# Overview

E-Commerce or Electronics Commerce is a methodology of modern business which addresses the need of business organizations, vendors and customers to reduce cost and improve the quality of goods and services while increasing the speed of delivery. E-commerce refers to paperless exchange of business information using following ways.

- Electronic Data Exchange (EDI)

- Electronic Mail (e-mail)

- Electronic Bulletin Boards

- Electronic Fund Transfer (EFT)

- Other Network-based technologies
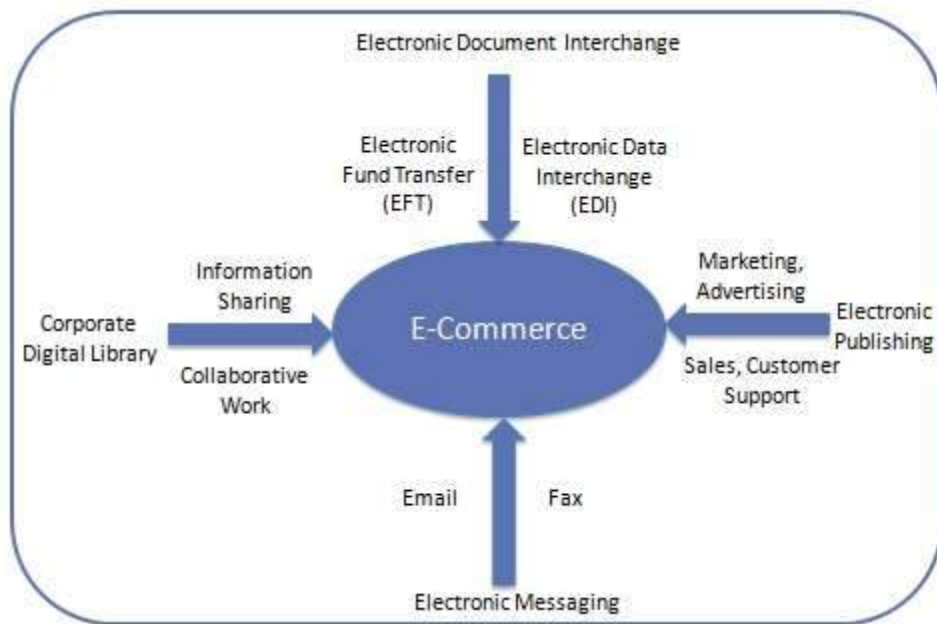
Features

E-Commerce provides following features

- **Non-Cash Payment:** E-Commerce enables use of credit cards, debit cards, smart cards, electronic fund transfer via bank's website and other modes of electronics payment.

- **24x7 Service availability:** E-commerce automates business of enterprises and services provided by them to customers are available anytime, anywhere. Here 24x7 refers to 24 hours of each seven days of a week.

- **Advertising / Marketing:** E-commerce increases the reach of advertising of products and services of businesses. It helps in better marketing management of products / services.

- **Improved Sales:** Using E-Commerce, orders for the products can be generated any time, any where without any human intervention. By this way, dependencies to buy a product reduce at large and sales increases.

- **Support:** E-Commerce provides various ways to provide pre sales and post sales assistance to provide better services to customers.

- **Inventory Management:** Using E-Commerce, inventory management of products becomes automated. Reports get generated instantly when required. Product inventory management becomes very efficient and easy to maintain.

- **Communication improvement:** E-Commerce provides ways for faster, efficient, reliable communication with customers and partners.

Traditional Commerce v/s E-Commerce

Sr. No.	Traditional Commerce	E-Commerce
1	Heavy dependency on information exchange from person to person.	Information sharing is made easy via electronic communication channels making little dependency on person to person information exchange.
2	Communication/ transaction are done in synchronous way. Manual intervention is required for each communication or transaction.	Communication or transaction can be done in asynchronous way. Electronics system automatically handles when to pass communication to required person or do the transactions.
3	It is difficult to establish and maintain standard practices in traditional commerce.	A uniform strategy can be easily established and maintain in e-commerce.
4	Communications of business depends upon individual skills.	In e-Commerce or Electronic Market, there is no human intervention.
5	Unavailability of a uniform platform as traditional commerce depends heavily on personal communication.	E-Commerce website provides user a platform where al l information is available at one place.
6	No uniform platform for information sharing as it depends heavily on personal communication.	E-Commerce provides a universal platform to support commercial / business activities across the globe.

E-Commerce Advantages

E-Commerce advantages can be broadly classified in three major categories:

- Advantages to Organizations

- Advantages to Consumers

- Advantages to Society

Advantages to Organizations

- Using E-Commerce, organization can expand their market to national and international markets with minimum capital investment. An organization can easily locate more customers, best suppliers and suitable business partners across the globe.

- E-Commerce helps organization to reduce the cost to create process, distribute, retrieve and manage the paper based information by digitizing the information.

- E-commerce improves the brand image of the company.

- E-commerce helps organization to provide better customer services.

- E-Commerce helps to simplify the business processes and make them faster and efficient.

- E-Commerce reduces paper work a lot.

- E-Commerce increased the productivity of the organization. It supports "pull" type supply management. In "pull" type supply management, a business process starts when a request comes from a customer and it uses just-in-time manufacturing way.

Advantages to Customers

- 24x7 support. Customer can do transactions for the product or enquiry about any product/services provided by a company any time, any where from any location. Here 24x7 refers to 24 hours of each seven days of a week.

- E-Commerce application provides user more options and quicker delivery of products.

- E-Commerce application provides user more options to compare and select the cheaper and better option.

- A customer can put review comments about a product and can see what others are buying or see the review comments of other customers before making a final buy.

- E-Commerce provides option of virtual auctions.

- Readily available information. A customer can see the relevant detailed information within seconds rather than waiting for days or weeks.

- E-Commerce increases competition among the organizations and as result organizations provides substantial discounts to customers.

Advantages to Society

- Customers need not to travel to shop a product thus less traffic on road and low air pollution.

- E-Commerce helps reducing cost of products so less affluent people can also afford the products.

- E-Commerce has enabled access to services and products to rural areas as well which are otherwise not available to them.

- E-Commerce helps government to deliver public services like health care, education, social services at reduced cost and in improved way.

E-Commerce Disadvantages

E-Commerce disadvantages can be broadly classified in two major categories:

- Technical disadvantages

- Non-Technical disadvantages

Technical Disadvantages

- There can be lack of system security, reliability or standards owing to poor implementation of e-Commerce.

- Software development industry is still evolving and keeps changing rapidly.

- In many countries, network bandwidth might cause an issue as there is insufficient telecommunication bandwidth available.

- Special types of web server or other software might be required by the vendor setting the e-commerce environment apart from network servers.

- Sometimes, it becomes difficult to integrate E-Commerce software or website with the existing application or databases.

- There could be software/hardware compatibility issue as some E-Commerce software may be incompatible with some operating system or any other component.

Non-Technical Disadvantages

- Initial cost: The cost of creating / building E-Commerce application in-house may be very high. There could be delay in launching the E-Commerce application due to mistakes, lack of experience.

- User resistance: User may not trust the site being unknown faceless seller. Such mistrust makes it difficult to make user switch from physical stores to online/virtual stores.

- Security/ Privacy: Difficult to ensure security or privacy on online transactions.

- Lack of touch or feel of products during online shopping.

- E-Commerce applications are still evolving and changing rapidly.

- Internet access is still not cheaper and is inconvenient to use for many potential customers like one living in remote villages.
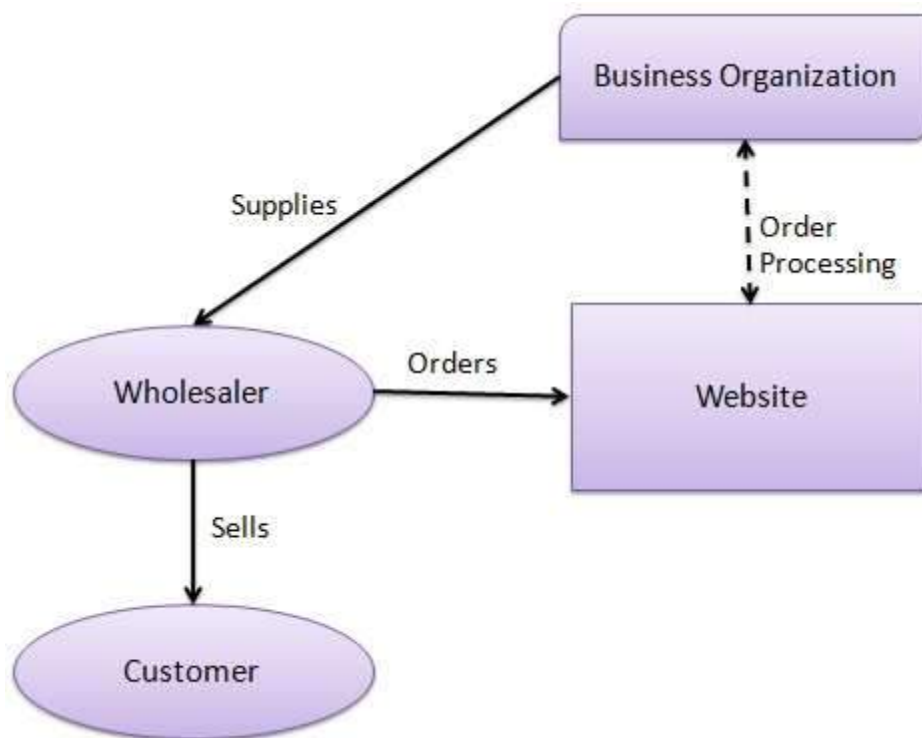
Business Models

E-Commerce or Electronics Commerce business models can generally categorized in following categories.

- Business - to - Business (B2B)

- Business - to - Consumer (B2C)

- Consumer - to - Consumer (C2C)

- Consumer - to - Business (C2B)

- Business - to - Government (B2G)

- Government - to - Business (G2B)

- Government - to - Citizen (G2C)

Business - to - Business (B2B)

Website following B2B business model sells its product to an intermediate buyer who then sells the product to the final customer. As an example, a wholesaler places an order from a company's website and after receiving the consignment, sells the end product to final customer who comes to buy the product at wholesaler's retail outlet.


Business - to - Consumer(B2C)

Website following B2C business model sells its product directly to a customer. A customer can view products shown on the website of business organization. The customer can choose a product and order the same. Website will send a notification to the business organization via email and organization will dispatch the product/goods to the customer.

Consumer - to - Consumer (C2C)

Website following C2C business model helps consumer to sell their assets like residential property, cars, motorcycles etc. or rent a room by publishing their information on the website. Website may or may not charge the consumer for its services. Another consumer may opt to buy the product of the first customer by viewing the post/advertisement on the website.
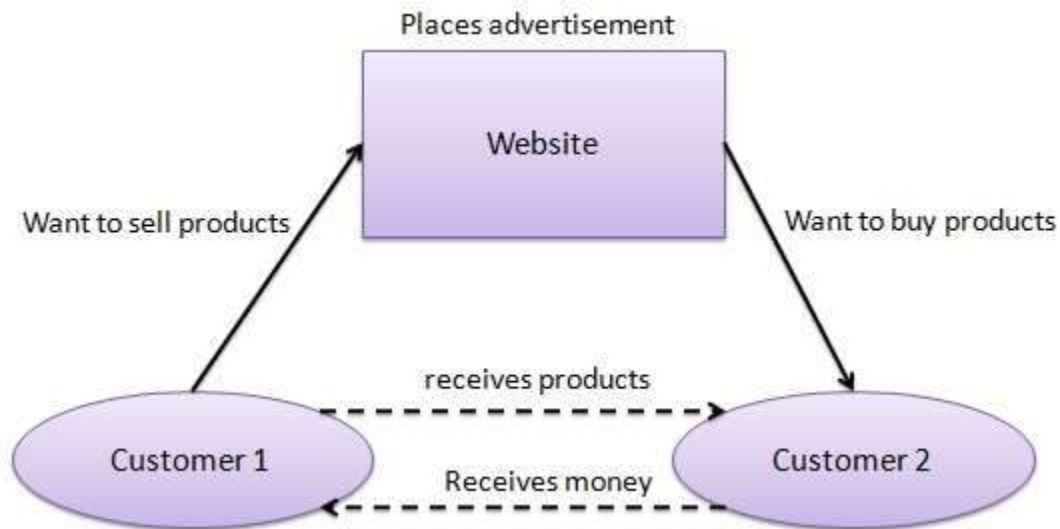

Consumer - to - Business (C2B)

