

Consumer oriented Ecommerce:

The convergence (union) of money, commerce, computing and networks is laying the foundation for a global consumer market place. Some fundamental business issues must be addressed before consumer oriented e-commerce can become widespread, including:

- Establishment of standard business processes for buying and selling products and services in electronic markets.
- Development of widespread and easy-to-use implementations of mercantile protocols for order-taking, online payment, and service delivery similar to those found in retail/ credit card based transactions.
- Development of transport and privacy methods that will allow parties that have no reason to trust one another to carry on secure commercial exchanges.

In other words, to make consumer-oriented e-commerce more effective, we need a better understanding of the components of the business process from the initial search and discovery of the product/services via on-line catalogs to the management of the order-to-delivery cycle, including the all- important payment/settlement component.

The wide range of applications for the consumer marketplace can be broadly classified into :

- **Entertainment:** Movies on demand, Video cataloging, interactive ads, multi-user games, on-line discussions
- **Financial services and information:** Home banking, financial services, financial news
- **Essential services:** Home shopping, electronic catalogs, telemedicine, remote diagnostics
- **Educational and training:** Interactive education, video conferencing, on-line databases

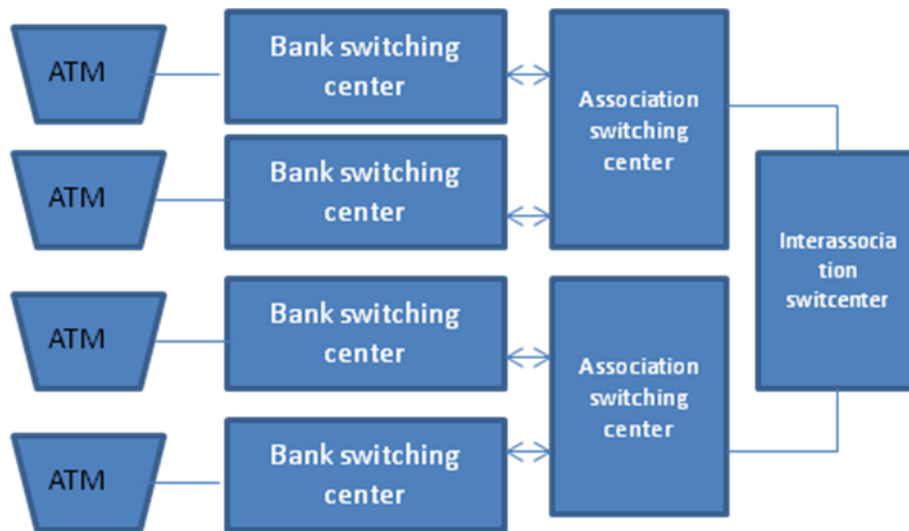
Categories:

1. Personal finance management
2. Home shopping
3. Home entertainment
4. Micro-transaction of information.

Personal finance management:

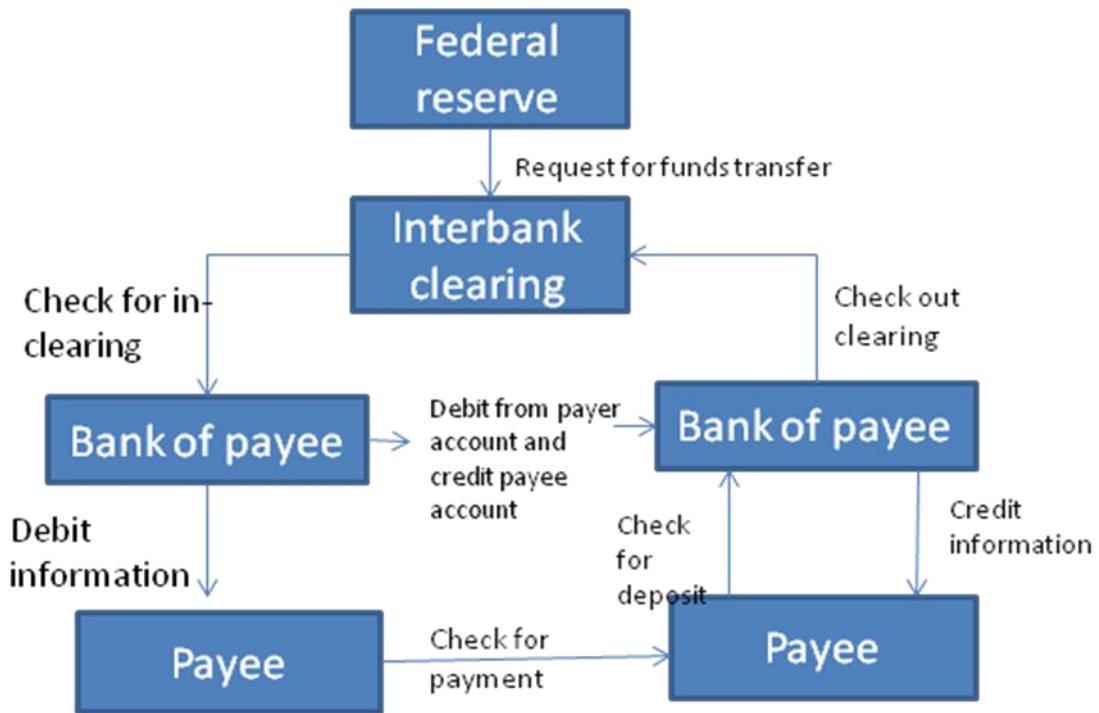
It includes the technology for paying bills, whether by computer or telephone, to manage the increasing complexity of household finances ,**home banking services** are used. Home banking services are categorized as **Basic, Intermediate and advanced**.

