

# An impact of E-banking on E- payment security system

**Dr.G.John, S. Cecili Suganthi, Associate Professor, Research Scholar Department of Commerce, St. Joseph's College (Autonomous) Tiruchirappalli, India**

**ABSTRACT-** The paper deals the consumer's usage of e-banking system related to consumer awareness. Most of the bank customers are aware about all banking services provided by the bank. The bank further has to take necessary steps to educate the customer regarding the new technology and services offered by the bank. An e-commerce fee device helps the acceptance of electronic price for on line transactions. Electronic payment is a financial exchange that takes place online between buyers and sellers. Electronic payment is the very important step of the electronic business system, and its security must be ensured. SSL/TLS is commonly used for internet security. The Secure Electronic Transaction (SET) protocol and e-cash were selected as the bases of the electronic payment system implementation.

**Keywords-** E-payment, Electronic Fund Transfer, Payment method, Measures, Security protocol.

## I. INTRODUCTION

E-commerce system is the functioning of accepting, electronic payment for online transaction. Electronic Data Interchange is the well known sample for e-commerce. E-payment method is well popular because of online shopping and online banking. Past few years, credit card has one of the most common forms of payment for e-commerce transaction.

E-commerce websites use electronic payment, anywhere electronic price refers to paperless financial transactions. Electronic charge has reworked the commercial enterprise manner via lowering the paintings, dealing fees, and labor cost. Being person friendly and less long than guide process, it helps commercial enterprise to increase its market growth.

## II. MODES OF DIGITAL PAYMENTS

- Credit Card
- Debit Card
- Smart Card
- E-Money
- Electronic Fund Transfer (EFT)

### CREDIT CARD

Charge utilization with credit card is one of the popular modes of electronic payment. Master card is a tiny plastic card with an isolated number connected with account. On this connect a magnetic strip implant in it which is used to study credit score card via card readers. Credit card establishment financial institution will pay on behalf of the patron and customer surround a certain period of time when that character can pay the Master card bill. It's generally

Master card monthly fee cycle. Following square degree the actors in the Master card system.

- The cardboard holder – consumer.
- The merchandiser – the seller of product who can take delivery of credit card bills.
- The cardboard status quo financial institution – card holder's financial institution
- The acquirer financial institution – the merchant's financial institution
- The cardboard complete – is an example for visa or MasterCard.

### CREDIT CARD PAYMENT TECHNIQUE

The credit score Card price technique consists of 7 steps. These steps are measured and explained underneath:

- ❖ Financial institution supply and activates a master Card to the patron on their request.
- ❖ The consumer presents the credit card facts to the merchandiser net web page or to the merchandiser from whom he/she desires to get a product/service.
- ❖ The client presents the MasterCard data to the merchandiser web site or to the merchandiser from whom he/she desires to get a product/service.
- ❖ Master card analyses and pays the amount indicates in the bill by credit. Merchandiser keeps the sales slip.
- ❖ Service provider submits the income slip to the acquirer banks and gets the service fees paid to the patron.

- ❖ Beneficiary financial institution requests the credit card logo agency to clean the credit quantity and receives the agreement of the charge.
- ❖ Now the cardboard brand corporation asks to clear the quantity from the issuer bank and the quantity gets transferred to the credit score card brand company.

### DEBIT CARD

Debit card, is like a credit card, is a small plastic card with a completely unique variety survey with the bank account wide variety. It desires to have a financial institution account earlier than getting the debit card from the bank. The major distinction among the debit card and the credit card is that in case of fee through debit card, the quantity will receives deduct from the card's holder financial institution account immediately and there must be sufficient balance within the bank account for the transaction to get completed, while in case of a credit card transaction, there's no need to have sufficient amount.

Debit card clients no want to carry cash and cheque book. Even all traders are accepting the debit card straight away. Having a restriction on the quantity that can be withdrawn in an afternoon using a debit card facilitates the consumer to continue a test on their spending the coins. It allows making cashless world.

### SMART CARD

Smart card is again similar to a credit card or a debit card in look, however it has a small microprocessor chip insert in it. It has the ability to store a customer's work-related and also the personal records. Smart cards are also used to the shop cash and the amount receives subtract after each transaction.

Smart cards can best be acquired by using PIN that every consumer is allocating with it. Smart card is relaxed, as they store data in encrypted layout and is much less pricey/gives faster processing. Mon dex and Visa coins playing cards are examples for Smart cards.