In this model, a consumer approaches website showing multiple business organizations for a particular service. Consumer places an estimate of amount he/she wants to spend for a particular service. For example, comparison of interest rates of personal loan/ car loan provided by various banks via website. Business organization who fulfills the consumer's requirement within specified budget approaches the customer and provides its services.
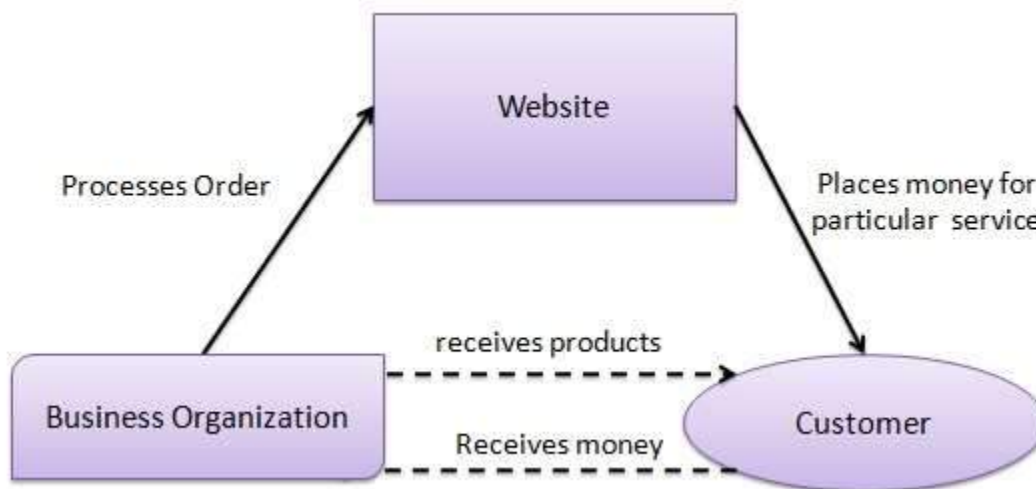

Business - to - Government (B2G)

B2G model is a variant of B2B model. Such websites are used by government to trade and exchange information with various business organizations. Such websites are accredited by the government and provide a medium to businesses to submit application forms to the government.
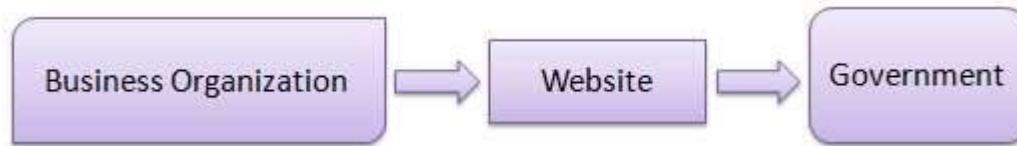
Government - to - Business (G2B)

Government uses B2G model website to approach business organizations. Such websites support auctions, tenders and application submission functionalities.
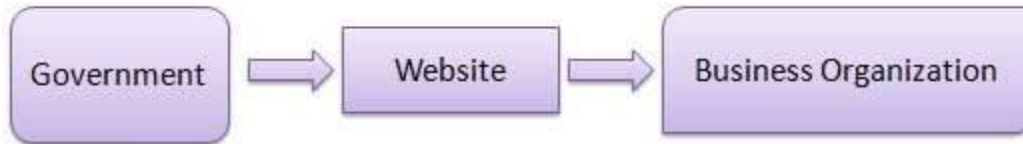

Government - to - Citizen (G2C)

Government uses G2C model website to approach citizen in general. Such websites support auctions of vehicles, machinery or any other material. Such website also provides services like registration for birth, marriage or death certificates. Main objectives of G2C website are to reduce average time for fulfilling people requests for various government services.

B2B Model

Website following B2B business model sells its product to an intermediate buyer who then sells the product to the final customer. As an example, a wholesaler places an order from a company's website and after receiving the consignment, sells the end product to final customer who comes to buy the product at wholesaler's retail outlet.
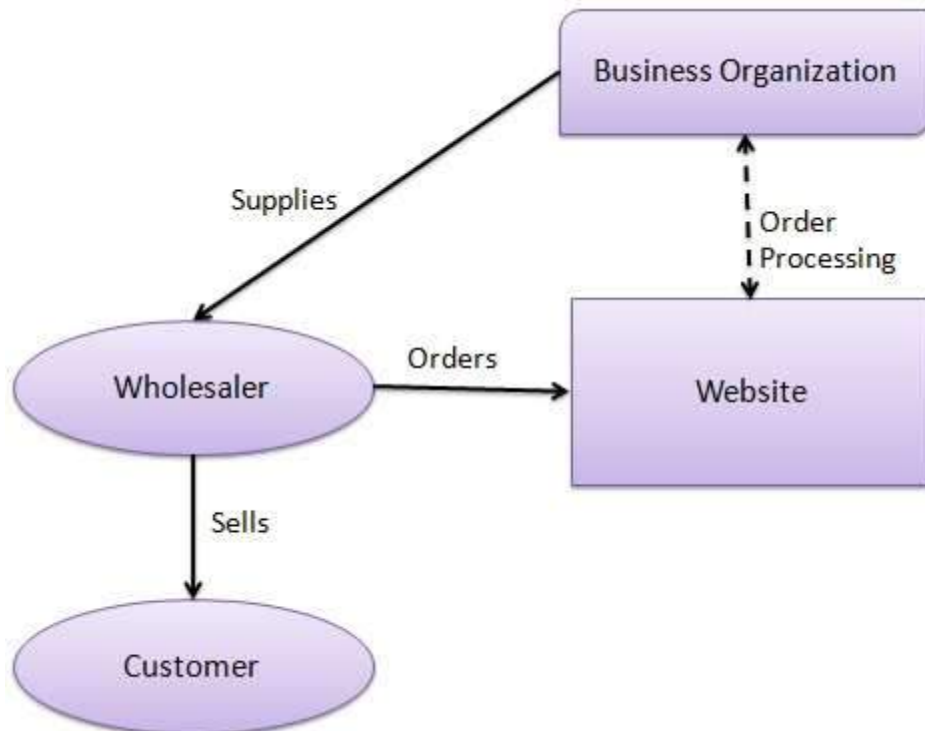
B2B implies that seller as well as buyer is business entity. B2B covers large number of applications which enables business to form relationships with their distributors, resellers, suppliers etc. Following are the leading items in B2B e-Commerce.

- Electronics

- Shipping and Warehousing

- Motor Vehicles

- Petrochemicals

- Paper

- Office products

- Food

- Agriculture

Key technologies

Following are the key technologies used in B2B e-commerce:

- **Electronic Data Interchange (EDI)** - EDI is an inter organizational exchange of business documents in a structured and machine processable format.

- **Internet** - Internet represents world wide web or network of networks connecting computers across the world.

- **Intranet**

  - Intranet represents a dedicated network of computers within a single organization

- **Extranet** - Extranet represents a network where outside business partners, supplier or customers can have limited access to a portion of enterprise intranet/network.

  .

- **Back-End Information System Integration** - Back End information systems are database management systems used to manage the business data.

Architectural Models

Following are the architectural models in B2B e-commerce:

- **Supplier Oriented marketplace** - In this type of model, a common marketplace provided by supplier is used by both individual customers as well as business users. A supplier offers an e-stores for sales promotion.

- **Buyer Oriented marketplace** - In this type of model, buyer has his/her own market place or e-market. He invites suppliers to bid on product's catalog. A Buyer company opens a bidding site.

- **Intermediary Oriented marketplace** - In this type of model, an intermediary company runs a market place where business buyers and sellers can transact with each other.

B2C Model

In B2C model, business Website is a place where all transactions take place between a business organization and consumer directly.
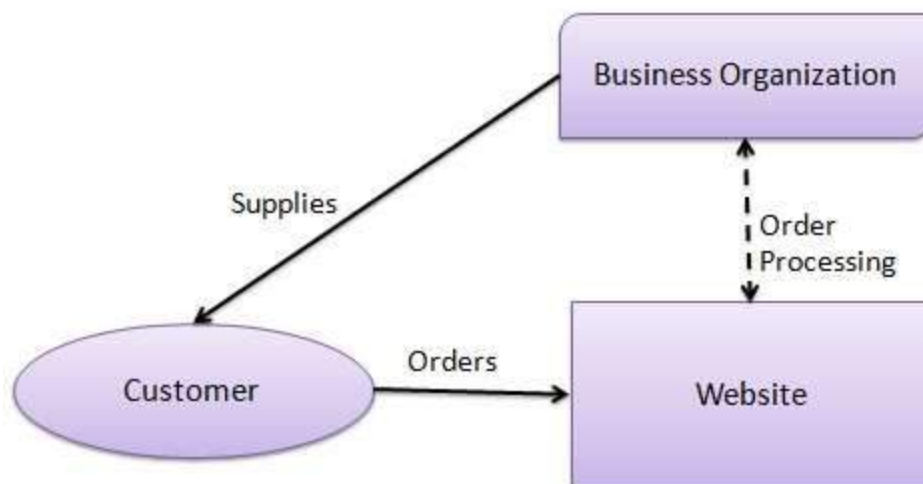
In B2C Model, a consumer goes to the website, selects a catalog, orders the catalog and an email is sent to business organization. After receiving the order, goods would be dispatched to the customer. Following are the key features of a B2C Model

- Heavy advertising required to attract large no. of customers.

- High investment in terms of hardware/software.

- Support or good customer care service

Consumer Shopping Procedure

Following are the steps used in B2C e-commerce:

A consumer

- determines the requirement

- searches available items on the website meeting the requirment.

- compares similar items for price, delivery date or any other terms.

- gives the order.

- pays the bill.

- receives the delivered item and review/inspect them.

- consults the vendor to get after service support or returns the product if not satisfied with the delivered product.

Disintermediation and Reintermediation

In traditional commerce, there are intermediating agents like wholesalers, distributors, retailers between manufacturer and consumer. In B2C website, manufacturer can sell products directly to consumers. This process of removal of business layers responsible for intermediary functions is called Disintermediation.
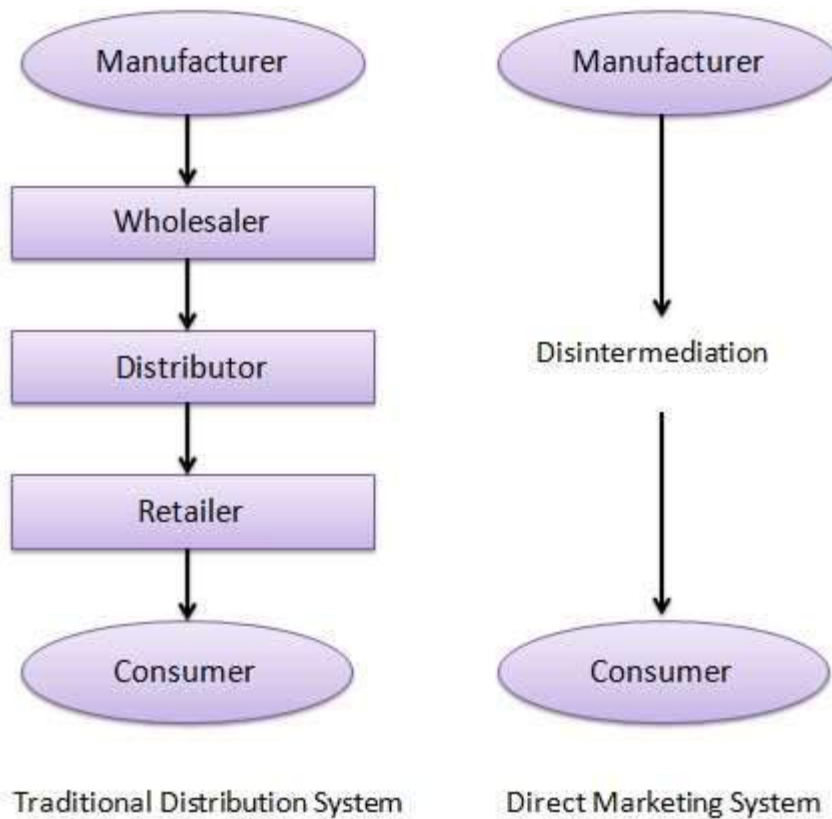
Now-a-days, a new electronic intermediary breed is emerging like e-mall and product selection agents are emerging. This process of shifting of business layers responsible for intermediary functions from traditional to electronic mediums is called Reintermediation.
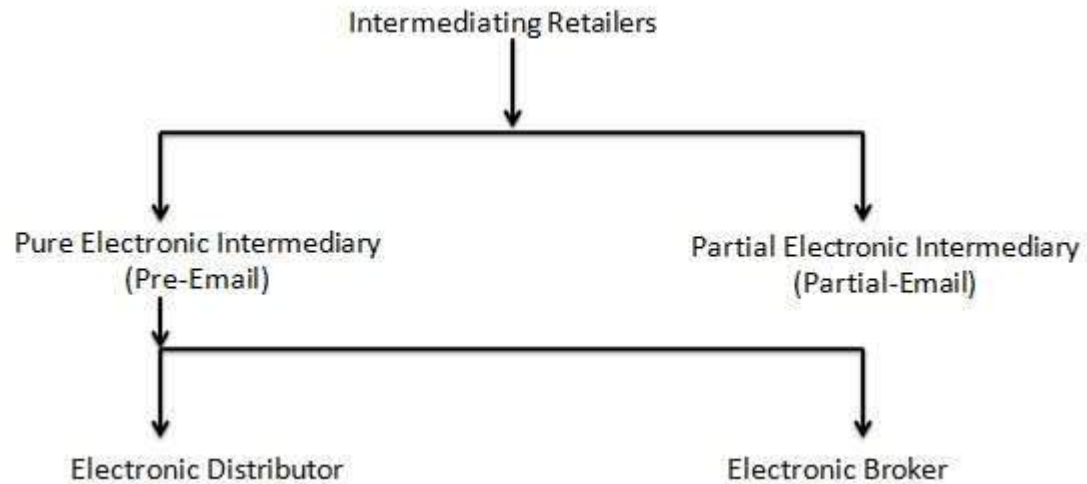
EDI