Basic Services: The basic service of home banking is ATM, banks introduced ATMs in 1970s to automate two functions: Deposits and Cash extraction. ATM network can be thought of as analogous to the internet with banks and their association being the routers and ATM machine being the heterogeneous computers on the network.

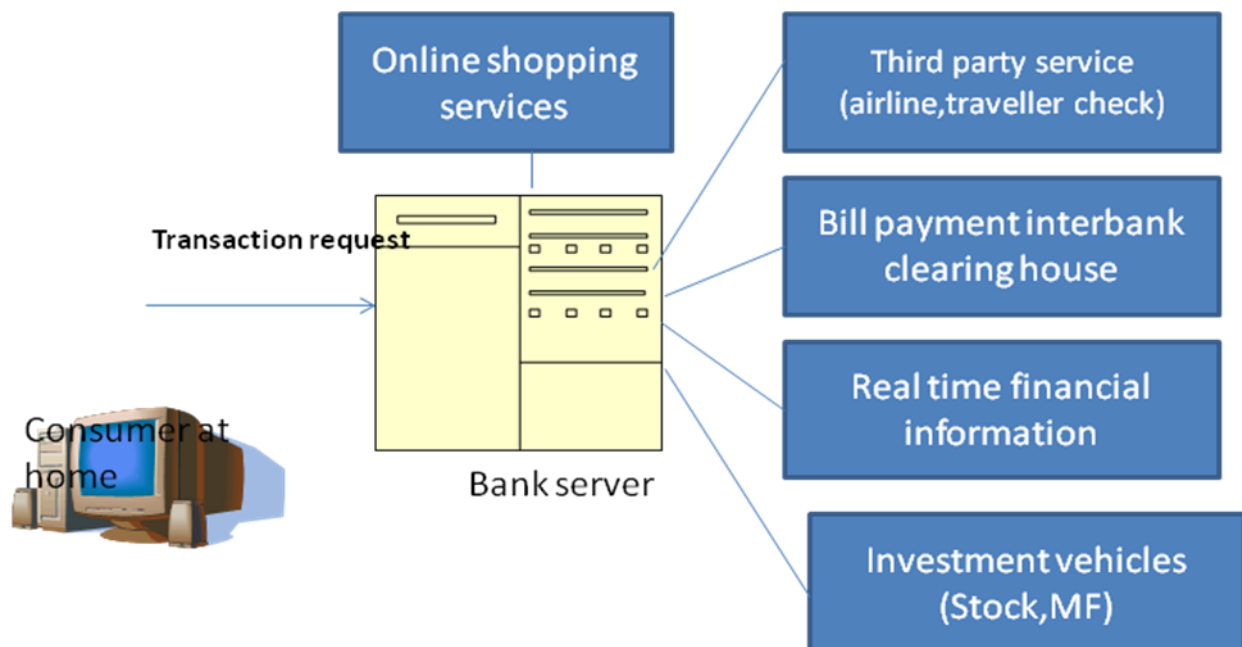


- **Intermediate Service :**

The problem associated with home banking is expensive service, it requires a PC ,a modem and special software, these problems are solved by intermediate service using QDPMM(Quick and Dirty personal money management) which allows you to pay the bills and reconcile (settle) your checking accounts, reconcile your credit card accounts, move money between investment accounts.



