A Study on Debit Cards

Dr. Yellaswamy Ambati
(Lecturer in Commerce, TS Model Junior College, Jangaon, Warangal, Telangana State, India)

Abstract: A Debit Card is a plastic payment card that can be used instead of cash when making purchases. It is also known as a bank card or check card. It is similar to a credit card, but unlike a credit card, the money comes directly from the user's bank account when performing a transaction. Some cards may carry a stored value with which a payment is made, while most relay a message to the cardholder's bank to withdraw funds from a payer's designated bank account. In some cases, the primary account number is assigned exclusively for use on the Internet and there is no physical card. In many countries, the use of debit cards has become so widespread that their volume has overtaken or entirely replaced cheques and, in some instances, cash transactions. The development of debit cards, unlike credit cards and charge cards, has generally been country specific resulting in a number of different systems around the world, which were often incompatible. Since the mid-2000s, a number of initiatives have allowed debit cards issued in one country to be used in other countries and allowed their use for internet and phone purchases.

Keywords: Debit Card, Credit Card, ATM, Bank, Master Card

I. INTRODUCTION

Debit cards are a great way to get more financial freedom without the risk of falling into debt. While most people probably have a debit card from their bank, knowing more about them can make it even more useful for everyday spending. Unlike credit and charge cards, payments using a debit card are immediately transferred from the cardholder's designated bank account, instead of them paying the money back at a later date. Debit cards usually also allow for instant withdrawal of cash, acting as an ATM card for withdrawing cash. Merchants may also offer cash back facilities to customers, where a customer can withdraw cash along with their purchase.

II. REVIEW OF LITERATURE

Review of literature paves way for a clear understanding of the areas of research already undertaken and throws a light on the potential areas which are yet to be covered. Keeping this view in mind, an attempt has been made to make a brief survey of the work undertaken on the field of Debit Cards. The reviews of some of the important studies are presented below.

Maganty (1996), “Changing Dimension.” the author discusses the emerging trend and importance of debit card in daily lives of Indian society. Debit cards are expected to be in use in places where most transactions are done by cash or cheque in supermarkets, petrol stations, convenience stores. These cards are designed for customers who like paying by plastic card but do not want credit. These cards not only keep the cardholder debt free but also provide a detailed account of spending. These types of cards are ideal for those who have a tight budget and want to keep within it. Study shows that there are two types of debit cards i.e. on line and off line debit cards. With the computerization and modernization plastic money will become the status symbols in the 21st century of Indian traditional bound society.

Radhakrishan (1996) study on “DEBIT CARDS” shows that the debit cards also have found wide acceptability than credit cards because of assurance of payments to retailers, switching of cardholders to debit card because of using interest free period to avoid high interest cost, annual charges as compared to debit cards etc. The study shows that the growth of service industry in the country, electronic fund transfer, point of services offer a large potential for banks to cutting down cost associated with the paper based clearing and payment services. The introduction of debit cards can take place subsequently and the objective should be to attain a critical mass in issuing number of such cards so that the operation becomes cost effective.

Bharagava (2004) title “Debit cards: A new generation plastic money” analyses that debit cards are fast catching up with the customers. A combination of factors like ease of availability, debit-averse profile of customer and zero interest rates are propelling the usage of Debit Cards. The study emphasizes to increase the usage of these cards, bank will need to improve infrastructure and continues to focus an increasing installations of point of sale [POS] in smaller cities and on the locations which are frequently used by cardholders, and to develop new marketing programmers that educate customers on the benefits of replacing cash with plastic.

Al-Laham (2009) in his research “Development of Electronic Money and its Impact on the Central Bank Role and Monetary policy” asserts that, in recent years there has been considerable interest in the development of electronic money schemes. Electronic money has the potential to take over from cash as the primary means of making small-value payments and could make such transactions easier and cheaper for both consumers and merchants. Electronic money is a record of the funds or “value” available to a consumer stored...
on an electronic device in her possession, either on a prepaid card or on a personal computer for use over a computer network such as the internet. This paper argues that electronic money, as network goods, could become an important form of currency in the future. Such a development would influence the effectiveness and implementation of monetary policy. Author feels that, if an increased use of e-money substantially limits demand for central bank reserves, it would require changes in the operational target of the central bank and a closer coordination of get of the central bank and a closer coordination of monetary and fiscal policies.