EDI stands for Electronic Data Exchange. EDI is an electronic way of transferring business documents in an organization internally between its various departments or externally with suppliers, customers or any subsidiaries etc. In EDI, paper documents are replaced with electronic documents like word documents, spreadsheets etc.
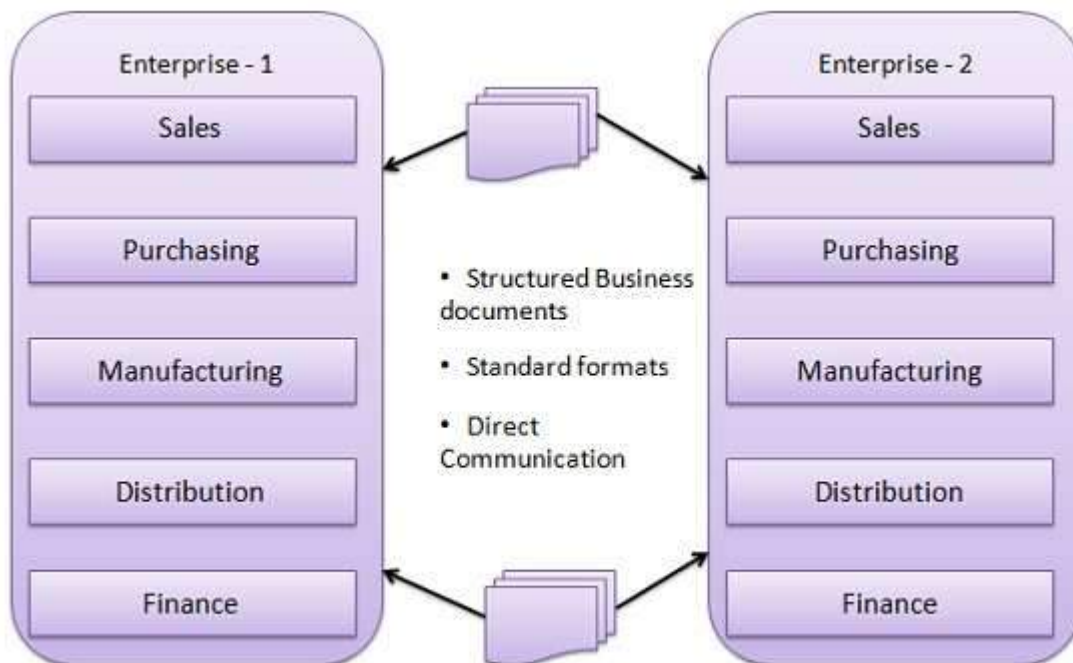
EDI Documents

Following are few important documents used in EDI:

- Invoices

- Purchase orders

- Shipping Requests

- Acknowledgement

- Business Correspondence letters

- Financial information letters

Steps in an EDI System

Following are the steps in an EDI System.

- A program generates the file which contains the processed document.

- The document is converted into an agreed standard format.

- The file containing the document is send electronically on network.

- The trading partner receives the file.

- An acknowledgement document is generated and sent to the originating organization.

Advantages of an EDI System

Following are the advantages of an EDI System.

- **Reduction in data entry errors.** - Chances of errors are much less being use of computer in data entry.

- **Shorter processing life cycle** - As orders can be processed as soon as they are entered into the system. This reduced the processing time of the transfer documents.

- **Electronic form of data** - It is quite easy to transfer or share data being in electronic format.

- **Reduction in paperwork** - As lot of paper documents are replaced with electronic documents there is huge reduction in paperwork.

- **Cost Effective** - As time is saved and orders are processed very effectively, EDI proves to be higly cost effective.

- **Standard Means of communication** - EDI enforces standards on the content of data and its format which leads to clearer communication.

①

✗ Mobile Commerce :— The term mobile commerce was orginally point in 1970's to mean delivery of electronic commerce capabilities directly into the consumer's hand anywhere via a wireless technology.

(Mobile commerce is an evolving area of e-commerce where users can interact with the service provider through the mobile & wireless network. Using mobile device for information retrieval & transaction processing. M-commerce service & applications can be added to different roles & mobile network with the aid of several mobile devices.) (BCS-12)

However, the constraints of mobile & device influence their operational per therefore there is a strong need for taking into consideration these constraints in the design & development phase of m-commerce service & application. An other factor in designing m-commerce service & application is the identification of mobile user requirements. Further [more m-commerce service & application need to be classified based on the functionality they provide to the mobile users. This kind of classification result in two major classes: 1) Directory & 2) 2) Transaction oriented.

②

→ M-commerce is the buying & selling of goods & services tho through wireless handheld devices such as cellular telephone & PDA. The emerging technology behind M-commerce, which is based on the wireless application protocol has made for greater growth in Europe, where mobile devices equipped with web ready microbrowser.

Definitions of Mobile Commerce :-
A

According to Lehman Brather, " m-commerce is the use of mobile devices to communicate, inform & entertain using text and data through a connection to public & private network."

" BCS-13

According to Duriacher, M-commerce refers to any transaction with monetary value that is conducted through a mobile communication network."

Examples :
  1) Purchasing airline tickets
  2) Purchasing movie tickets
  3) Restarent booking & reservation
  4) hotel booking & reservation

Difference between M-commerce & E-commerce

Frequently m-commerce represented as a

M-commerce should be recognised as a
unique business
not just an extension of an organization
internet based e-commerce channel.

Technology	E-Commerce	M-commerce
1. Device Used	PC	Smartphones, PDA
2. Operating System	UNIX, LINUX, WINDOWS	PALM OS, POCKET
3. Presentation Standard	HTML	I-NODE, HTML
7. Browser	Internet explorer and Firebox	Nokia browser, Mobile explorer, other micro browser
5.	BCS-14	

E-Marketing

E-Marketing (Electronic Marketing) are also known as Internet Marketing, Web Marketing, Digital Marketing, or Online Marketing. E-marketing is the process of marketing a product or service using the Internet. It not only includes marketing on the Internet, but also includes marketing done via e-mail and wireless media. It uses a range of technologies to help connect businesses to their customers.
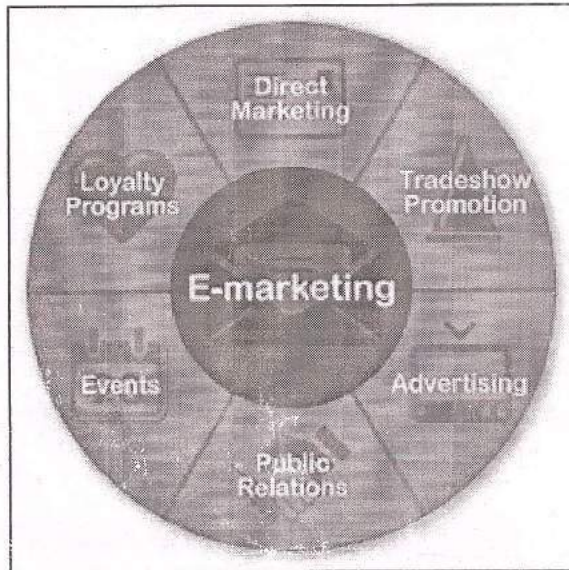
BCS-15

The primary benefits of E-marketing are:

- Much better return on investment from than that of traditional marketing
- Reduced Marketing campaign cost
- Fast result of the campaign
- Easy monitoring through the web tracking capabilities

Portal

Traditionally, a portal denotes a gate, a door, or entrance. A portal is a web destination that presents information and resources that are diverse in location, technology and derivation through a single point of entry. A web portal is most often one specially designed web site that brings information together from diverse sources in a uniform way. Usually, each information source gets its dedicated area on the page for displaying information (a portlet); often, the user can configure which ones to display

Examples of early public web portals were AOL, Excite, Netvibes, iGoogle, MSN, Naver, Lycos, Indiatimes, Rediff, and Yahoo.

Types of portals

① Personal web portals

A personal portal is a web page at a web site on the World Wide Web or a local HTML home page including JavaScript and perhaps running in a modified web browser. A personal portal typically provides personalized capabilities to its visitors or its local user, providing a pathway to other content. It may be designed to use distributed applications, different numbers and types of middleware and hardware to provide services from a number of different sources and may run on a non-standard local web server. Personal portals can be related to any specific topic such as providing friend information on a social network or providing links to outside content that may help others beyond your reach of services. Examples of personal portals include:

- home.psafe.com – A personal portal based on adaptive neural network technology provides customizable content according to each user's navigation, and provide full security against viruses, malware, phishing and bank fraud. The portal is developed by Brazilian online security company PSafe.[3]

② Government web portals

many governments had already committed to creating portal sites for their citizens. These included primary portals to the governments as well as portals developed for specific audiences. Examples of government web portals include:

- australia.gov.au for Australia.
- USA.gov for the United States (in English) & GobiernoUSA.gov (in Spanish).
- www.pakistan.gov.pk for Pakistan.
- www.gov.lk for Sri Lanka.
- india.gov.in for India.

③ Cultural portals

Cultural portal aggregate digitised cultural collections of galleries, libraries (see: library portal), archives and museums. Examples of cultural portals include:

- DigitalNZ – A cultural portal led by the National Library of New Zealand focused on New Zealand digital content.
- Europeana – A cultural portal for the European Union based in the National Library of the Netherlands and overseen by the Europeana Foundation.

④ Stock portals

Also known as stock-share portals, stock market portals or stock exchange portals are Web-based applications that facilitates the process of informing the share-holders with substantial online data such as the latest price, ask/bids, the latest News, reports and announcements.

⑤ Search portals

Search portals aggregate results from several search engines into one page. You can find search portals specialized in a product, for example property search portals. Library search portals are also known as discovery interfaces.

Property search portals

Property search portals aggregate data about properties for sale by real estate agents. Examples in the UK include Zoopla, Rightmove, Nestoria and Nuroa. Examples in the US include Propertini.

Tender portals

A tender portal is a gateway for government suppliers to bid(boli) on providing goods and services. Tender portals allow users to search, modify, submit, review and archive data in order to provide a complete online tendering process.

What a portal does:

- Enables universal login
- Handles both structured and unstructured data
- Facilitates multi-channel consistency
- Facilitates messaging and notification
- Automated tuning: pervasive content can be tuned based on personalization, location, browser, etc.
- Integration to other systems

Key features of portals:

- Security
- Access different data
- Transactions
- Search
- Publish Content
- Personal Content

BCS-17

The Major Functions of Portals are

According to the analyst and consulting company Ovum - as described in their study "Enterprise Portals: New Strategies for Information Delivery", 2000 - the ideal portal is based on eight functionality areas:

1) - search and navigation
2) - information integration (content management)
3) - personalization
4) - notification (push technology)
5) - task management and workflow
6) - collaboration and groupware
7) - integration of applications and business intelligence
8) - infrastructure functionality

The advantages of portals

Beyond institutional gains, portals offer obvious benefits to students, faculty, staff, and external stakeholders.

Students benefit from:

- Web interface to courseware and required information about courses;
- increased and easier communications with faculty;
- online access to grades, financial aid information, class schedules, graduation checks;
- access to the communities of interest within the university, sports, clubs, and community services opportunities; and
- increased life-long learning opportunities.

Faculty and staff benefit from:

- real-time communications with students;
- simplified course management tools;
- instant access to information for advising students;

some other benefits are

- efficiently deliver information to the audience;
- increase productivity for the end user;
- provides customizable features and development tools;
- increase interaction between customers and employees;
- personalized environments for end users; and
- integration of external applications and services by portlets.

(BCF-18)

The limitations and drawbacks of portals

- The portal industry is several years old,

The uses of portals

- **Single Access Point:**
- **Internet Tools**
- **Collaboration Tools:** These include e-mail, threaded discussions, chat, and bulletin board software that offer a whole range of ways to communicate and share information
- **User Customisation:.**
- **User Personalisation:**

EDI (Electronic Data Interchange)

EDI is the computer-to-computer exchange of business data in standard formats. In EDI, information is organized according to a specified format set by both parties, allowing a "hands-off" computer transaction that requires no human intervention or rekeying on either end. All information contained in an EDI transaction set is, for the most part, the same as on a conventionally printed document.