Advanced service: Range of services that may will be offered by banks in future, these services range from online service to real time financial information from anywhere in world .Some of these services are already being offered and others are planned for future, although these are simple but they require extraordinary integration of computer system at branch, Central office and partners level



Home Shopping :

One of the example often sighted about e-commerce is home shopping which is widely used and had generated substantial revenue for many companies racing to develop on- line malls. The malls will enable a customer to enter an online store look at products, try on computerized clothes, see a reflection in a digital mirror and purchase with overnight delivery against credit card billing. The exact operating method of these services has yet to be determined, but the retailers are well aware of the potential opened up by the ability to transmit huge amounts of digital information into home and to provide interactive control to the shopper.

Television based shopping:

TV shopping has evolved over years to provide a wide variety of goods ranging from clothing, small electronic house ware, jewelry and computing.

Catalog based shopping:

The online catalog business consists of brochures, CD ROM catalogs and online interactive catalogs. Most online catalogs are some form of electronic brochure. Electronic brochures are multimedia replacement for direct mail, paper & brochures used in the business to business marketing. Basically electronic catalog contains highly interactive programs using still images, graphics, animation, sound, text & data. One of the disadvantages of this catalog is its prohibitive cost.

Home Entertainment:

It is another application area of E-commerce, the most important services provided under these are movies on demand, interactive games. The online gaming industry in turn parallels the TV industry where the customer is primarily interested in good quality programming & is not faithful to any one network.

In the entire home entertainment area, the key element is the notion of customer control under programming entertainment on demand as expected to give each viewer total control over what, when and where to watch. In addition to game technology we also witness the emerging services of entertainment support function such as on screen catalogues, TV guide that inform users what is on TV.

Micro Transaction of Information:

To serve the information needs of the consumer, services providers whose product is information delivered over the I-way are creating an entirely new industry.

Most sell any form of digital information and can be sent down the network of one sort or another such as data, picture, images, sounds, computer programs and services. A few sell products such as music books, clothing etc through on- line catalogues.

Desirable characteristics of E-Market Space:

The following characteristics are essential for consumer oriented E-commerce.

1. Critical mass of buyers and sellers:

The trick is getting a critical mass of cooperation and consumers to use electronic mechanism i.e., the E-market place should be the first place for the customer to go to the right product & service they need.

2. Opportunity for independent evaluation and for customer dialogue and Discussion:

The ability to openly evaluate the wares (goods) offer is a fundamental principle of viable market place i.e. the users compare notes on who has best products and whose prices are outrageous.

3. Negotiation and bargaining:

No marketplace is complete if it does not support negotiation.

4. New products and services:

In a viable market place consumer can request a product and services which are not currently offered i.e. the viable market place is an interactive information service that supports the entire innovation process.

5. Seamless (fault less) Interface:

Biggest barriers to E-market Place is having all the pieces work together so that information can flow seamlessly from one source to another. This requires standardization

6. Recourse (option) for disgruntled (dissatisfied) buyers:

viable market place must have a recognized mechanism for resolving disputes among buyers and sellers. Markets typically include a provision for resolving this and agreement by replacing the product.

Mercantile Process models

- Mercantile processes define interaction models between consumers and merchants for on-line commerce.