### E-MONEY

E-cash transactions discuss with circumstance where payment is accomplished through the community and the quantity gets transferred from one monetary institution to every other economic group without any involvement of the alternative folks. E-cash transactions are quicker, handy, and safer.

Online bills achieved through credit card, debit card, and smart card is examples of e-money transactions. E-cash is the excellent instance for coins much less global. In case of e-cash, both consumer and merchant must join up with the bank or enterprise issuing e-coins.

### ELECTRONIC FUND TRANSFER

It is a much regarded digital charge technique to transfer money from one bank account to another bank account. Money owed may be in the equal financial institution or

different banks. Fund switch may be performed the use of ATM (Automated Teller Machine) or using the pc.

In recent times, internet-primarily based EFT is getting widely recognized. In this situation, a customer makes use of the internet site furnished via the bank, login to the direct bank's website and registers every other bank account. Then the client has to give a request to switch positive amount to that account. Customer's financial institution transfers the quantity to other account if it's far inside the equal bank, or in any other case the transfer request is forwarded to an ACH (Automatic Clearing House) to switch the quantity to other account and the quantity is deducted from the client's account. Once the quantity is transferred to the alternative account, the customer is stated the fund transfer by way of the financial institution.

## III. SECURITY

Security is very important part of online transaction. Customers never accept or encourage their personal information may stole to anybody else. If it happens the customer will lose their confidence in e-business. Following are the important requirements for safe e-payments:

- **Confidential** – Information should not be shared to any other unauthorized person. It could not be imparting during the process.
- **Honesty** – Particulars should not be modified at the time of transmission through the network.
- **Attainability** – Information are avail only within the specified time limit only.
- **Reality** – There must be a mechanism to accept as true with worth a person before make the transaction.
- **Non-condemnation** – the sender and the recipient could not refuse their order or payment after sending a message. Once they send the message it could not be able to deny.
- **Convert** – An authorized person should be encrypted the information.
- **Audit** – Data should be verified for the trustworthy.

### MEASURES TO MAKE SURE SAFETY

Primary safety features are following:

Encryption –In a practical manner, it does very secure the data to be transmitted thru the internet. Sender of the facts encrypts the records, using a secret code and handiest the unique receiver can decode the information using the same or a special secret code.

Virtual Signature – virtual signature permit the reality of the records. A digital signature is an e-signature authenticated through encryption and password.

Safety Certificates – safety certificates is an exclusive digital identity used to verify the identity of an person internet site or consumer.

#### IV. SAFETY PROTOCOLS IN INTERNET

##### SECURE SOCKET LAYER (SSL)

It's far the maximum normally used protocol and is broadly used. SSL have following security requirements:

- Authentication
- Encryption
- Integrity
- Non-reputability

"https://" is to be used for HTTP urls with SSL, where as "http://" is to be used for HTTP urls without SSL.

##### SECURE HYPERTEXT TRANSFER PROTOCOL (SHTTP)

SHTTP extends the HTTP internet protocol with public key encryption, authentication, and virtual signature thru the internet. Secure HTTP supports multiple safety system, supplying safety to the stop-customers. SHTTP In among the consumer and the server SHTTP works through negotiable encryption scheme. Secure Electronic Transaction

MasterCard and Visa collaborated and developed this Protocol. Orally, it is the best security protocol. It has the following elements:

- Card Holder's digital wallet – virtual pockets permit the card holder to make relaxed purchase from on-line.
- Software of merchant –via the usage of this, merchants are in contact with the customers and monetary institutions in a at ease manner.
- Charge Gateway Server – price gateway offers automatic and trendy payment manner. It helps the manner for service provider's certificates request.
- Software of certificates Authority–by this software program economic group to problem digital certificate issued with the aid of the financial organization with the aid of the usage of this software to the card holders and traders, and to allow them to sign up their account agreements for at ease e- trade.

#### V. CONCLUSION

In the modern era E-commerce and E-payments are most favorites for everyone in the world. By using this mainly we can go anywhere with safely because no need to carry

more money with us. Now most of the shops and hotel are accept the e-payments. And also it save more time and also have online trading. Banks may additionally expand customer meeting time with bank officials and additionally friendly method is necessary. Definitely it will help to retain the existing customer and to attract new customers. It will automatically improve the banking service and development of the banks.

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