Objectives
The following are the Objectives of the Study;
1. To Study the History of the debit card
2. To Study the Common Features of Debit Cards
3. To Study the Types of debit card systems
4. To Study the Providers of Debit Cards;
5. To Study the Consumer protection with regard to Debit Cards
6. To Study the Financial access of Debit Cards
7. To Study the Internet purchases of Debit Cards
8. To Study the Debit Cards in India
9. To Study the Advantages of Debit Cards
10. To Study the Disadvantages of Debit Cards
11. To Offer Conclusion

III. RESEARCH METHODOLOGY
The prepared paper is a descriptive study in nature. The study has been carried out based on the collection of the relevant secondary data. Secondary data collection was based on various sources such as published books, articles published in different journals & newspapers, periodicals, conference paper, working paper and websites, etc.

History of the Debit Card
The debit card has been around since 1966, which means banks have had a lot of time to figure out new ways to charge you for using your own money. Wells Fargo this week announced a plan to test a $3 monthly fee for debit card users in five states, and as I reported earlier today, these fees are starting to really add up for consumers. But fees aren't new. So we decided to take a look at the history of debit cards and their fees. The first debit card may have hit the market as early as 1966, according to a report by the Kansas City Federal Reserve. The Bank of Delaware piloted the card. And by the '70s, several other banks were trying out similar ideas. Robert Manning, author of Credit Card Nation, said debit card usage picked up in the '80s and '90s as more and more ATMs started cropping up across the country. In 1990, debit cards were used in about 300 million transactions. In 2009, prepaid and debit cards were used in 37.6 billion transactions. Debit card fees aren't actually new. Wells Fargo has been issuing debit cards since 1990, and spokesperson Lisa Westermann said the company charged $1 a month to use debit cards in some regions as recently as a few years ago.

"As merchants began paying financial institutions for the convenience of processing debit card transactions (including payment protection), fees slowly went away," Westermann said in an email. Today, merchants typically pay a swipe fee each time a debit card is used. A Federal Reserve survey found the average swipe fee is 44 cents. Those fees added up to $16.2 billion in 2009 for prepaid and regular debit cards. Consumers are also using debit cards with greater frequency. An IBOPE Zogby International survey this summer found that, when making daily purchases, about 55 percent of consumers say they use their debit card more than half the time. Manning said many borrowers have seen their credit card limits cut. Others voluntarily cut back on credit card use. But banks see that as a problem, because in a few months, regulations -- which don't apply to credit cards -- will limit the amount they can charge in swipe fees. Recently the Federal Reserve Board -- as directed by financial regulation passed last year -- ruled the average swipe fee should be cut about in half. The new regulations go live in October. Wells Fargo estimated losses could be $250 million per quarter.

Common Features of Debit Cards
Some of the most common features of debit cards include;

- **Transaction Options**
  Debit cards can be used in a range of different ways and are often described as just like credit cards, but with the advantage of having your own money on the card. Most debit cards will enable you to access your money in the following situations:
  - At ATMs
  - In stores or restaurants
  - Online
  - Over the phone; and
  - Overseas
- Many banks also offer Visa debit cards and MasterCard debit cards, which can be used anywhere.
  
- **Account Management Features**
  One of the biggest advantages of debit cards is that they allow you to financial flexibility while also encouraging better financial management. There are a number of debit cards that offer greater access to banking services, like the ANZ Access Advantage debit card which gives cardholders unlimited access to ANZ ATMs, phone and internet banking, branch, cheque and EFTPOS facilities without any extra fees. For people likely to travel overseas, a debit card like the St George Complete Freedom will give you a Visa debit card for access to your money any time, anywhere in the world. It also offers unlimited branch, cheque and electronic transactions, which could be handy if you need to transfer funds while on the road.