How EDI works :-

The following is the flow data takes throughout a normal EDI cycle.
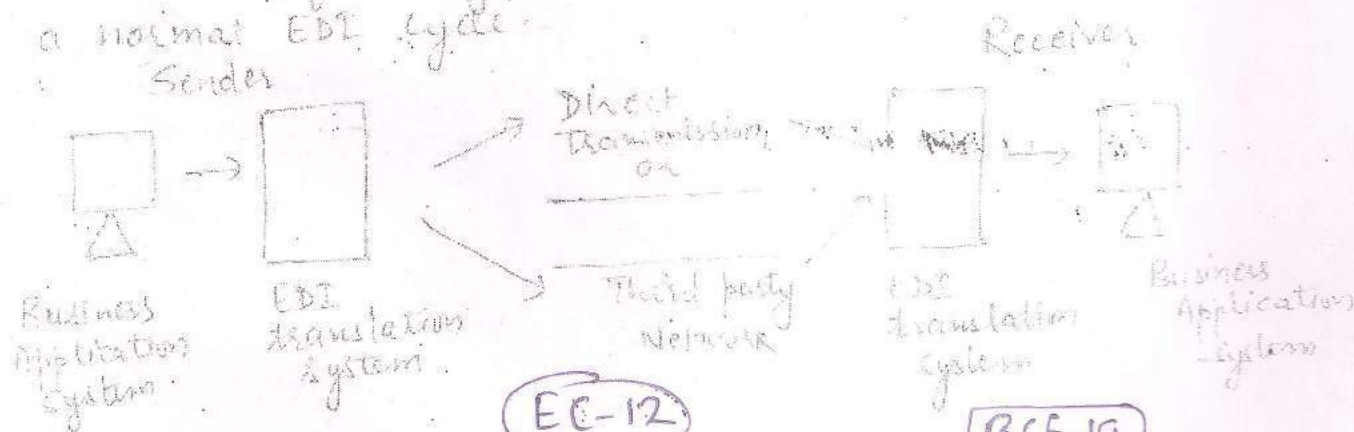
Data Flow in EDI cycle

The sender creates the application file using their own business application system. The file is then translated into an EDI standard format, and transmitted either through a value added network or a direct connection. The receiver takes the transaction set and translates the file from the EDI standard format to a file that is usable by their own business application system. Thus the cycle of EDI continues-

Benefits of EDI :-

1) Reduced cycle time
2) Better inventory management
3) Increased productivity

4). Reduced costs
5) Improved accuracy
6) Improved business relationships
7) Enhanced customer service
8) Increased sales
9) Minimized paper use and storage
10). Increased cash flow

The EDI standards are developed and maintained by the Accredited Standards Committee (ASC) X 12. The standards are designed to work across industry and company boundaries. Changes and updates to the standards are made by consensus, reflecting the needs of the entire base of standards users, rather than those of a single organization or business sector.

Industries currently using EDI include retail, insurance, education, manufacturing, mortgage, banking and numerous departments of U.S. Govt. As more and more businesses turn to EDI, several standards committees - including the ASC X 12 and EDIFACT - are working to include appropriate transactions in its body of standards.

Disadvantages of EDI :- $\quad$ (E-C-13) $\quad$ (BCF-20)

1) Too many standards :-
   There are too many standards bodies developing standard document formats for EDI. For ex, your company may be following X12 standard format, while your trading partner follows the EDIFACT standard format.

2) Changing standards :- Each year, most standard bodies publish revisions to standards. This pose a problem to EDI users. You may be using one version of the standard while your trading partners are still using older versions.

3) EDI is too expensive :- Some companies are only doing business with others who use EDI. If a company wants to do business with those organization, they have to implement an EDI program. This expense may be very costly for small companies.

be either physical or digital.

→ In traditional commerce all processes are physical.

→ In pure e-commerce all processes are digital.

→ In partial e-commerce processes include a mix of digital and physical dimensions.

3) Delivery agent :- This dimension includes various intermediary units involved in commercial transactions. Usually delivery agents behave as a communication channel b/w buyer and seller. Delivery agents may be either physical or digital.

→ In traditional commerce all delivery agents are physical.

→ In pure e-commerce all delivery agents are digital.

→ In partial e-commerce delivery agents include a mix of digital and physical dimensions.

Imp.

Advantages of E-commerce :-

The advantages of e-commerce are basically increased sales and decreased costs through the use of electronic media, especially the Web.

Major advantages of e-commerce are :

(i) Reduce Production cost :- replacing paper-based business operations.

BC5-21

(ii) Better Information System :- faster data retrieval rate

(iii) Better Management System within Org" :- central database for different departments of the company.

(iv) Better Management system across different Org"s :- Data exchanges & transactions b/w different Org"s from suppliers to customers.

(v) Better Business Strategy :- extending the business to cover more customers.

(vi) Globalization :- E-commerce is the essential pathway to implement globalization.

Inter Organization Transaction (BCS-22)

is similar to Internal Requisition/Sales Order. You can transfer goods from an organization (source) to another organzation (destination). The transfer method can be directly or throught intransit organization depend on the significancy of the route distance.

Organizational transactions are financial actions that affect the resources of a company. These can be within the business or business-to-business transactions, business-to-consumer transactions or business-to-government transactions. Every time a company agrees to take some action -- such as make a payment in exchange for anything of value -- it creates a legal contract. Therefore, organizational transactions are also contracts.

Inter-organizational transactions pertain to events that take place within the organization. This can include partnership agreements, technology and software licensing, trademarks and copyrights, non-disclosure agreements and employment contracts. Partnership agreements take place when two or more parties decide to start a business. Non-disclosure agreements and employment contracts are normally human resources transactions.

Business-to-Consumer Transactions

This includes everyday buying and selling of retail goods and services. It also includes the buying and selling of stock shares.

Business- to-Government Transactions

The government is the largest contractor in the country. It contracts various businesses for products and services pertaining to government needs. The government contracts for many different departments, including military and day-to-day operations. Examples could be toothpaste for the military or toilet paper for the Justice Department building.

Electronic Markets

was established in 1991, long before the Internet became known outside the academic world and before the rise of modern electronic commerce and electronic business.

* On-Line Shopping:-

On-line shopping is a form of determine commerce which allows customers to directly buy goods & services from a seller over internet using a web browser. It is also called e-web-store, e-shop, internet-shop, web shop & online store. Online shopping describe purchasing from online retailers.

English enterpreneur 'Micheal Albrich' invented online shopping in 1979. His system connected modified domatic T.V. to a real time transaction processing computer via a domestic telephone line.

Online shopping is the process where by customer directly buy goods or service from a seller in real time without any intermediate service over the internet. It is form of e-commerce, e-shop, virtual store. This process is called Business to Consumer online shopping. When businesses buy from another business it is called B2B online shopping. (BCS-23)

Benefits of Online Shopping:-

1. Convenience :- The convenience of this method of shopping is that you can

shop even at the midnight. You don't have to wait in a line till shop assistant is ready to help you with your purchase. You can do your shopping even if you are busy apart from saving time & avoiding crowds.

2. **Better Prices:** We can do cheap deals & better prices from online stores because products come to you directly from the manufacturer without middlemen involvement. Many online shops offer discount coupen & rebates. Only online store is required to collect sales tax if the have physical location over the state.

(BCS-24)

3. **Send Gifts :—** Online shopping makes sending gifts to relatives & friends easy no matter wherever they stay. Now there is no need of making distance an excuse for not sending a gift on occasion like birthday, anniversary & mothers day.

4. **Comparison of Prices:—**

Online shops make comparison & research of product and price possible. Online stores also gives you ability to store information and review with other shoppers who have first hand experience with products or retailer.

(8)

5. Fewer Expenses:

Many time when we op for conventional shopping. we tend to spend a lot more than the required shopping like travelling expenses and impulsive shopping

6. Crowds:-

Especially during festival & special events the crowds can really gives a headache crowds force us to do hurried shopping. Most of time, people crowds also create a problem when it comes to find a parking place near by you want to shop & going back to your vehicle lates on loaded with shopping bags. (BCS-25)

7. Variety:- In online shopping many varieties are given at home. due to this fact facility we can easy easily shop anything which we want to buy at anytime.

UNIT - IV

✗ E-Tailing :-

E-tailing is the selling of retail goods on the internet short for electronic retailing & used in internet discussion as early as 1995. The term seems as almost same to e-mail, e-business & e-commerce. E-tailing has resulted in the development of e-tail ware software tools for creating online catalogues & managing the business connected with doing e-tailing. A new trend is the price comparision site that can quickly compare prices from a number of different e-tailers and link you to them.

The word e-tail has its routes in the word retail. Here, the letter 'e' stands for electronic. Since the shopping process happens through the electronic media. (BCS-26)

With the use of web space, a virtual shop is created & products are displayed through images in their space with the features & price tags. By accessing this shopping, a customer can choose his or her products into the cart. The payment to this product can be done to the various mode as introduced by the shopping site. The product would be delivered the address specified

by the customer.

Steps include in e-tailing process:-

1) Customer visit
2) Choice of Product
3) Payment on-line.
4) Product delivery
5) Customer feedback

Benefits of E-tailing:-

1) It reduces the space occupied by retail outlets in the real world.
2) It gives quick & easy access to a shopping space at any time & from any place where there is access to internet.
3) It saves time of customers that is spend on travelling to a shopping place in the real world.
4) It creates an new platform for goods from different part of the world which could be imported by placing an order.

Some Examples of E-tailers in India:-

1) Flipcart.com
2) amazon.com
3) homeshop18.com
4) OLX.com

eShop (formerly known as **Ink Development Corporation**) was a company founded in May, 1991. It was started as a software company to develop products for Go Corporation's PenPoint operation system. In later years, it developed software for the Windows for Pen Computing and Magic Cap platforms. In 1993, it was renamed to eShop and developed electronic commerce software, focusing primarily on the "business-to-consumer" marketplace.

Definition: An e-shop is an online business that sells a variety of goods and services. E-shops are business-to-consumer oriented. They are just like a retail store but instead of having a physical location, its location is on the internet. E-shops are also referred to as an "e-store" or an "e-tailer." The benefits of an e-shop are that customers can shop anytime they want without having to go anywhere. There are two types of e-shops, pure plays and click and mortar or bricks and clicks. E-shops must make the shopping experience for the customer as easy and attractive as it would be to shop at a regular retail store.

History : E-shop started out in 1991 as a software company named Ink Development Corporation. In 1993 Ink Development Corporation was renamed E-shop. E-shop developed electronic commerce software that focused on the business-to-consumer marketplace. One of the most notable founders of e-shop was Pierre Omidyaris. He had an interest inconsumer-to-consumer commerce but e-shop was focused on business-to-consumer commerce. He left in 1994 but it was a loss for e-shop because he took his interest in consumer-to-consumer commerce and launched E-bay, a very successful company.

Types: E-shops come in two forms, pure plays and click and mortar or bricks and clicks. Pure plays are online businesses that only exist on the internet. Some examples of pure plays are Amazon.com, E-bay.com, Bluefly.com, and Overstock.com. Click and mortar or bricks and clicks are businesses that sell at both, online and physical locations. Some examples of click and mortar or bricks and clicks are, the Gap, Best Buy, Target, Barnes & Noble, Macys, Nordstrom, Blockbuster, and many more. Even grocery stores like Safeway allow you to shop online and they will deliver at your door.

How it works: The way an E-shops works is first, the customers visit a store, they browse the stores catalog and search for the products they are looking for, they add the products to their shopping cart, they can manage their shopping cart by adding or removing products at anytime before they check-out, once they have the products they want to buy they can check-out. The check-out process is usually safe because e-shops use encryption technology to protect customer's information such as credit card numbers, bank accounts, and addresses. The store usually offers support by email or contact number in case the customer needs help with something.

BCS-28

What makes a good E-shop: An e-shop should be appealing and easy to manage so that cusmtomers will want to buy from it rather than going to a regular retail store. There are billions of e-shops on the internet so a good e-shop should have an attractive and appropriate sign board. A sign board can be the lines in a search system, the banners, the advertisements on other sites, the head of the homepage, etc. When customers see your sign board they should be attracted to it and enter your shop. An e-shop should also be in a high position of a search list to attract customers because customers don't want to be looking around; they are going to go for what they see first. It should place references where it is convenient for its target group to find. An e-shop should be clean and simple so that the customer can concentrate on the product to make a good decision and not be distracted by mess such as bright colors or unreadable texts. It should be easy for the customer to find the product they are looking for, get product information, see the product price, and to get ass stance if he or she needs help.

Internet shopping/Online shopping is a form of electronic commerce which allows consumers to directly buy goods or servicesfrom a seller over the Internet using a web browser. Consumers find a product of interest by visiting thewebsite of the retailer directly or by searching among alternative vendors using a shopping search engine, which displays the same product's availability and pricing at different e-retailers. As of 2016, customers can shop online using a range of different computers and devices, including desktop computers, laptops, tablet computers and smartphones.

An online shop evokes the physical analogy of buying products or services at a regular "bricks-and-mortar"retailer or shopping center; the process is called business-to-consumer (B2C) online shopping. When an online store is set up to enable businesses to buy from another businesses, the process is called business-to-business (B2B) online shopping. A typical online store enables the customer to browse the firm's range of products and services, view photos or images of the products, along with information about the product specifications, features and prices.