Mercantile Models from the Consumer's Perspective

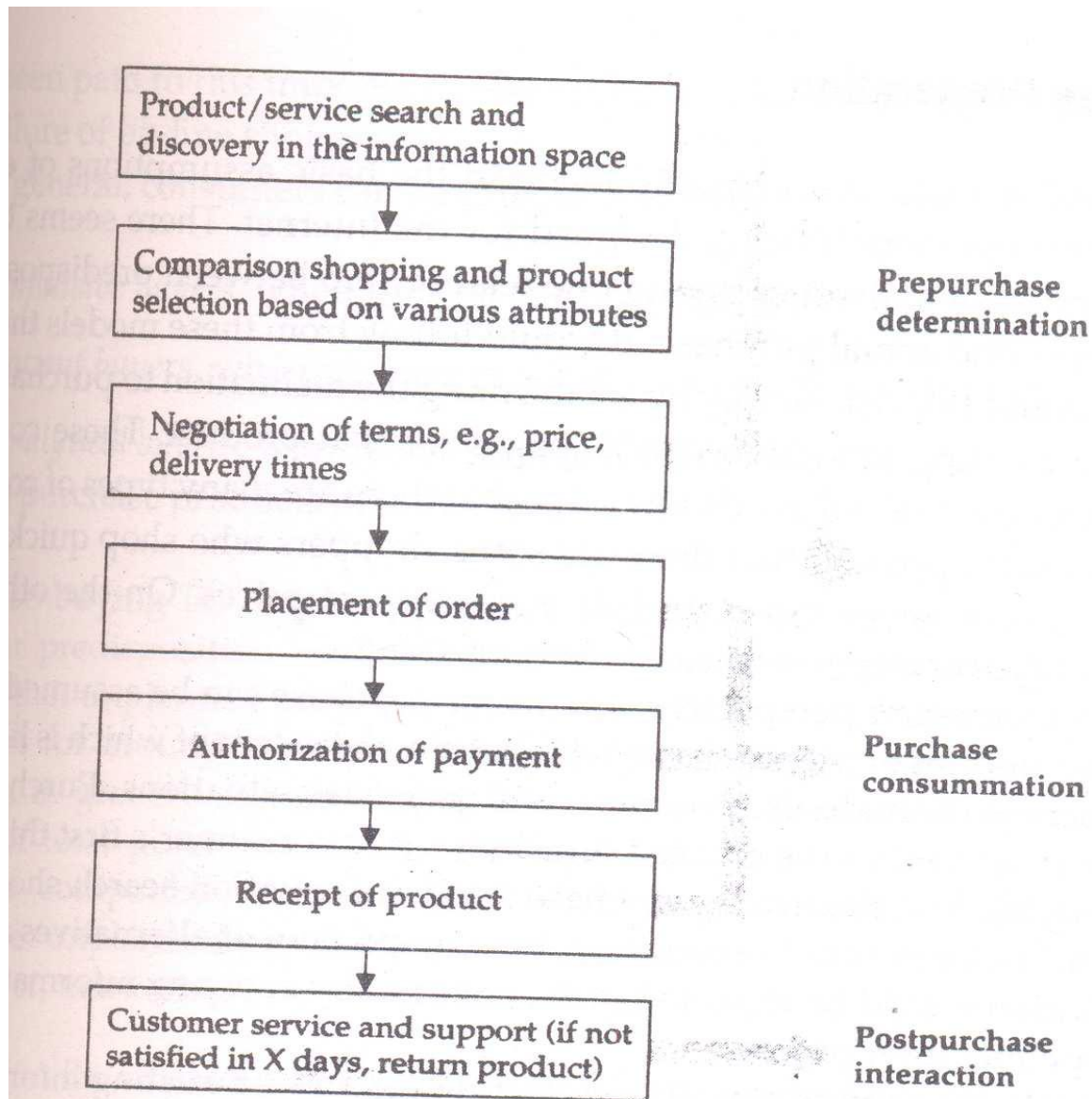


Figure 7.4 Steps taken by customers in product/service purchasing

(i) Pre purchase preparation:

The pre purchase preparation phase include search and discovery for a set of products to meet customer requirements

- (a) The consumer information search process.
- (b) The Organizational search process.
- (c) Consumer search experiences.
- (d) Information brokers & brokerages.

(ii) Purchase consummation :

The purchase consummation phase include mercantile protocols.

- (a) Mercantile process using digital cash.
- (b) Mercantile transaction using credit cards.
- (c) Costs of electronic purchasing.

(iii) Post purchase interaction:

The post purchase interaction phase includes customer service & Support.

(i) Pre purchase Preparation

- The purchase is done by the buyers, so consumers can be categorized into 3 types
- **Impulsive buyers**, who purchase products quickly
- **Patient buyers**, purchase products after making some comparisons
- **Analytical buyers**, who do substantial research before making decision to purchase products,.
 - Marketing researches have several types of purchasing:
- **Specifically planned purchases** – The need was recognized on entering the store and the shopkeeper brought the exact item planned.
- **Generally planned purchases** - The need was recognized, but the shopper decided on store on the actual manufacturer of the item to satisfy the need.

- **Reminder purchase-** The shopkeeper was remained of the need by some store influence. The shopper is influenced by in store advertisement and can substitute products readily.
- **Entirely unplanned purchases** - The need was not recognized entering the store.

The consumer information search process

- Information search is defined as the degree of care, perception & effort directed toward obtaining data or information related to the decision problem

The Organizational search process

- Organizational search can be viewed as a process through which an organization adapts to such changes in its external environment as new suppliers, products, & services.

