Electronic Payment System

E-Commerce - Payment Systems

E-commerce sites use electronic payment, where electronic payment refers to paperless monetary transactions.

Electronic payment has revolutionized the business processing by reducing the paperwork, transaction costs, and labor cost.

Being user friendly and less time-consuming than manual processing, it helps business organization to expand its market reach/expansion.

Some of the modes of electronic payments

- Credit Card
- Debit Card
- E-Money / M- Wallet
- Electronic Fund Transfer (EFT)

Credit Card

Payment using credit card is one of most common mode of electronic payment.

Credit card is small plastic card with a unique number attached with an account.

It has also a magnetic strip embedded in it which is used to read credit card via card readers.

When a customer purchases a product via credit card, credit card issuer bank pays on behalf of the customer and customer has a certain time period after which he/she can pay the credit card bill.

It is usually credit card monthly payment cycle.

Following are the actors in the credit card system.

- **The card holder** − Customer
- **The merchant** − seller of product who can accept credit card payments.
- **The card issuer bank** − card holder's bank
- **The acquirer bank** − the merchant's bank
- **The card brand** − for example , visa or Mastercard

Credit Card Payment Process

Step	Description
Step 1	Bank issues and activates a credit card to the customer on his/her request.
Step 2	The customer presents the credit card information to the merchant site or to the merchant from whom he/she wants to purchase a product/service.
Step 3	Merchant validates the customer's identity by asking for approval from the card brand company.
Step 4	Card brand company authenticates the credit card and pays the transaction by credit. Merchant keeps the sales slip.
Step 5	Merchant submits the sales slip to acquirer banks and gets the service charges paid to him/her.
Step 6	Acquirer bank requests the card brand company to clear the credit amount and gets the payment.
Step 6	Now the card brand company asks to clear the amount from the issuer bank and the amount gets transferred to the card brand company.

Debit Card

Debit card, like credit card, is a small plastic card with a unique number mapped with the bank account number.

It is required to have a bank account before getting a debit card from the bank.

The major difference between a debit card and a credit card is that in case of payment through debit card, the amount gets deducted from the card's bank account immediately and there should be sufficient balance in the bank account for the transaction to get completed; whereas in case of a credit card transaction, there is no such compulsion.

Debit cards free the customer to carry cash and cheques. Even merchants accept a debit card readily. Having a restriction on the amount that can be withdrawn in a day using a debit card helps the customer to keep a check on his/her spending.

E-Money/ M- Wallet

E-Money transactions refer to situation where payment is done over the network and the amount gets transferred from one financial body to another financial body without any involvement of a middleman.

E-money transactions are faster, convenient, and saves a lot of time.

Online payments done via credit cards, debit cards, or smart cards are examples of e-money transactions.

Another popular example is e-cash. In case of e-cash, both customer and merchant have to sign up with the bank or company issuing e-cash.

Electronic Fund Transfer

Electronic Fund Transfer

It is a very popular electronic payment method to transfer money from one bank account to another bank account. Accounts can be in the same bank or different banks. Fund transfer can be done using ATM (Automated Teller Machine) or using a computer.

Nowadays, internet-based EFT is getting popular.

In this case, a customer uses the website provided by the bank, logs in to the bank's website and registers another bank account.

He/she then places a request to transfer certain amount to that account. Customer's bank transfers the amount to other account if it is in the same bank, otherwise the transfer request is forwarded to an ACH (Automated Clearing House) to transfer the amount to other account and the amount is deducted from the customer's account. Once the amount is transferred to other account, the customer is notified of the fund transfer by the bank.

Advantages of electronic payments

Speed and Efficiency

Increase in the number of sales

Transaction costs are reduced

Disadvantages of electronic payments

Concerns relating to security

Disputes in Transactions

Increase in the cost of business

Risks in Electronic Payment Systems

The Risk of Fraud

The Risk of Tax Evasion

The Risk of Payment Conflicts

The Risk of Impulse Buying

Regulatory bodies governing electronic payments in India

Reserve Bank of India

The Reserve Bank of India (RBI) is the primary regulator for electronic payments in India.

In the beginning, the regulations governing this ambit was very general till recently where it turned into full-fledged regulation due to increased use of the electronic payment system.

The Reserve bank of India, responds to the fluctuations to the market very easily and therefore change its regulations according to the circumstance which arises.

Regulations relating to Electronic Payment systems

Payment and Settlements Systems Act, 2007

The Payment and Settlements Systems Act (PSS), 2007 is the Act which governs the electronic payments systems in India.

This Act gives the Reserve Bank of India (RBI) the power to oversee all the matters which relates to electronic payment systems, the settling of it as well as the legalities which are included.

The PSS Act specifies that no person, other than the RBI, can operate a payment system except with due authorization issued by the RBI (unless specifically exempted by the terms of the PSS Act itself).

The Act provides for netting and settlement finality and gives formal oversight powers over overall payment and settlement systems with the RBI.

Top 5 online payment gateway in India

- Razorpay
- Instamojo
- Paypal
- Paytm
- Cashfree

With increasing number of digital transactions, the reliance on payment aggregators & payment gateways is more than ever. The RBI has recently issued guidelines for regulating both Payment Gateways & Payment Aggregators.

Contents of the new guidelines issued by the RBI

1. **Authorisation**– Payment aggregators who are not a bank, will need prior approval from the RBI. And those who are non-banks who have become a payment aggregator before these guidelines were issued will have to apply for authorisation before 30th July 2021 and can work without any disturbance till the approval is given by the RBI.

2. **The requirement of Capital**– The starting net worth of the payment aggregators should be 15 crores at the initial stages and will continue to increase 25 crores which will have to be kept maintained as per the new guidelines of the RBI.

3. **Govern-** According to the guidelines, the RBI is supposed to be kept notice about any change that occurs in ownerships, policies etc in the payment aggregators

4. **Laundering**– The Prevention of Money Laundering Act, 2002 is applied to the payment aggregators as per this new guideline.

5. **Merchants**– All the payment aggregators have to do a thorough background check on the merchants before they are made to do any business so as to ensure that they are genuine and not entering into a business with the intent to fraud any individual.

6. **Dispute Settlement**– According to this new guideline, the payments aggregators have to ensure that there is a proper mechanism so that any dispute which arises is solved.

7. **Management of Risk**– A Board is supposed to be appointed as per this guideline to ensure that there is minimal risk and it is the duty of the Board to make sure that the guidelines of the RBI are followed in the prescribed manner.

Risk Management in E-Commerce transactions

The management of risk in e-commerce transactions is considered the most important factor for the long term survival of your business.

These risks may relate to internet fraud, information security, payment methods or even e-commerce legislation.

Once getting into one of those risks, it would be costly for business to solve and to recover.

Each year, it costs e-commerce and direct marketing businesses billions of dollars annually, making it imperative for merchants to understand the risks associated with doing business online.

Business owners should develop an internal policy to address the potential risks and train staff on implementing it.

Risk Management in E-Commerce transactions

Most important procedures for managing risk in e-commerce transactions:

1. Understand the risks and train your staff

2. Ensure information security

3. Select the right acquiring bank and merchant services provider.

4. Create and display effective policies

THANK YOU