- **Security Measures**
  Like credit cards, debit cards have a range of security features. Physical features include a unique debit card number (which can be used for electronic transactions), a signature panel and a three-digit card security code that ensures no one can simply copy your details off the front of the card then use them to buy things online. Visa debit cards, which you can get through a range of banks including ANZ, Citibank, Westpac and Suncorp, also offer a zero liability policy so if there are unauthorised transactions on the card you will not be held responsible for the charges. While it is easy to take anything convenient for granted, the features of debit cards can make a difference to your financial management and lifestyle. Plus, with so many different debit cards available, the possibilities are endless.

- **Debit Card Security Code**
  There are currently three ways that debit card transactions are processed: EFTPOS (also known as online debit or PIN debit), offline debit (also known as signature debit), and the Electronic Purse Card System. One physical card can include the functions of all three types, so that it can be used in a number of different circumstances. Although the four largest bank card issuers (American Express, Discover Card, MasterCard, and Visa) offer all debit cards, there are many other types of debit card, each accepted only within a particular country or region, for example Switch (now: Maestro) and Solo in the United Kingdom, Interac in Canada, Carte Bleue in France, EC electronic cash (formerly Eurocheque) in Germany, UnionPay in China, RuPay in India and EFTPOS cards in Australia and New Zealand. The need for cross-border compatibility and the advent of the euro recently led to many of these card networks (such as Switzerland's "EC direkt," Austria's "Bankomatkasse," and Switch in the United Kingdom) being re-branded with the internationally recognized Maestro logo, which is part of the MasterCard brand. Some debit cards are dual branded with the logo of the (former) national card as well as Maestro (for example, EC cards in Germany, Switch and Solo in the UK, Pinpas cards in the Netherlands, Bancontact cards in Belgium, etc.). The use of a debit card system allows operators to package their product more effectively while monitoring customer spending.

**Types of Debit Card Systems**
- The following are the Types of Debit Card Systems:

  - **Online debit system:**
    Online debit cards require electronic authorization of every transaction and the debits are reflected in the user’s account immediately. The transaction may be additionally secured with the personal identification number (PIN) authentication system; some online cards require such authentication for every transaction, essentially becoming enhanced automatic teller machine (ATM) cards. One difficulty with using online debit cards is the necessity of an electronic authorization device at the point of sale (POS) and sometimes also a separate PINpad to enter the PIN, although this is becoming commonplace for all card transactions in many countries.

  Overall, the online debit card is generally viewed as superior to the offline debit card because of its more secure authentication system and live status, which alleviates problems with processing lag on transactions that may only issue online debit cards. Some on-line debit systems are using the normal authentication processes of Internet banking to provide real-time online debit transactions.

  - **Offline debit system:**
    Offline debit cards have the logos of major credit cards (for example, Visa or MasterCard) or major debit cards (for example, Maestro in the United Kingdom and other countries, but not the United States) and are used at the point of sale like a credit card (with payer's signature). This type of debit card may be subject to a daily limit, and/or a maximum limit equal to the current/checking account balance from which it draws funds. Transactions conducted with offline debit cards require 2–3 days to be reflected on users’ account balances. In some countries and with some banks and merchant service organizations, a "credit" or offline debit transaction is without cost to the purchaser beyond the face value of the transaction, while a fee may be charged for a "debit" or online debit transaction (although it is often absorbed by the retailer). Other differences are that online debit purchasers may opt to withdraw cash in addition to the amount of the debit purchase (if the merchant supports that functionality); also, from the merchant's standpoint, the merchant pays lower fees on online debit transaction as compared to "credit" (offline).
Electronic Purse Card System:
Smart-card-based electronic purse systems (in which value is stored on the card chip, not in an externally recorded account, so that machines accepting the card need no network connectivity) are in use throughout Europe since the mid-1990s, most notably in Germany (Geldkarte), Austria (Quick Wertkarte), the Netherlands (ChipKnip), Belgium (Proton), Switzerland (CASH) and France (Moneo, which is usually carried by a debit card). In Austria and Germany, almost all current bank cards now include electronic purses, whereas the electronic purse has been recently phased out in the Netherlands.