Information Brokers and Brokerages

- To facilitate better consumer and organizational search, intermediaries called information brokers or brokerages.
- Information brokerages are needed for 3 reasons: Comparison shopping, reduced search costs, and integration

(ii) Purchase Consumption

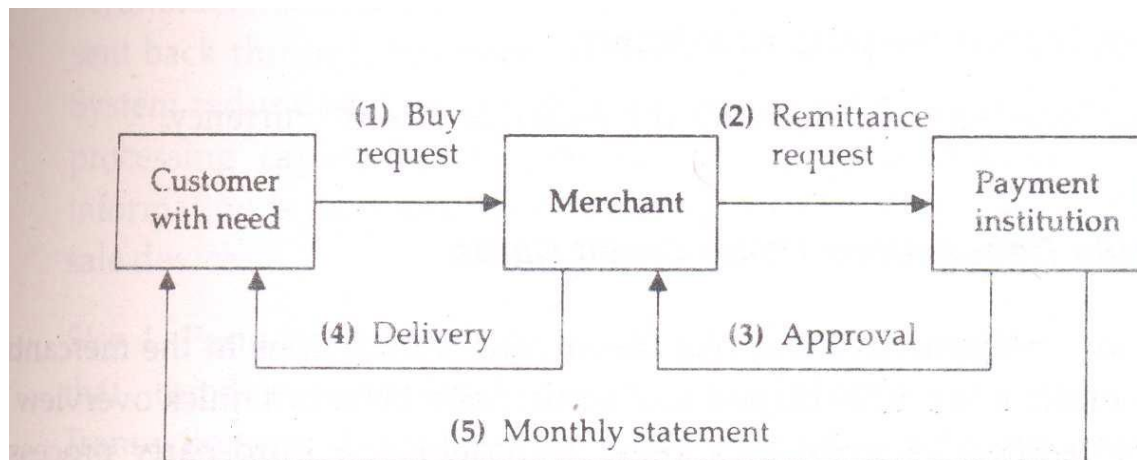


Figure 7.5 Simplified on-line mercantile model

- Buyer contacts vendor to purchase
- Vendor states price
- Buyer and Vendor may or may not engage in negotiation

- If satisfied, buyer ask the payment to the vendor
- Vendor contacts billing service
- Billing service decrypts authorization and check buyers account balance
- Billing service gives to the vendor to deliver product
- Vendor delivers the goods to buyer
- On receiving the goods, the buyer signs and delivers receipt
- At the end of the billing cycle, buyer receives a list of transactions

Mercantile process using Digital Cash

- Buyer obtains e-cash from issuing bank
- Buyer contacts seller to purchase product
- Seller states price
- Buyer sends e-cash to seller
- Seller contacts his bank or billing service to verify the validity of the cash
- Bank gives okay signal
- Seller delivers the product to buyer
- Seller then tells bank to mark the e-cash as “used” currency

Mercantile Transactions Using Credit Cards

- Two major components compromise credit card transactions in this process: electronic authorization and settlement
- In retail transaction, a third-party processor (TPP) captures information at the point of sale, transmits the information to the credit card issuer for authorization, communicates a response to the merchant and electronically stores the information for settlement and reporting.
- The benefits of electronic processing include the reduction in credit losses, lower merchant transaction costs, & faster consumer checkout & merchant-to-bank settlement

A step-by-step account of retail transaction follows:

- Step 1: A customer presents a credit card for payment at a retail location
- Step 2: The point-of-sale software directs the transaction information to the local network

- Step 3: System verifies the source of the transaction and routes it.
- Step 4: In this, transaction count and financial totals are confirmed between the terminal & network
- Step 5: In this, the system gathers all completed batches and processes the data in preparation for settlement

A merchant /client takes one of two forms:

- Merchants are charged a flat fee per transaction for authorization and data capture services
- The other form of billing allows merchants to pay a "bundled" price for authorization, data capture, & settlement

Cost of Electronic Purchasing:

- Cash seems to be preferable to electronic payments, such as, on-line debit, credit, and electronic check authorization
- Consumers appear to spend more when using cards than when spending cash

(iii)Post purchase Interaction

- Returns and claims are an important part of the purchasing process
- Other complex customer service challenges arise in customized retailing are:

Inventory issues: To serve the customer properly, a company should inform a customer right away and if the item is in stock, a company must be able to assign that piece to customer

Database access and compatibility issues: Customers should get kind of services by easy issues like calling an 800 number

Customer service issues: To clear the doubts of customer about product

Mercantile Models from the Merchant's Perspective

- To better understanding, it is necessary to examine the order management cycle (OMC).
- The OMC includes eight distinct activities.
- The actual details of OMC vary from industry to industry and also for individual products and services
- OMC has generic steps

- (i) Order planning & Order generation.
- (ii) Cost estimation & pricing.
- (iii) Order receipt & entry.
- (iv) Order selection & prioritization.
- (v) Order Scheduling
- (vi) Order fulfilment & delivery.
- (vii) Order billing & account/payment management.
- (viii) Post sales service.