Online stores typically enable shoppers to use "search" features to find specific models, brands or items. Online customers must have access to the Internet and a valid method of payment in order to complete a transaction, such as a credit card, an Interac-enabled debit card, or a service such as PayPal. For physical products (e.g., paperback books or clothes), the e-tailer ships the products to the customer; for digital products, such as digital audio files ofsongs or software, the e-tailer typically sends the file to the customer over the Internet. The largest of these online retailing corporations are Alibaba, Amazon.com, and eBay.[1]

Internet shopping/Online shopping is the process whereby consumers directly buy goods or services from a seller in real-time, without an intermediary service, over the Internet. It is a form of electronic commerce. An online shop, eshop, e-store, Internet shop, webshop, webstore, online store, or virtual store evokes the physical analogy of buying products or services at a bricks-and-mortar retailer or in a shopping center. The process is called business-to-consumer (B2C) online shopping. When a business buys from another business, it is called business-to-business (B2B) online shopping.

History

In 1990, Tim Berners-Lee created the first World Wide Web server and browser.[1] It opened for commercial use in 1991 . In 1994 other advances took place, such as online banking and the opening of an online pizza shop by Pizza Hut.[1] During that same year, Netscapeintroduced SSL encryption of data transferred online, which has become essential for secure online shopping. Also, in 1994, the German company Intershop introduced its first online shopping system. In 1995, Amazon launched its online shopping site, and in 1996, eBayappeared.[1]

BCS-25

Description

A good online store is easy to navigate and browse for possible purchases. It has a product catalog that customers can use to browse the search criteria (usually a type, price, material, age, etc.), information about the products, the sellers, and the service center. Online stores may also discuss business conditions and a Complaints Procedure.

If a shopper finds a product to purchase, clicking "send" will add the item to the shopping cart. The shopping cart collects all items to be purchased. Once a shopper is satisfied with their selections, the shopper makes a binding order and payment using a credit card or other financial arrangement. Therefore, implementing usability testing is highly important for an online store to avoid the reduce of overall performances of the online store [2]

In the twenty first century, online shopping has become very popular, especially with the lifestyles of business people who are always busy and are looking for a convenient way to shop.

The e-Commerce Trade Cycle

A trade cycle is the series of exchanges, between a customer and supplier, that take place when a commercial exchange is executed. A general trade cycle consists of:

Pre-Sales: Finding a supplier and agreeing the terms.
Execution: Selecting goods and taking delivery.
Settlement: Invoice (if any) and payment.
After-Sales: Following up complaints or providing maintenance.

For business-to-business transactions the trade cycle typically involves the provision of credit with execution preceding settlement whereas in consumer-to-business these two steps are typically co-incident.

The nature of the trade cycle can indicate the e-Commerce technology most suited to the exchange.

BC5-30

Commercial transactions that are repeated on a regular basis, such as supermarkets replenishing their shelves, is one category of trade cycle. EDI is the e-Commerce technology appropriate to these exchanges, see Figure 1.
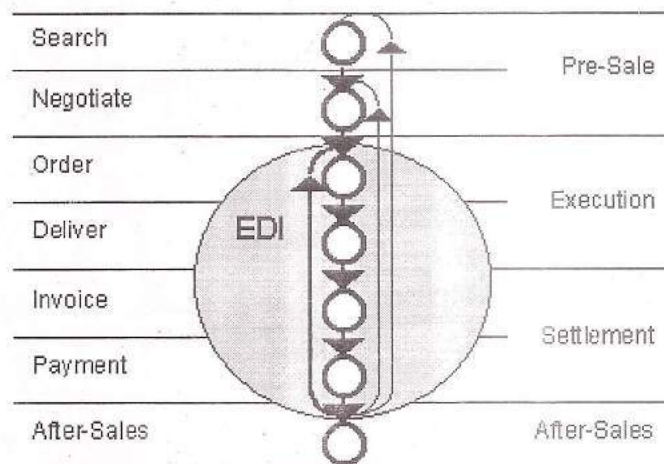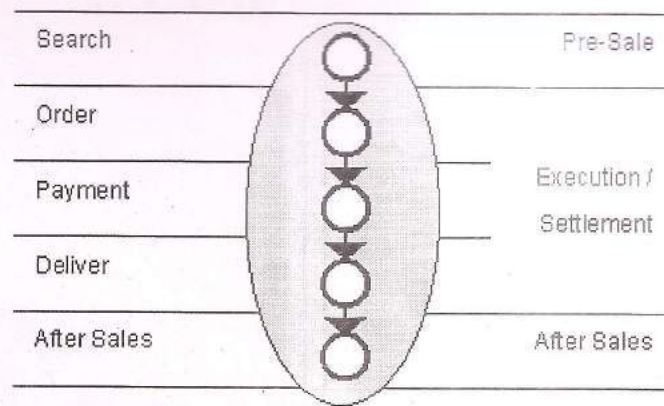

Figure 1: EDI Trade Cycle.

Consumer transactions tend to be once-off (or at least vary each time) and payment is made at the time of the order.Internet e-Commerce is the technology for these exchanges, see Figure 2.

Figure 2 Consumer i-Commerce.

The third generic trade cycle is the non-repeating commercial trade cycle and Internet e-Commerce or an electronic market is the appropriate e-technology.

BCS-31

Advantages and disadvantages of consumer e-commerce

(i) Consumers have a much wider choice available on the cyber market.

(ii) They bear lower costs for products due to increased on-line competition among sellers.

(iii) Because of wide-scale information dissemination, consumers can compare products, features, prices and even look up reviews before they select what they want.

(iv) They enjoy wider access to assistance and to advice from experts and peers.

(v) They enjoy saving in shopping time and money.

(vi) Consumers also avail of fast services and delivery of products and services.

(vii) They also have the convenience of having their orders delivered right to the door step.

(viii) Finally, consumers are driven to e-shopping in hordes as even branded goods cost less on the Net.

BCS-32

disadvantages of e-commerce include the following:

a. Return-on-investment is difficult to calculate.

b. Many firms have had trouble recruiting and retaining employees with the technological, design, and business process skills needed to create an effective electronic commerce presence.

c. Difficulty of integrating existing databases and transaction-processing software designed for traditional commerce into the software that enables electronic commerce.

d. Many businesses face cultural and legal obstacles to conducting electronic commerce.

PC banking:-

The term "PC banking" refers to the online access of banking information from a personal computer. A solution for both personal or business banking needs, this type of financial management allows you to conduct transactions using an Internet connection and your computer in lieu of a trip to the local bank branch or the use of an ATM. PC banking enables an account holder to perform real-time account activities and effectively manage finances in a way that avoids the hassle of daytime bank visits and eliminates the postage required to pay bills by mail.

 PC-Banking is a service which allows the bank's customers to access information about their accounts via a proprietary network, usually with the help of proprietary software installed on their personal computer". Once access is gained, the customer can perform a lot of retail banking functions. The increasing awareness of the importance of computer literacy has resulted in increasing the use of personal computers. This certainly supports the growth of PC banking which virtually establishes a branch in the customers' home or office, and offers 24-hour service, seven days in a week. It also has the benefits of Telephone Banking and ATMs.

BCS-33

Internet Banking

The idea of Internet banking according to Essinger4 is, "to give customers access to their bank accounts via a web site and to enable them to enact certain transactions on their account, given compliance with stringent security checks". Internet Banking, which is described as "the provision of traditional (banking) services over the internet, by its nature offers more convenience and flexibility to customers coupled with a virtually absolute control over their banking". Service delivery is informational (informing customers on bank's products, etc) and transactional (conducting retail banking services). As an alternative delivery conduit for retail banking, it has all the impact on productivity imputed to Tele-banking and Personal Computer-Banking. And it is the most cost-efficient technological means of yielding higher productivity. Furthermore, it eliminates the barriers of distance / time and provides continual productivity for the bank to unimaginable distant customers.

A bank must first attract banking consumer attention to the internet banking service before the consumer will consider internet banking. However, unless the consumer has a high level of internet accessibility at home or at work, he/she is unlikely to consider using internet banking. The consumer also assesses whether it is convenient to conduct his/her banking that way (convenience), how usable the application appears (usability), and his/her perceived competence at internet use and banking application use (self-efficacy). The consumer also considers whether the perceived relative advantages of internet banking compared with other banking forms outweigh perceived risks and costs. In addition, the availability of sufficient support and in depth knowledge from the bank and its employees contribute significantly to the adoption decision. Each component of the framework is discussed in detail from the top of the framework to the bottom hereunder.

E-Cheque:-

e-Cheque is the electronic counterpart of paper cheque, and is issued and presented in digital form. The totally electronic operation process brings you the following key benefits:

Benefits

Added convenience

- Immediate access anywhere with an internet connection
- No need to physically pickup or deposit
- No cheque book required

It can be used for clearing micro payment.
Time saving & reduced costs.
No secure storage is required as in the case of e-cheques

Better security

- Uniquely identifiable and protected with digital signing technology that prevents data from being altered
- e-Cheque details are captured digitally for complete accuracy
- Use of PIN-protected security device and SMS transaction alerts to provide safe and secure service

Increased flexibility

BCS-34

- Extended cheque deposit cut-off time
- Issuance, deposit and status enquiry can be performed anytime online
- Festive themed e-Cheque background designs available for selection

WORKING OF E-CHEQUES

* E-cheques work the same way as paper cheques and are a legally binding promise to pay. The payment system uses digitally signed XML documents that provide mechanism to authenticate parties to a transaction. E-cheques are defined using FSML (financial services markup langauge) which allows for addition and deletion of document blocks, signing, co-signing, endorsing, etc. Signatures are accompanied by bank-issued certificates which tie the signer's key to a bank account.

Micro Payment system

An electronic check, also referred to as an e-check, is a form of payment made via the internet, or other data network, designed to perform the same function as a conventional paper check. Since the check is in an electronic format, it can be processed in fewer steps. Additionally, it has more security features than standard paper checks including authentication, public key cryptography, digital signatures and encryption, among others.

Development of the Electronic Check

Electronic checks were developed in response to the transactions that arose in the world of electronic commerce. Electronic checks can be used to make a payment for any transaction that a paper check can cover, and are governed by the same laws that apply to paper checks. This was the first form of internet-based payment used by the U.S. Treasury for making large online payments.

Benefits Associated With Electronic Checks

Generally, the costs associated with issuing an electronic check are notably lower than those associated with paper checks. Not only is there no requirement for a physical paper check, which costs money to produce, electronic checks do not require physical postage in cases of payments being made to entities outside of the direct reach of the entity issuing the funds. It is estimated that while a traditional check may cost as much as $1 to issue, an electronic check costs closer to $0.10. Electronic checks also come with a lower risk of the associated funds being stolen, as there is no tangible item to intercept. Further, there are multiple levels of authentication to help ensure funds are routed properly.

Common Electronic Checks

One of the more frequently used versions of the electronic check is the direct deposit system offered by many employers. It is an electronic method of sending an employee's wages directly into the employee's bank account. Additionally, tax payers due a refund on federal tax returns can elect to receive a directly deposited electronic check from the Internal Revenue Service (IRS) instead of having a physical paper check sent through the mail.

BCS.35

Electronic cheques address the electronic needs of millions of businesses, which today exchange traditional paper cheques with the other vendors, consumers and government. The e-cheque method was deliberately created to work in much the same way as conventional paper cheque. An account holder will issue an electronic document that contains the name of the financial institution, the payer's account number, the name of payee and amount of cheque. Most of the information is in uncoded form. Like a paper cheques e-cheques also bear the digital equivalent of signature, a computed number that authenticates the cheque from the owner of the account. Digital chequing payment system seeks to extend the functionality of existing chequing accounts for use as online shopping payment tools. Electronic cheque system has many advantages:

1. They do not require consumers to reveal account information to other individuals when setting an auction.

2. They do not require consumers to continually send sensitive financial information over the web.

3. They are less expensive than credit cards and

4. They are much faster than paper based traditional cheque.

But, this system of payment also has several disadvantages. The disadvantage of electronic cheque system includes their relatively high fixed costs, their limited use only in virtual world and the fact that they can protect the users" anonymity. Therefore, it is not very suitable for the retail transactions by consumers, although useful for the government and B2B operations because the latter transaction do not require anonymity, and the amount of transactions is generally large enough to cover fixed processing cost. The process of electronic chequing system can be described using the following steps:

● Step 1: a purchaser fills a purchase order form, attaches a payment advice (electronic cheque), signs it with his private key (using his signature hardware), attaches his public key certificate, encrypts it using his private key and send it to the vendor.

- Step 2: the vendor decrypts the information using his private key, checks the purchaser's certificates, signature and cheque, attaches his deposit slip, and endorses the deposit attaching his public key certificates. This is encrypted and sent to his bank.

- Step 3: the vendor's bank checks the signatures and certificates and sends the cheque for clearance. The banks and clearing houses normally have a private secure data network.

