Debit Card Fraud: An Imminent Issue in Cyber Crime

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Abstract: *With the growth of information and communication technology, the structure and nature of financial services delivery has also changed. Online banking or internet banking has emerged as a new and convenient way for using financial services like funds transfer, viewing account statement, bill payment, use of e-wallets etc. An upsurge in the use of devices connected with the internet and the convenience of online financial services has increased the risk of our hard-earned money being duped by cybercriminals of our hard-earned money. Debit cards are among the most popular payment methods for both physical and digital transactions worldwide. And, as the COVID-19 pandemic has led to a digital transformation worldwide, contactless method like debit and credit cards as well as e-wallets have gained further traction since 2020. Indeed, payment cards allow people to spend money conveniently without resorting to cash or bank transfers. On the other hand, this significant shift in consumer trends also opens up more possibilities for cybercriminals to steal victims' funds via debit card fraud. According to a FIS report, the pandemic-fuelled digital transformation led to a 35% increase in the dollar volume of attempted fraudulent transactions in April 2020 compared to a year earlier. While regulators are aware of this issue and are stepping up their game to protect citizens against fraudsters, criminals learn fast and utilise more sophisticated methods. Debit card fraud falls into two major categories: where the criminal uses the physical card of the consumer and card-not-present (CNP) fraud, in which fraudsters siphon money from the payment card via using it online or over the phone. The prior can occur in many ways, from theft on the street and intercepting your mail to attaching a card skimmer device to an ATM to create a counterfeit card.*

Keywords: Debit card, Financial Service, Cyber Crime

1. Introduction

Objectives of the Study

i) Try to increase about the debit card fraud to the general population.
ii) To highlight the possible means to protect or save from the debit card fraud in the near future.

Research Methodology

Focus group discussion with the different section of the society, Interview with the key persons like bank officials, community leaders, reviewed literatures etc. And, the present study is also used both the published and unpublished materials pertaining to the present study.

According to Wikipedia "A debit card also known as a bank card or check card is a plastic payment card that can be used instead of cash when making purchases. 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". (Debit Card, 2016).

In the previous years, the rate of use of debit cards has rapidly increased by replacing the need for cash and cheques transactions at all places and for all purposes. The best facility these cards provide is that they can be used worldwide and does not matter in which part of the world the card is issued. This card can also help in online purchases which increase its demands too.

A debit card works by debiting the money from you're checking or saving the account. Payments made via debit cards are directly transferred from the savings account unlike the credit cards, which allows you to pay back money at a later date. Debit cards also act as the ATM cards as the cardholder can withdraw cash instantly anytime. Now further detailed information about a debit card is discussed. This is how a debit card looks like (BEIGEL, 2016):

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personal data like social security numbers, date of birth, name, and billing address, perpetrators use this to purchase products and services at merchants to be sold later or open new financial accounts to monetise the stolen card details. In these cases, fraudsters use the physical card (or a cloned card) either at an ATM to withdraw cash or a point of sale (PoS) terminal at a merchant. On the other hand, cybercriminals utilise a wide variety of tactics to acquire debit card details for CNP fraud, including hacking centralised databases of merchants or financial services, skimming, and phishing attacks. After they have the necessary information-which is often paired with sensitive personal data like social security numbers, date of birth, name, and billing address, perpetrators use this to purchase products and services at merchants to be sold later or open new financial accounts to monetise the stolen card details.

Debit Card in Indian Economy:

A Debit Card is personal card provided to the customers by the Bank to enable the card holder to withdraw money or to have the cost of purchases charged directly to the holder's bank account. A debit card (also known as a bank card or check card) is a plastic card that provides the cardholder electronic access to their bank account at a financial institution. Some cards have a stored value with which a payment is made, while most relay a message to the cardholder's bank to withdraw funds from a payee's designated bank account. The card, where accepted, can be used instead of cash when making purchases.

Advantages of Debit Card:

A debit card is a plastic recompense card that can be used instead of cash when making purchases. 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 have a stored value with which a payment is made, while most send a message to the cardholder's bank to withdraw funds from a payer's selected bank account. In some cases, the primary account number is assigned solely for use on the Internet and there is no physical card.

The development of debit cards, unlike credit cards has generally been country specific resulting in a number of different systems around the world, which were often mismatched.

- Ease. Purchases can be made using a chip-enabled terminal or by swiping the card rather than filling out a paper check.
- Portable. You don't have to carry cash or a cheque book.
- Readily accepted. When out of the country, debit cards are usually widely accepted.

Disadvantages of a Debit Card:

- No grace period. Unlike a credit card, a debit card uses funds directly from your checking account. A credit card allows you to borrow funds on credit, leaving disposable cash in your account.

- High Fees. Using your debit card for ATM transactions may be costly if the ATM is not affiliated with your institution.
- Some Guidelines
- Guard your debit card against loss or theft. Keep it in a safe place just like cash, credit cards or cheque.
- If you lose your debit card, notify your bank immediately.
- Choose a PIN number that only you know. It is recommended, you don't use your phone number or birthday.
- Protect your PIN number. Memorize it and never write it on anything you keep with you.
- Record transactions.
- Analyze your statements immediately and investigate any unknown

Cyber Crime:

Cybercrime or attack is defined as the systematic criminal activity occurring digitally and done by attackers. Cyber crime is the most discussed issue of the 21st century. The technology sector worldwide is witnessing a boom in the consumer of smart phones and the internet which is raising concerns with regard to the privacy and security of the users. Owing to this reason, it is highly essential for all the users to know about cyber crime & security. As a result, this topic has become the most favourite topic of the today's world. Cybercrime is a dangerous attack a company or an individual may face. There are many cases where the cyber attack has brought massive loss to the company and individual due to the data hack. We live in a technology-driven era, and every piece of information is now fed on malware viruses, cyber stalking and others, government agencies and companies are investing more in the maintenance and bring hiring of cyber crime experts. Earlier, cybercrime was committed only by the individual of by small groups. However, now a highly complex cyber criminals network on attacking the system for data collection.

2. Conclusions

Fraudsters are still committing debit and credit cards fraud, which prove that the **Europay, Master Card and Visa** (EMV) technology is not the magic bullet to eliminate fraud; EMV technology however, does reduce fraud on a high scale. Because of this new Chip technology fraudsters are changing their techniques, as well as finding other ways to take your money out of your bank account and charge your credit card. Card Skimming, Card Trapping and Cash Trapping are among the types of fraud still happening. Phishing and Spyware are other traditional and famous methods that fraudsters are also using to get your card information. Card Skimming: it is when your card number is captured when using Automated Teller Machine (ATM). The Skimming devise is attached to the ATM's card slot; it is so thin that it is almost invisible. A tiny camera is also attached to the ATM to capture your PIN. These two pieces of information are later used to reproduce a fake card to withdraw cash.

Credit cards provide a convenience to consumers, acting as both a method of payment and a flexible credit instrument. We may expect then that most consumers would pay a modest net monetary cost to access this convenience. But the wide distribution of costs and benefits across cardholders instead suggests extensive variation in the credit card market, with some consumers paying relatively high net costs, and others receiving substantial net monetary benefits.

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