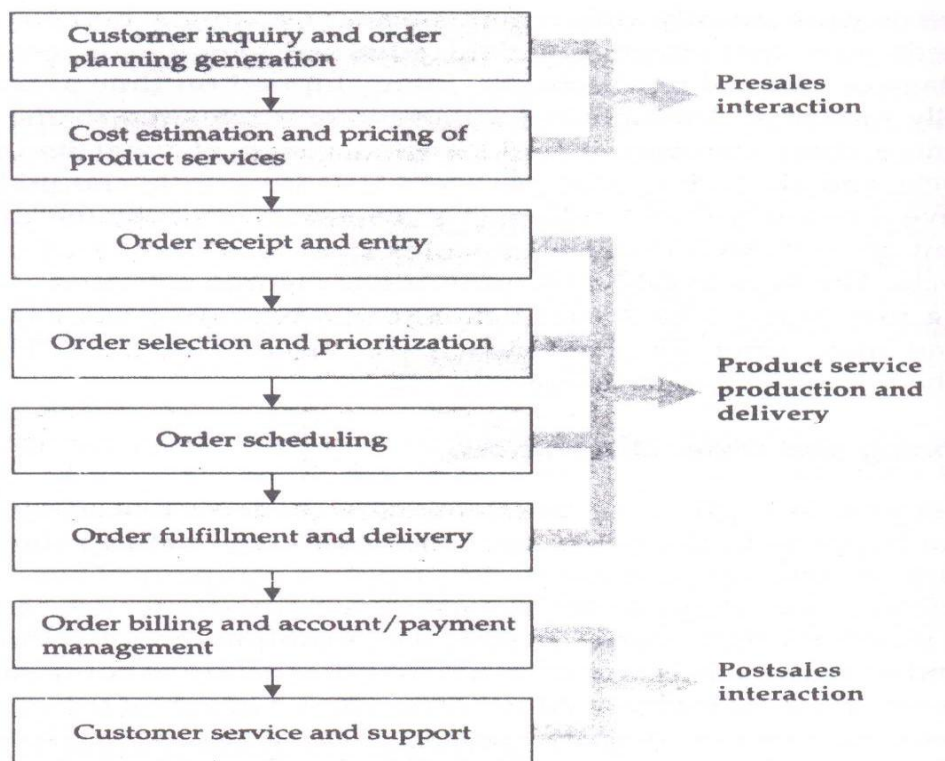


Figure 7.6 Order management cycle in e-commerce

Order planning & order Generation

- Order planning leads to order generation.
- Orders are generated in a no. of ways in the e-commerce environment.

- The sales force broadcasts ads (direct marketing), sends personalized e-mail to customers (cold calls), or creates a WWW page.

Cost Estimation & pricing

- Pricing is the bridge between customer needs & company capabilities.
- Pricing at the individual order level depends on understanding the value to the customer that is generated by each order, evaluating the cost of filling each order; & instituting a system that enables the company to price each order based on its value & cost

Order Receipt & Entry

- After an acceptable price Quote, the customer enters the order receipt & entry phase of OMC.
- This was under the purview of departments variously titled customer service, order entry, the inside sales desk, or customer liaison.

Order Selection & Prioritization

- Customer service representatives are also often responsible for choosing which orders to accept and which to decline.
- Not, all customers' orders are created equal; some are better for the business.

Order Scheduling

- In this phase the prioritized orders get slotted into an actual production or operational sequence.
- This task is difficult because the different functional departments- sales, marketing, customer service, operations, or production- may have conflicting goals, compensation systems & organizational imperatives:

Production people seek to minimize equipment changeovers, while marketing & customer service representatives argue for special service for special customers.

Order Fulfilment & Delivery

- In this actual provision of the product or service is made.
- It involves multiple functions and locations.

Order Billing & Account/Payment Management

- After the order has been fulfilled & delivered, billing is given by finance staff.

- The billing function is designed to serve the needs and interests of the company, not the customer.

Post sales Service

- This phase plays an increasingly important role in all elements of a company's profit equation: customer, price, & cost.
- It can include such elements as physical installation of a product, repair & maintenance, customer training, equipment upgrading & disposal.