- Step 4: when the cheque is cleared, the amount is credited to the vendor's Account and a credit advice are sent to him.

- Step 5: the purchaser gets a consolidated debit advice periodically.

Clearing Cheque payment electronically

BCS-36
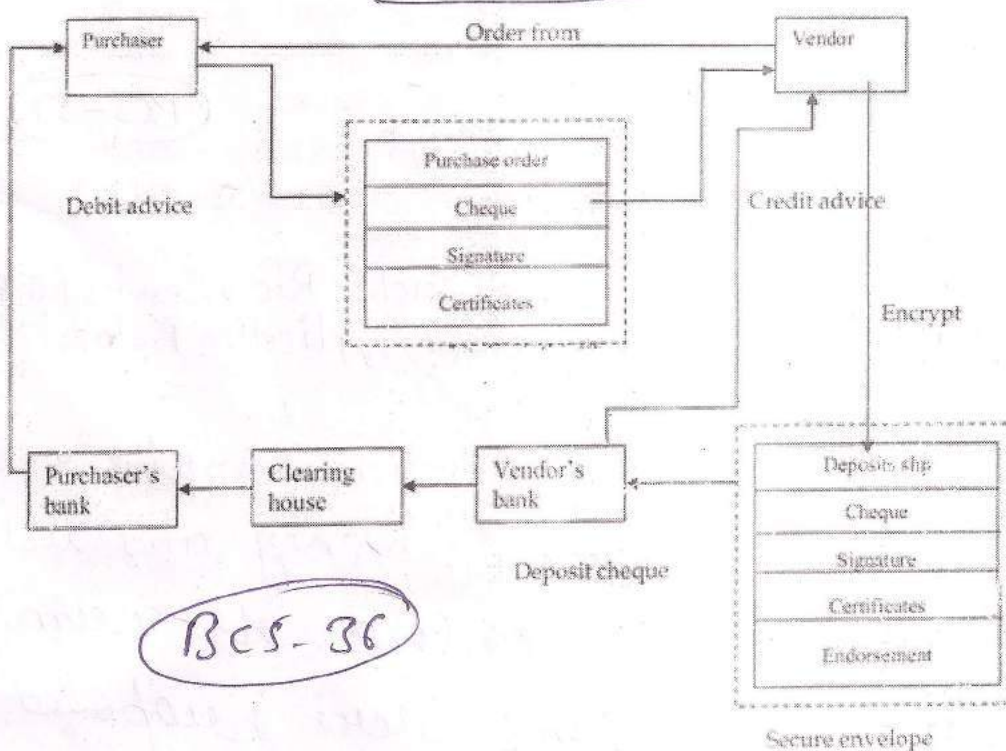
Micro Payment system

- Micropayments are financial transactions involving very small sums of money. M-PESA offered by different telecom companies to its customers are the examples of micro payment systems.
- Instead of using methods like cash, cheque, and credit card, a customer can use a mobile phone to transfer money or to pay for goods and services.
- customer can transfer money or pay for goods and services by sending an SMS, using a Java application over GPRS, a WAP service, over IVR or other mobile communication technologies. In India, this service is bank-led. (BCS-37)
- Customers wishing to avail themselves of this service will have to register with banks which provide this service. Currently, this service is being offered by several major banks and is expected to grow further

* Global Packet Radio Service (GPRS)
* Wireless Application Protocol
*

A financial transaction involving a very small sum of money and usually one that occurs online. A number of micropayment systems were proposed that developed in the mid to late 1990s, all of which were ultimately unsuccessful. A second generation of micropayment systems emerged in the 2010s. while micropayments were originally envisioned to involve very small sums of money, practical systems to allow transactions of less than 1 USD have seen little success. one problem that has prevented the emergence of micropayment systems is a need to keep cost for individual transaction low.

E-cash

ecash was conceived by David Chaum as an anonymous cryptographic electronic money or electronic cash system in 1983. It was realized through his corporation Digicash and used as micropayment system at one US bank from 1995 to 1998

E-Cash

> A system that allows a person to pay for goods or services by **transmitting a number** from one computer to another.

> Like the serial numbers on real currency notes, the **E-cash numbers are unique.**

> This is **issued by a bank** and represents a specified **sum of real money**.

> It is anonymous and reusable.

BCS-38

Introduction to E-cash

- E-cash is data
  - A long random number
  - An assertion as to value
  - Signed by a bank with its private key
- Implementation
  - Can be totally "virtual" or can rely on smart card or other token
  - Clearing can be online or off-line
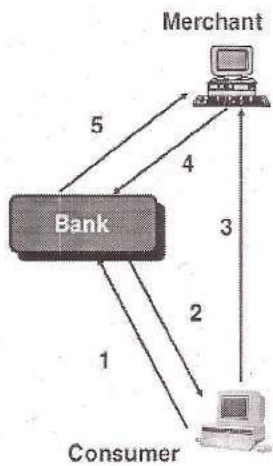
3rd Annual Incremental Tax Seminar :1/11/98.

E-cash Concept

1. Consumer buys e-cash from Bank
2. Bank sends e-cash bits to consumer (after charging that amount plus fee)
3. Consumer sends e-cash to merchant
4. Merchant checks with Bank that e-cash is valid (check for forgery or fraud)
5. Bank verifies that e-cash is valid
6. Parties complete transaction: e.g., merchant present e-cash to issuing back for deposit once goods or services are delivered

BCS-39

E-Cash Processing

1. Consumer buys e-cash from Bank

2. Bank sends e-cash bits to consumer (after charging that amount plus fee)

3. Consumer sends e-cash to merchant

4. Merchant checks with Bank that e-cash is valid (check for forgery or fraud)

5. Bank verifies that e-cash is valid

6. Parties complete transaction

(8)

Electronic Cash

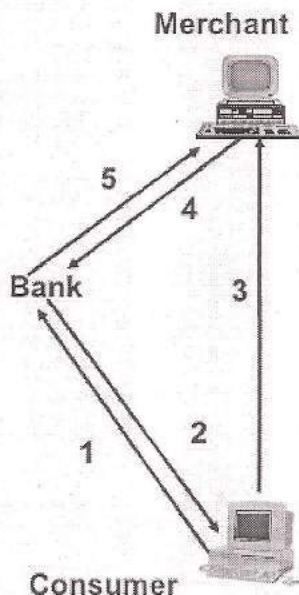- **Electronic cash** (e-cash, digital cash)
  - Describes any value storage and exchange system created by private (nongovernmental) entity
    - Does not use paper documents or coins
    - Can serve as substitute for government-issued physical currency
- Readily exchanged for physical cash on demand
- Problem
  - No standard among all electronic cash issuers
  - Not universally accepted

BCJ-40

ADVANTAGES OF ELECTRONIC CASH

- Electronic cash transactions are more efficient and less costly than other methods.

- The distance that an electronic transaction must travel does not affect cost.

- The fixed cost of hardware to handle electronic cash is nearly zero.

- Electronic cash does not require that one party have any special authorization.

(4)

Advantages and Disadvantages of Electronic Cash

- Advantages of electronic cash:
  - Transactions are more efficient
  - Costs less than processing credit card transactions
- Disadvantages of electronic cash:
  - No audit trail
  - Money laundering and fraud
  - Susceptible to forgery

17

BC5-41

DISADVANTAGES OF ELECTRONIC CASH

○ Electronic cash provides no audit trail.

○ Because true electronic cash is not traceable, money laundering is a problem.

○ Electronic cash is susceptible to forgery.

○ So far, electronic cash is a commercial flop.

12

Electronic Funds Transfer

Electronic Funds Transfer at Point of Sale (EFTPoS) An Electronic Funds Transfer at the Point of Sale is an on-line system that allows customers to transfer funds instantaneously from their bank accounts to merchant accounts when making purchases (at purchase points). A Point of Sale uses a debit card to activate an Electronic Fund Transfer Process.5 Increased banking productivity results from the use of EFTPoS to service customers shopping payment requirements in stead of clerical duties in handling cheques and cash withdrawals for shopping. Furthermore, the system continues after banking hours and hence continual productivity for the bank even after banking hours. It also saves customers' time and energy in getting to bank branches or ATMs for cash withdrawals which can be harnessed into other productive activities.

BCS-42

It is the electronic transfer of money form one bank account to another, either within a single financial institution or across multiple institutions, through computer based system. & without the direct intervention of bank staff. In United state, they may be referred to electronic checks or e-checks.

e.g.
- card-holder-initiated transactions, using a payment card such as credit/debit card
- Direct deposit payment initiated by the payer
- electronic bill payment in online banking
- Direct debit payment for which a business debits the consumer's bank accounts for payments for goods or services.
- Online bill payments

①

E-Banking :-
Online banking is also known as e-banking, cyber banking and virtual banking. Online banking includes various banking activities conducted from home business or on the road instead of at a physical bank location. E-banking has capabilities ranging from paying bills to securing a loan electronically. Many banks are begining to use home banking and some use e-commerce a major competitive strategy. One such bank is ICICI (BCS-43)

Tabular Form] Using E-banking you can transfer money between accounts, review past statement and credit card transactions, pay bills, check balances in all your accounts and credit cards and calculate the interest to be paid on loans and credit cards within fraction of time at any time at any place.

E-banking allows customers of a financial istitutions to conduct financial transaction on a secured website operated by the institution which can be a retail bank, virtual bank.

~~A~~ To access a financial institution online banking facility, a customer having personal internet access must register with the institution for the service and set up some password for customer verification.

②

E-Banking Operations:

1) A bank customer can perform non-transactional operation through e-banking or online banking:-

(1) Viewing Account Balances
(2) Viewing Recent transaction
(3) Downloading bank statements
(4) Viewing images of paid checks.
(5) Ordering checkbooks.
(6) Download a peroidic account statements.
(7) Downloading applications for M-banking,
(8) E-banking etc.

BCS-44

2) Bank Customers can transact banking through e-banking or online including:

(1) Funds transfer between the customers
(2) link account.
(3) Paying third parties
(4) Bill payment
(5) Investment purchase or sale.
(6) Loan applications and transactions.

Advantages:-

1) Get current account balances at any time at any place.
2) Obtain charge and credit cards statements
3) Saves time by making payment of electricity bill, telephone bill.
4) Download account transactions.
5) Transfer money between account within

B

fraction of seconds.

6) Balance your account if you are a kind of person who forgets to record ATM withdrawal, online banking may help you get organised. Just download the transactions and import them into your register.

7) Customers of some banks, receive free phone banking with their online banking service.

8) Handle your finances when travelling

BCS-45

9) If you find a problem with your account you can send a quick note to your online bank representative.

10) Many online banks provide customer care services.

11) Just one mouse click, you can obtain the full information regarding home loans, car loans, education loan etc.

✗ Risk of E-commerce & E-Banking :—

1. Spoofing
2. Unauthorised
3. Unauthorised Action
4. Data Alteration

(BCS-46)

1. Spoofing :—

The low cost of website creation & the ease of copying existing pages makes it all to easy to create a illegitimate sites that appear to be operated by established organization. In other words, spoofing refers to deceiving computer system or other computer users. This is typically done by hiding one's identity or faking the identity of another user on the internet. Spoofing can take place on the internet by several different ways. One common method is e-mail. E-mail spoofing involves sending messages from a bogus e-mail address or faking the e-mail address of user.

2. Unauthorised Disclosure :
When transaction information is transmitted " in the clear without proper security and encryption, hacker can intersect the transmission to obtain

②

customer's sensistive information like personal information, debit or credit card information

3. Unauthorised Action:-
A competitor can alter a website so that it malfunctions or refuse services to potential clients.

BCS-47

t. Data Alteration:-
The content of a transaction can be not only inter but also can be altered either maliciously or accidently user name, credit card number and dollar amounts sent without proper security and encryption are all vulnerable to such alteration.

There are three key elements to Inspiring the confidence of your customers and ensuring a trudy secure online transaction.

1) Encryption
2) Authentication
3) Digital Certificates

1. Encryption:-
Businesses that are serious

about e-commerce must implement a complete e-commerce trust infrastruc based on encryption technology. Encryption, the process of transforming information to make it unintelligible to all but the intended receipients, forms the bases of data integrity and privacy necessary for e-commerce.

BCS-48-I

2. **Authentication:**

Although, some certificate authorities believe that encryption is enough, it is imperative that your website is also authenticated. This will improve your ~~digital~~ ~~trust~~ visitors trust in you & your website.

3. **Digital Certificates:**

A digital certificate is an electronic file that uniquely identify individuals and websites on the internet and enables secure confidential communications. They serve as sort of digital passport. The practice of providing unauthenticated certificates exposes online users to the risk of false online store fronts operating on the internet.