Prepaid Debit Cards:
Prepaid debit cards that can be reloaded are also called reloadable debit cards. The primary market for prepaid debit cards has traditionally been unbanked people that is, people who do not use banks or credit unions for their financial transactions. But prepaid cards also appeal to other users attracted by their advantages.

Advantages
Advantages of prepaid debit cards include being safer than carrying cash, worldwide functionality due to Visa and MasterCard merchant acceptance, not having to worry about paying a credit card bill or going into debt, the opportunity for anyone over the age of 18 to apply and be accepted without regard to credit quality, and the option to directly deposit paychecks and government benefits onto the card for free. And if a user has doubts about online security, using a prepaid debit card for online purchases protects their normal credit card from risk.

Risks
If the card provider offers an insecure website for letting you check the card's balance, this could give an attacker access to the card information. If you lose the card, and have not somehow registered it, you likely lose the money. If a provider has technical issues, the money might not be accessible when you need it. Some companies' payment systems do not appear to accept prepaid debit cards. And there is a risk that prolific use of prepaid debit cards could lead data provider companies to miscategorize you in unfortunate ways.

Providers of Debit Cards
Some of the first companies to enter this market were: MiCash, RushCard, Netspend, and Green Dot who gained market share as a result of being first to market. However, since 1999, there have been several new providers, such as TransCash, 247card, iKobo. These prepaid card companies offer a number of benefits, such as money remittance services, card-to-card transfers, and the ability to apply without a social security number.

Consumer protection
Consumer protections vary, depending on the network used. Visa and MasterCard, for instance, prohibit minimum and maximum purchase sizes, surcharges, and arbitrary security procedures on the part of merchants. Merchants are usually charged higher transaction fees for credit transactions, since debit network transactions are less likely to be fraudulent. This may lead them to "steer" customers to debit transactions. Consumers disputing charges may find it easier to do so with a credit card, since the money will not immediately leave their control. Fraudulent charges on a debit card can also cause problems with a checking account because the money is withdrawn immediately and may thus result in an overdraft or bounced checks. In some cases debit card-issuing banks will promptly refund any disputed charges until the matter can be settled, and in some jurisdictions the consumer liability for unauthorized charges is the same for both debit and credit cards.

In some countries, like India and Sweden, the consumer protection is the same regardless of the network used. Some banks set minimum and maximum purchase sizes, mostly for online-only cards. However, this has nothing to do with the card networks, but rather with the bank's judgement of the person's age and credit records. Any fees that the customers have to pay to the bank are the same regardless of whether the transaction is conducted as a credit or as a debit transaction, so there is no advantage for the customers to choose one transaction mode over another. Shops may add surcharges to the price of the goods or services in accordance with laws allowing them to do so. Banks consider the purchases as having been made at the moment when the card was swiped, regardless of when the purchase settlement was made. Regardless of which transaction type was used, the purchase may result in an overdraft because the money is considered to have left the account at the moment of the card swiping.

Financial access
Debit cards and secured credit cards are popular among college students who have not yet established a credit history. Debit cards may also be used by expatriated workers to send money home to their families holding an affiliated debit card.

Internet purchases
Debit cards may also be used on the Internet either with or without using a PIN. Internet transactions may be conducted in either online or offline mode, although shops accepting online-only cards are rare in some countries (such as Sweden), while they are common in other countries (such as the Netherlands). For a comparison, PayPal offers the customer to use an online-only Maestro card if the customer enters a Dutch address of residence, but not if the same customer enters a Swedish address of residence. Internet purchases can
be authenticated by the consumer entering their PIN if the merchant has enabled a secure online PIN pad, in which case the transaction is conducted in debit mode. Otherwise, transactions may be conducted in either credit or debit mode (which is sometimes, but not always, indicated on the receipt), and this has nothing to do with whether the transaction was conducted in online or offline mode, since both credit and debit transactions may be conducted in both modes.

