

Transaction: Processing and Security

A Vital Requirement of E-Commerce

What is online processing system?

- **Online processing** is an automated way to enter and **process** data or reports continuously as use as the source documents are available. A good example of **online processing** is bar code scanning. When you buy a shirt at Target, the bar code gets scanned at the register.

What is Online Transaction?

- **Online banking** is an electronic payment system that enables customers of a financial institutions or non financial institutions to conduct financial **transactions** on a website operated by the institution, such as a retail bank, virtual bank, credit union or building society.
- An **online transaction**, also known as a PIN-debit transaction, is a password-protected payment method that authorizes a transfer of funds over an electronic funds transfer (EFT)
- Also known as internet banking or online banking

Features of Online Transaction

- User in Control
- Log on from almost Anywhere
- Makes all Payments Electronically
- Transaction Speed
- Saves Time
- Convenient
- Flexible

Participants of Online Transactions

- Card Holder
- Merchant
- Issuer (Bank)
- Acquirer (Customer)
- Payment Gateway
- Certificate Authority (CA)

What is OLTP?

- **On line transaction processing**, or **OLTP**, is a class of information systems that facilitate and manage transaction-oriented applications, typically for data entry and retrieval transaction processing.
- OLTP is done with Internet connection only

Stages of Online Transactions

- **Pre-purchase/Sale:** In this stage, the product or service is advertised online with some details for the customers.
- **Purchase/Sale:** When a customer likes a particular product or service, he/she buys it and makes the payment online
- **Delivery Stage:** This is the final stage where the goods bought are delivered to the consumer.

Online Transaction Stages

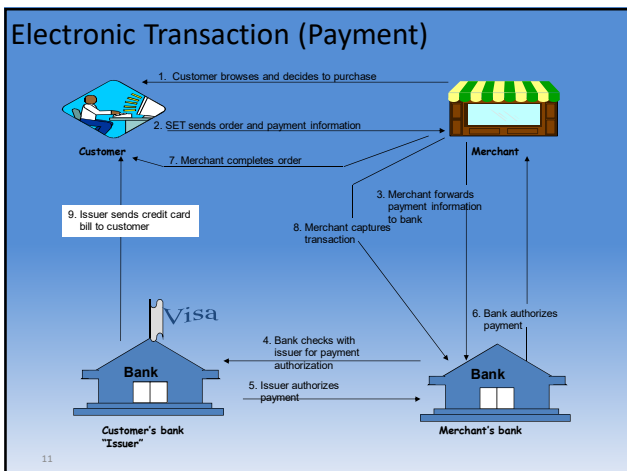
- Registration
 - The consumer has to register online on the particular website to buy a particular good or service.
 - The customer's email id, name, address, and other details are saved and are safe with the website.
- Placing an Order
 - The shopping cart gives a record of all the items selected by the buyer to be purchased, the number of units or quantity desired to be bought per item selected and the price for each item.

Online Transaction Stages

- **Payment**
 - The buyer then has to select the payment option, he/she has various payment options.
 - These payment pages are secured with very high-level encryptions so that the personal financial information that you enter (bank/card details) stay completely secure.

Types of Payment

- **Cash On Delivery**
 - The Cash on Delivery option lets the buyer pay when he/she receives the product.
- **Cheque**
 - In this type of payment, the buyer sends a cheque to the seller and the seller sends the product after the realization of the cheque.
- **Net Banking Transfer**
 - Here, the payment is transferred from the buyer's account to the seller's account electronically
- **Credit or Debit Card**
 - The buyer has to send his debit card or credit card details to the seller, and a particular amount will be deducted from his/her account.
- **Digital Cash**
 - Digital Cash is a form of electronic currency that exists only in cyberspace and has no real physical properties.



Authentication V/S Authorization

- **Authentication** is the process of verifying who you are. When you log on to a PC with a user name and password you are authenticating.
- **Authorization** is the process of verifying that you have access to something. Gaining access to a resource (e.g. directory on a hard disk) because the permissions configured on it allow you access is authorization.

Transaction Security

- **Secure Electronic Transaction (SET)** is a system for ensuring the **security** of financial **transactions** on the Internet. It was supported initially by Master-card, Visa, Microsoft, Netscape, and others.
- With SET, a user is given an electronic wallet and a transaction is conducted and verified using a combination of digital certificates and digital signatures among the purchaser, a merchant, and the purchaser's bank in a way that ensures privacy and confidentiality.

Secure Electronic Transactions

- Cryptographic protocol
- Developed by Visa, Mastercard, Netscape, and Microsoft
- Used for credit card transactions on the Web
- Provides
 - Authentication of all parties in transaction
 - Confidentiality: transaction is encrypted to neutralize eavesdroppers
 - Message integrity: not possible to alter account number or transaction amount
 - Linkage: attachments can only be read by 3rd party if necessary

14

Requirements of Online Transaction

- **Eliminate Geographical Boundaries**
- **More Convenient +**
- **Less Time Consuming**
- **Cost – Free Benefits**
- **Meet Day to Day Requirements**
- **Additional Security for Payment**

Essential Tips To Secure Your Online Transactions

- Use a Secure Connection. A secured connection is an encrypted (SSL) internet connection that hides what you are doing from unauthorized people. ...
- Determine If a Site is Trustworthy. You must always make payments through sites you know you can trust. ...
- Keep an Eye on Your Transactions. ...
- Secure Passwords. ...
- Leave No Evidence Behind.

Query Session

I hope you are there mentally
present to ask something!!!