Security Certificate:

→ Java allow us to generate Public & Private key pairs. It also allow digital signing ~~which~~. The key is transmitted in the form of certificate. A certificate is just another piece of data that contains the Public key of an entity and additional information much as the entity's name. You can create your own certificate, but the general practice is to use certain companies, known as Certificate Authorities (CAs), which create these certificate. Client-side s/w knows about these trusted CAs, so they accept the certificates generated by one of them. If a certificate is received by the client, it first check whether the certificate has been created by a CA. If so, it is accepted

BC$ — (48) - II

* Future of E-Commerce :—

As the technological advances affect the way business is run it can be assumed that some unforseen circumstances will have a substantial impact on the way electronic commerce develops. As it has been in the past business to business commerce will grow the quickest with business to consumer also growing but at a slower rate. The distinctions blu voice and data communication will break down and they will be combined more often to make a more efficient form of communication. In the post-modern era the emergence of the internet in other mediums apart from computers is growing and shall continue growing in the future, this will be allow e-commerce to be conducted from any location even if there is no computer present, for example, through mobile phones and televisions. Companies will utilize the expansion of e-commerce and will most likely charge venders wanting to acess their users and most likely charge extra for exclusive acess. Since it is important that the web will be only

increase in its complexity the opportunities for companies to make money from intermediary services will increase. As electronic commerce becomes more widely used the government should maximise the efficiency and becomes a model user. As several countries engage in a race to become the most efficient in e-commerce, they must keep in mind that over regulating the growth of the industry will inhibit (निषेधना) the growth and depreciate the trust levels b/w both businesses and consumers.

Introduction To Portals

Portals can link to inform. sources beyond the corporate firewall, including internet news feeds, real time events, calendars, news announcements and online discussion (book) groups. Data (can be) feeding the portal can either be structured and unstructured (Structured data are database and applications; ex. of unstructured data are files, emessages)

A portal is a destination sites for users of a particular class. A portal is any site with a large number of visitors on which the primary focus was not to sell products.

Portal can be a powerful marketing utility that help companies add more value to customers by cost effectively delievering to them the kind of augmented product was not possible in the pre-net era.

* Definition of Portal :-
Portal is a major visiting centre for internet users.

Portal is a single, web based interface to content, data; aggregated and customised, based on the user's profile, subscription and access.

Profiling the user (user can be internal and external to the corporation like employees, customers, partners and suppliers)

Meaning :-
Traditionally, a portal denotes a gate, a door, or entrance. A portal is a web destination that presents inform. and resources that are diverse in location, technology and derivation through a single point of entry.

* Advantages of portals :-

Beyond institutional gains, portals offer obvious benefits to students, faculty, staff and external stake heblers. (हिस्सेदार)

(A) Student benefits from:-

i) Web interface to courseware and required information about course;

ii) Increased and easier communications with faculty;

iii) Online access to grades, financial aid inforn, class schedules, graduation checks;

iv) access to communities of (internet) invest interest within the university, sports, club, and community services opportunities;

v) Increased life-long learning opportunities.

B) Staff and faculty benefits from:-

i) real time communication with students;

ii) Simplified course management tools;

iii) instant access to inforn. for advising students;

(C) Some other benefits are:-

i) Efficiently delivers inforn to the audience.

ii) increase productivity for the end user;

iii) Provides customizable's features and development tools.

iv) increase interaction b/w customers and
      employees;
v) personalized environments for end users;
vi) integration of external applications and
      services by portlets.

The major advantages of portal:-

    There are many other advantages
of portal. These are as follows:-

i) **Simplicity:-**
        The primary advantages of
using a portal is simplicity. The portals
are developed because of this reason.

ii) Portals are not always to serve a large
number of users. Sometimes, single point
consolidation of portals is used to
support a relatively small numbers of
specilists.

iii) Suppliers are another ready audience for
portals.

iv) Supplier portals can also be one link
in a complete web enabled business chain.

* **Disadvantages of portal:-**

i) The portal industry is several years
old.

* **Market place for electronic Commerce:—**

The market place in e-commerce where buying and selling takes place are shown under.

e-commerce shops are similar to the physical shops we find at various places, where only product and price inforⁿ are given and the purchase transactions conducted online.

```
          ┌─────────────────────┐
          │   e-commerce        │
          │   market place      │
          └──────────┬──────────┘
        ┌────────────┴──────────────────┐
┌───────────────────┐          ┌──────────────┐
│ Pure e-commerce   │          │   Portals    │
│     shops         │          └──────┬───────┘
└────────┬──────────┘                 │
    → e-shops                    → vertical
    → e-grocerise                  portals (vortel)
    → emalls                     → Horizontal
                                   Portals (Hortel)
                                 → spot portals
```

(A) **Pure e-commerce shops :→**

(i) **e-shops:-**

Single shop selling a single type of product service on a single site.

PT→

2) **e-groceries:-**

Single shop typically selling multiple types of related products or services on a single site.

3) **e-malls:-**

Set of multiple shops selling a variety of products and/or service that are hosted by a single mall site.

(B) **Portals :-)**

4) **Vertical Portals (vortals):-**

(i) A single product category.
(ii) Provides info^n on multiple brands of that product as well as a closely related information.

5) **Horizontal Portals (Hortals):→**

A range of large unrelated product categories carried out.

6) **Spot portals (Sportals):-**

Advantages of Horizontal and vertical portals combined here.
eg.- computer. com.

We all know that shops and groceries selling single or multiple or related products or services on a simple site.

e-malls:-

The mall may have a single owner/manager or multiple owners/managers. Certain malls may provide for all orders and/or payment consolidation across services within the mall, whereas other may need the customer to place individual orders or make individual payments for each shop in the mall. Malls typically have a subject that decides the type of shop eg — geographical location, type of good sold, indian leather garments mall or a combination of both.

* E-Commerce Portals:- (क्रमश:)

On the contrary to the physical shops, these are places where, apart from providing product and price information, conducting the purchase transactions, additional inform and links to the other related sites are provided to the customer aid and influe influence the purchase decision. It provides in addition useful related or unrelated inform to a potential non-transacting customer like specialized repair and care inform, new product

or technology developments etc.

(i) Vertical Portal :->

Vertical portal is a typical type of portal which showcase a single product category and provides inform on multiple brands of that product as well as closely related product inform. Only a subset of the audience is created by this who are interested in that product alone either as a buyer, user or a seller and will seek out the portal to meet their needs. Such portals draw commission revenues or discounts for that service of targeting they provide. Eg- product $x — x_1, x_2, x_3$

ii) Horizontal Portal :->

This carries a range of largely unrelated product categories and provide inform on multiple brands of the set of products that it chooses to carry. further, a host of related product inform and unrelated inform or loosely related inform of services also may be carried. It trys to attract attract a large and wide variety of customers to its site by providing a broad range of products and services in the hope that some visiting customers may purchase from the site.

iii) <u>Spot Portal</u> :→

This is the third type of portal attempting to take the advantages of the above two types of portals. It carries a ranges of related product categories and provides information on multiple brands of the set of product that it chooses to carry as well as a host of related product inform and services. Thus, it is broader in the range of product it carries than a vertal and provides most products and product inform in each product category.

Eg- More range of products as in vertal
XI, X2, X3, X4, X5)
more products and product inform in each category than vertal p.

R:.. Hortal $\begin{cases} A_1, A_2, A_3, A_4, A_5 \\ B_1, B_2, B_3, B_4, B_5 \end{cases}$ + more product infor.

iv) <u>Portal as <u>intermediary</u></u> :→

The service provided by portals are:
- Relevent News
- Inform
- Training
- Weather information
- Stock quotes
- Community forums etc.
- Directory of websites
- Support
- Products
- Access to business partners
- Transaction support

Every one in the economy wants to get into establishing their individual portals.
Today, portals in leadership position include Yahoo! Excite, Netscape, Lycos MS Networks and few others.
The portal sites serve as intermediaries by putting content and audience together.

* Types of Portals →

Different types of portals are as follows:-

1) Web Searching portals :-
Web searching portals such as Yahoo, provided aggregated contents, usually as a series of f predefined links along with a search engine. As their servival is dependent on advertising they must drive large number to their site.

2) E-Commerce portals :-
E-Commerce portals facilitates the sharing of inform to customers and suppliers. They usually have a transactional processing component, provide inform on products and services and often include supply chain mgt. features. E-Commerce portals aim to increase the value of relationship while lowering the cost.

2) **Self - Service portals :→**

Self - Service portals allow employees, customers or suppliers to access info¹ about themselves and to carry out certain business processes in a way that is suited to their own needs. Portals are usually justified in terms of removing hard cost from the business through self service of options.

4) **Business intelligence portals :→**

Business intelligence portals or decision portals empower users in their decision making process. More than just allowing users to query and report access multiple data stores, business intelligence portals have built-in tools that provide targeted reports to end-users groups and (individual) Individuals. Business intelligence portals are likely to cater to the needs of executives looking for top-level info¹ relating to company performance, general employees require ad-hoc reports as well as those within the org¹ whose specific role is to mine and ~~any~~ analyse data. (cont)

(5) **Collaboration portals:-**

Collaboration portals enable a geographically dispersed workforce

to interact around projects and business - as- usual tasks through a common user or access or rallying point. Collaboration portals ensure that non-technical staff can administer the collaboration session. Workgroup or site including uses set-up and creating online webpages, presentations etc.

Collaboration portal offers generic tools such as chat, white boards and threaded discussion streams along with ways to share objects such as map, documents.

(6) **Enterprise information portal:→**

The Enterprise info^n portal is the most comples. The objectives is a ~~society~~ highly tailored, unique ~~expensive~~ experience for every user. This is achieved by typing the various disparate legacy systems together and joining these to the business process.

7) **E- learning portals :→**

E- learning portals focus on guiding students in the broadest ~~sense~~ sense through a structured learning experience. E- learning portals test abilities and provide feedback to the students in

a personalised and confidential manner.
They may also interact with others
systems and business processes to
provide in-content training and help.

8) Communication portals :→

Communication
portals aggregate various forms of
messaging into a single place. Bringing
together e-mail, voice, mobile, web
feeds and etc. in a way that allows
access and control from multiple
interfaces and locations at any time.
The individual can then tailer this,
choosing for example, to receive and
manage critical communications regardless
of where they are as or what type
of device they have with them.

* functions of portals :-

The major
functions of portals are :-

1) Search and navigation — Yahoo, Google.
2) inform integration (content management); student
3) Personalization — it avoid to wander in other website (admission form on univ. site)
4) Notification (Push technology)
5) Task management and work flow
6) Collaboration and groupware
7) infrastructure functionality
8) integration of applications and business
   intelligence.

*   Limitations of E- Commerce :-

1) **Costs :-** Huge cost is involved in E- Commerce. Such as, advertising cost, high startup cost that may be related to H/w & s/w, setup cost, connection cost, maintenance cost etc.

2) **Security :->**
A primary concern without which it is difficult to sustain in e- market is e- security. It aims at preventing unauthorized access to the data / inform travelling on the internet. The protection needs to be taken from the hacker, viruses, data transfer and transaction risk, client & server risk.

3) **Time for delivery of physical products :->**
Physical goods delivery in e- commerce takes time and costs money.

4) **Products people won't buy online :->**
There are various products which the user customer would like to first touch and feel and then buy it for example Sofa, user wants to sits on it, feel the tenture of the fabric, etc.

5) **System Scalability :->**
It means regular up gradation of the website is required when the number of websites users increased over a period of time or during busy seasons. It might case slow down of the system performance and eventually less of customers.

6) <u>Loyal customers:→</u> Great amount of effort is put on building a customer relationship by the organisations and retaining them is rather a bigger job. A business can't survive without a loyal customers.

7) <u>Resistance to change :→</u> A change from <u>traditional bricks & mortar</u> business to commerce is generally resisted by the customers. People are not use to paper-less or faceless <u>transactions</u>.

8) <u>Size of transaction:→</u> E-Commerce is most often conducted using credit card facilities for payments, and as a result very small very large transactions tend not to be conducted online. The size of transaction is also impacted by the economics of transporting physical goods.

9) <u>Customer search is not efficient:→</u>
There is a direct contact of customers with the website, no middlemen are required. But a closer study has indicated intermediary or trusted third party is required to legitimate these transactions & all these trans. to all intermediaries add to the trans. cost.

10) <u>Corporate vulnerability :→</u>
The value, availability of products details, catalogs & other inforn about a business through its web sites makes it vulnerable to access by competitions.

11) <u>Fulfilment problem:→</u> It is related with delivery of the products on the internet. It includes problems related to: (a) shipping, (b) sending out the bill, (c) packaging the merchandise, (d) answering questions about the orders

12) Privacy issues.

* Advantages of E-commerce :-

1) **Being able to conduct business 24x7 —**

E-commerce can operate all day every day. Physical storefront does not need to be open for customers and suppliers for doing business electronically.

2) **Reduce cost to buyers :→**

Electronically open marketplaces will increase competition and reduce buyers cost.

3) **Reduce cost to the suppliers:→**

The ability to access online databases of bid opportunities, to submit bids electronically and to review awards online will reduce suppliers cost.

4) **Create New markets:→**

The ability to reach potential customers easily and cheaply will create new markets.

5) **Easy market entry:→**

Market entry will be easier when geographic limits are no longer relevent.