**Debit Cards in India**

The debit card had limited popularity in India as the merchant is charged for each transaction. The debit card was mostly used for ATM transactions. RBI has announced that such fees are not justified so the transaction has no processing fee. Most Indian banks issue Visa debit cards, though some banks (like SBI and Citibank India) also issue Maestro cards. The debit card transactions are routed through Visa or MasterCard networks in India and overseas rather than directly via the issuing bank. The National Payments Corporation of India (NPCI) has launched a new card called RuPay. It is similar to Singapore’s NETS and Mainland China’s UnionPay.

**Advantages of Debit Cards**

The following are the Advantages of Debit Cards:

1. **Extremely Convenient**
   The biggest draw for debit cards is how simple they are to use. Since the payment is taken directly out of your bank account, where the money already exists, it can be done instantly. This is much faster than having to wait for a credit transaction to go through, or having to worry about having enough cash to cover your expenses. It is especially faster than writing out a check, which many people no longer take.

2. **It’s A Cash Card Too**
   Sure, debit cards are nice, but sometimes cash is a necessity. If you are going garage sale-ing or to the flea market, you may have to have cash to make the purchases that you want to. Debit cards still have the ability to give you cash, you can take them to an ATM and use them there to withdraw the cash. In addition to ATM use, the majority of stores offer cash back options at checkout.

3. **Your Pin Protects You**
   Debit cards are protected by a four digit pin number that you set yourself. This pin is needed to make almost any purchase with your debit card. This gives you a great deal of protection against theft. These cards can also be canceled very easily and quickly, so if you lose it, you can prevent anyone from being able to do any damage.

4. **Anyone Can Have One**
   The only thing that you must have to have a debit card is have a bank account. Anyone can open a bank account with a small minimum deposit. This makes debit cards much different than credit cards, because approval for a credit card largely depends on your credit score and payment histories. None of these things are taken into account when getting a debit card.

5. **Strong Budgeting Tool**
   One of the best things about a debit card is that you cannot spend more money than you have, which means you cannot go into debt. This helps you to only spend the money that you have to spend because you cannot accumulate new debt, like with credit cards.

**Disadvantages of Debit Cards**

The following are the Disadvantages of Debit Cards:

1. **Your Credit Score Isn’t Helped**
   A person’s credit score impacts them for their entire life, whether it be negative or positive. With a debit card, you do not impact your credit score at all, which means that you cannot build it up. Having a higher credit score gives you lower interest rates and increased lines of credit.

2. **Fees Galore**
   When you have a debit card, fees are likely a part of your life as well. Banks inflict a wide variety of different fees to debit card holders, which can add up very fast. Some of these include monthly use charges, major overage fees, and transaction fees or limits.

3. **Instant Money Means Instant Risk**
   If someone got a hold of your debit card, they would be able to take money directly from your bank account. With a credit card, the charges are much easier to dispute, and they do not interfere with your direct lines of income the way that debit cards do.

4. **Merchant Blocks**
   Depending on where you are using your debit card, or what you are buying, the merchant can put a “hold” on your money. For example, if you are filling your tank up with gas, the gas station will likely put a hold up to 100 dollars on your card, this is because they want to ensure that you have the funds to pay for the gas before you pump it. The bank can take up to 48 hours to free this money up again.
IV. CONCLUSION

Debit cards are one of the most common forms of payment used in the world today. These are cards that look identical to credit cards, which are linked directly to your bank account. Whenever you make a purchase, the funds are taken directly from your account, resulting in a simple and quick transaction. Debit cards are also known as “E-Checks” and didn’t come around until the late 1970’s, but they have changed the way that we purchase things globally. There are some spectacular benefits from using a debit card as your form of payment, but some negative things to consider as well.

V. REFERENCES

[1] "RBI fixes five free ATM withdrawals". Deccan Herald.
[4] "India card to be called RuPay".
[5] "India card to be called RuPay". The Times Of India. 2011-03-21.
[10] An Amtrak onboard ticket purchase several years ago was one case where a prepaid card was not accepted.
[11] "Oakland Residents Will Be Slammed With Fees If They Use City IDs As Debit Cards". Consumerist.
[12] "Chicago Transit Prepaid Debit Cards Also Fully Loaded With Fees". Consumerist.