for their survival and growth in future. Despite the strong advances in e-payments, an estimated 90 percent of personal consumption expenditure in India is still made with cash which indicates the tremendous growth potential of this business. So this can be considered as mere beginning which indicates the bright future prospects of plastic card market in India. P Manivannan (2013) in his research paper “Plastic Money a way for cash Less Payment System” examined that Plastic Money i.e. usage of Credit card was measured a luxury, and has become needed. These plastic money and electronic payments was and used by only higher income group. This facility extended not only to customers in urban areas or cities, but also to customers residing in rural area. However, today, with development of banking and trading activity, the fixed income group or salaried classes are also start using the plastic money and electronic payment systems and particularly Credit cards. In this research paper an attempt has been made to study an overview of the development of banking in the plastic cards usage trends since these have been introduced in Indian banking sector. The study also highlights the role of these cards as electronic payment tool to be used by customers and discusses the penetration of these cards in replacement of cash and paper money. The factors for adoption of plastic money in replacement of cash and paper money have been identified which shows the preference of the customers for plastic cards over the cash and paper money.

7.1. Plastic Money

The Currency of Modern India The Indian card market is at par with the best in the world. Here are some indicators. Profitable usage: Credit cards can be used online with a separate security number to prevent misuse. This has increased profitability. Credit cards are now increasingly being used to pay for even school fees and hospitalization expenses. Safety standards followed by players to prevent misuse match the best in the world. For example, any transaction above a particular sum is automatically referred to the issuing bank which calls up the cardholder in a matter of seconds on the mobile phone to confirm the purchase. Product features too match the best anywhere in the world. Almost all credit cards come with standard frills such as free accident insurance, medical insurance at a heavy discount and much more. The cardholder is offered the option of converting a big purchase made on credit card into a loan at a lower rate of interest spread over a long period.

7.2. Challenges

Challenges faced 21st Century banking has become wholly customer-driven &technology driven by challenges of competition, rising customer expectations & shrinking margins, banks have
been using technology to reduce cost & enhance efficiency, productivity & customer convenience. Technology intensive delivery channels like net banking, mobile banking etc. have created a win-win situation by extending great convenience & multiple options for customer. From educating customers about credit cards there is a need to educate them about the differentiating factors of the cards. Because visa and master card are advertising regularly and thereby increases awareness. The strategy should be to emphasize on its differentiating characteristics. They also need to identify potential customers and target those using mailers. As internet is growing at a fast rate the net users can be targeted by having interactive sites. The prospective company’s card personality could also be used in the home page to solve customer queries in the best possible manner. Overall, there is currently a lot of innovation taking place in the following areas in India, which will encourage development of a cashless society and help the market move towards the idea of new payment methods. Growth prospects of plastic money Growing popularity of online shopping made increase usage of plastic cards more than previous years. It was primarily driven by the urban population and by the increased acceptance of cards by organized retailers.

8. Conclusion

The modern day, people like to make payment through debit or card cards rather than cash. It increased the use of plastic money. Due to major social and technological advancements, the banking landscape is undergoing massive change. The market is seeing increased availability of sophisticated technologies that can enable cashless transactions; however the perceived disadvantages such as the need for high IT investment by various service providers, security concerns, lack of technological awareness and the traditional mindset of Indians who prefer to use physical money seem to outweigh the potential benefits. With the change in technology and the improvement in the payment system has led to further development in plastic money.

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