6) **Increase in variety of goods:→**

As the market will expand, the variety of goods available will also expand. Wide variety of goods are available than ever before.

7) **Reduce Inventories:→**

Electronically linking the demand for goods and services through just-in-time inventory and integrated manufacturing techniques will allow companise to maintain reduce inventories.

8) **No Middleman:-**

There is a direct contact with customers in e-commerce through internet without any intermediation. Companise can now focus more on specific customers by adopting different one-to-one marketing strategy.

9) **Improved and better customer service:-**

Since there is a direct contact with the business customers, It is possible to solve their queries regarding piece price, quality, additional features of the

product, etc and thus resulting in a better improved customer service. Response time is started reduced more quickly b/w the seller and the buyer.

10) Team works:-

The output of the e-commerce is the teamwork that helps organisations work together. E-mail is one of the examples of how people collaborate to exchange infor^n and work on solutions.

11) Infor^n sharing with the customers.

12) Customized products.

13) swapping of goods & services.

14) infor^n Sharing

15) Global reach

16) Advertising of goods & services

17) Higher profit

18) E-Payment System.

19) Ensure Secrecy

20) computer plateform independent.

* Business to Business electronic commerce:

* Inter organisation Transactions :→
T.O.T. is similar to internal Requisitions / sales order. You You can transfer from an organi⁰ (source) to another organisation (destination). The transfer method can be directly or through intransit organisation depend on the significancy of the route distance. Organizational transactions are financial actions that affect the resources of a company. These can be within the business or business to business transactions, business to government transactions. Every time a company agrees to take some action - such as make a payment in exchange for anything of value. It creates a legal contact. Therefore, organi⁰ zational transactions are also contracts. Inter organizational transactions pertain to events that take place within the organization. This can include partnership agreements, technology and software licensing, trademarks and copyright non disclosure agreements and employments contracts. Partnership agreement take place when two or more parties decides to start a business. Non-disclosure agreements and employments

P-T-0→

Contracts are normally human resource transaction. As:—

Business to Consumer transactions:—

This includes every day buying and selling of retail goods and services. It also includes the buying and selling of stock shares.

Business to government Transactions:—

The govt. is the largest contractor in the country. It contracts various business for products and service pertaining to govt. needs. The govt Contracts for many different departments, including military and day to day operations.

Ex— could be toothpaste for the military or toilet paper for the Justice department building.
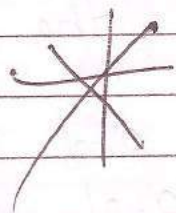
✳ Electronic Markets :→

(History:—)

E— markets are established in 1991, 1991, long before the internet became known outside the academic world and before the rise of modern electronic commerce and electronic business.

Introduction To Electronic Market :→

This can be viewed as a direct parallel of the familiar shop, store or emporium. It is a virtual trading area where deals are struck on a computer system over a network. The shop front is usually a set of web pages, the shelves equate to the catalogues where products are stored and displayed wharehouse is the server. There is an electronic analogue of all the items you would find in a conventional market, the peris of fraud and shady hands go hand in hand with all the glitz and glamour. There are mechanisms to make sure that people are who they say they are, that cash changes hands as it should, and that goods are delivered. These mechanisms are becoming increasingly sophisticated and can be complex and expensive to display. This means establishing a clear business model, one that fits the way in which you intend to operate and which meets your trading objectives. Straight forward internet shopping is the most familiar form of e-commerce.

1.) **Online Shopping :->**

Whether you are looking for a hard-to find item, need something to be delivered to a friend on the other side of the word world, or are seeking the perfect birthday present, online shopping lets you find what you are looking for with the click of your mouse. No more travelling from store to store, looking for a parking spot and waiting online. The selection, ease and consence make it the best way to shop around the world without every leaving the house, Is by online shopping which is a great way ofor consumers and merchants to quickly and security link up. over worldwide web. And just like shopping on the physical world, any credit cards are a convenient method and widely accepted way to pay for your purchases. online shopping has quickly become one of the most popular internet activities.

We offer products from unorganized sector, which do not have the means to reach various parts of the globe. These products generally a specialty from a particular city or region, can be

purchased through our site, " says
Malamal.com. It offers products
like Hyderabad pearls, mathura's
peda or thiruvel velli's halwa.

Advantage :-

1) Sheer convenience
2.) Wider choice
3) Better value
4) Unique gifting opportunity
5) Saves time and strain
6) Micro targeting
7) Mass personalization
8) Know customer preferences
9) Integrated source of inform.

The product with the most natural
fit for the online natural fit for the
online world are the ones you don't
need to see, touch or try on for
ex- books, music, office products etc.
But shopping a car or a shirt is
still a distant possibility for people
in india. These companies have to
offer only products like Computer
peripherals one is already familar
with, say experts.

11. Catering to niche markets:-

1. It is the shopping sites targeting niche segments. that are likely to be more successful in the future. Sensing a huge patential many sites have sprouted in this area even. fab mart Com is a niche site which. offers books and related stuff.over the   .

III. **E. cataloging :-**

Shopping malls began with a simple HTML farm - a farm that would take on order. But when you have more than a few product to choose from, the farm got clumy. since the order farm was on a different page farm the product description.

IV. **Shopping cart :-**

This is a kind of software that keeps a record of the choices you make during an online buying session.
The battlenecks of online shops are:-

1.) Lack of trust
2.) payment gateway not clear.
3.) Security concerns
4.) Transaction fulfilment is questioned.
5.) No Integration biw online and off line stores.

6.) Physical large shopping malls themselves are a new concept in India.

Online purchasing :—

Online purchasing is the technology Infrastructure for the exchange of data and the purchase of a product over the Internet online purchasing is a metaphor used in B2B electronic commerce for providing customer with an online method of placing an order. submitting a purchase order or requesting a quate. Eg. Short buying - visit shops and decide the shop based on quality, sizes, colours, prices at different stores. It provides Information and activitis that gives your. Customer the knowledge to make Informed. buying decision. Eg. car purchasing search the prices and features of cars online.

The customer may visit the site to find Information. Internet provides him with an easy way to shop for different products so that he can compare features, functionality and price online.

He may also visit one of the car aggregetors like www. car point.

com to get pricing and other detail of the cars. For B2B transactions online. shopping may entail an extranet that include Information that business partners may need to conduct business. on the site of manufacturer. It provides standered product copy, product features, logas, case, studies, technical, speaifications and product availability on his site. A retailer goes to his sites to download the above and a graphic for a mailer or newspaper Insert by accessing business parther's online shopping site, the retailer can be ensured that the picture mathes the product and the product will be available in the hecessay quantities for proination. Online shoping for B2B trenictions speeds up Information gathering and access process, providing timely access to accurate, Information. Online. (Shopping) purchasing in defined as the Infrastructure to allow the purchase. of product over the Internet. It a customer is Interested in buying office supplies, he might go to respective website.

Models of Electronic market :—

These are as follow —
1. Broker model
2. customisation model
3. Contact model

1.)

(i) Broker model · Establish
Requestforgoods shopfront
customer select · solicitdetauss
Supplier's of the order
Web page · creditcard
Enjoys purchase validated
← · Goods availability
order Checked
confirmation
←
order
fulfilment

ii) Customisation model :— ✕
Requestforgoods · Establish shopfront
customer select · solicit detais of
Supplier's the order.
Web page · Credit card
Enjoys purchase. validated
· Goods availability
Checked

(II)

message flows ● Establish

customer Select product enquiry shopfront
Suppliers ──────→ with user
Web page Select preferences ● config
──────→ applications

Enjoys choice ● presentation of
options
● Capture customer
Choice

←─── order confirmation ● check build schedule
←─── ● validate creat cart
order fulfilment

(III) Contact model :—

──────→ ● maintains cataly
customer views submet ● Collect all bids
catalog bid ──→ ● Select winning bids
● ~~match~~ Match buyess and
seliers
● Collect commission

Enjoy bargain ←────
Bid accept/
reject

Three Model descriptions :—

1. Broker Model :—

Electronic business may not have tangible presence. Its aim is to market a predetermined set of goods and services. A good business is distinguished by the following key features:

1. Attractive packaging
2. Efficient delivery
3. Accurate payment handling.

2. Customisation model :—
object is more likely to be the selling of a customisable range of products to a mass market. Business should ~~that~~ have online applications that enable prospective buyers to adjust the basic product to their specific needs and preferences.

3. Contact model :—
Aim is go b/w matching prospective suppliers of goods and services with buyers, a high volume business with speed and efficiency of all the electronic transactions being the key point of differentiations.

E - Business :—
Electronic business

represents transformation of an organis-
tions business and functions progress
through the application of technologues
philosophies and computing paradigam
of the new digital economy.
E- business Includes —

1. Merchandise planning and analysis
2. order entry.
3. fulfilment
4. Warehousing
5. Inventory management
6. Customer service
7. knowledge management
8. Shipping
9. Returns
10. Other logistics
11. Pricing and Promotions
12. functional accounting and reporting
13. Customer Relationship management (SCM)

E- business is really a new way to
drive the following in an organisation—

1. Efficiencies
2. Speed
3. Innovation
4. New Value creation

Definition :—
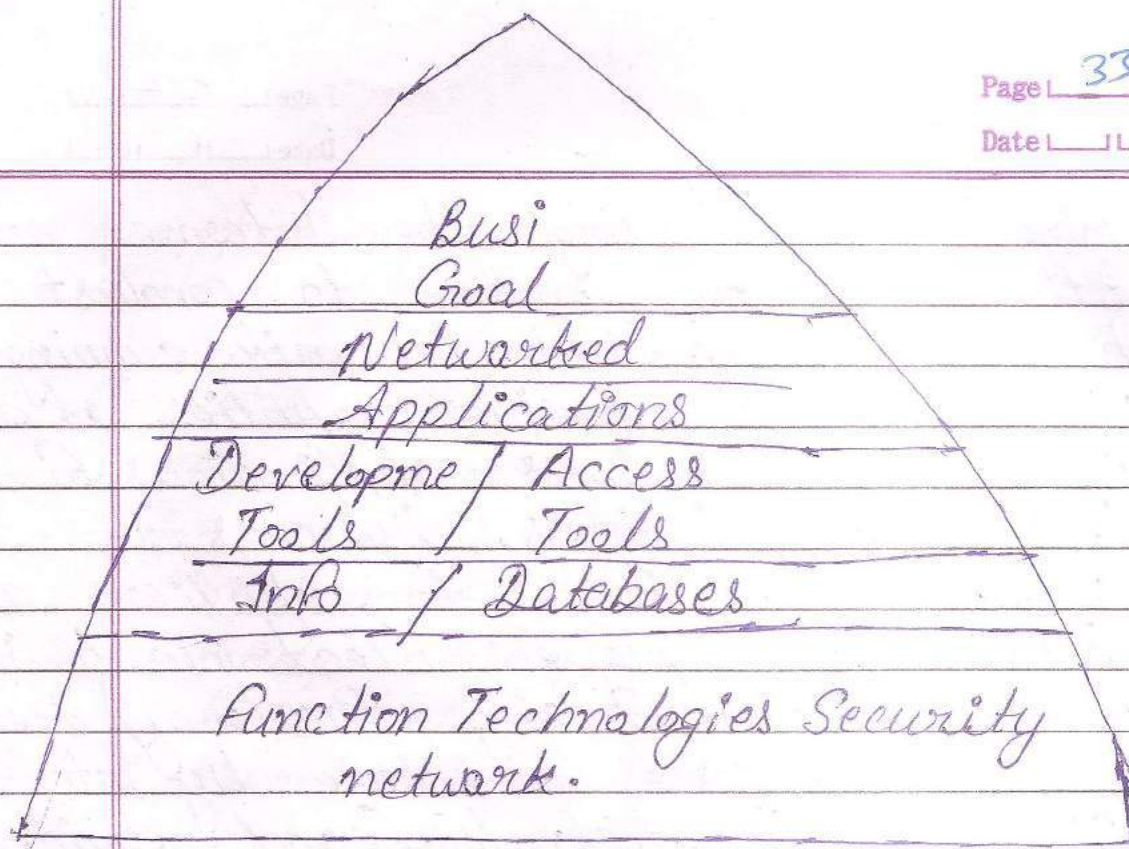   Electronic business is a term
now used broadly for the act of

doing business using the Internet and other electronic means to conduct business as defined by mike cunningnam. The term E-business upplies at all net-based business applications for business to business, business to consumers, business to suppliers, and business to employees Electronic business is about transforming the way key business processes as done by Interrating Internet technology and services Into a Companies essential bussiness processes. It links employees, supplers, partners and customers

Applications of E-Business:—

1. Portals 2. self-service applications
3. Trading exchange 4. B2B stare fronts
5. Indirect procurement 6. Hosted services
7. Web enabled order management
8. callaborative planning
9. Product life cycle management
10. Web based service
11. virtual fulfilment networks.

Architecture of E-business.

```
            Busi
            Goal
         Networked
        Applications
  Developme / Access
  Tools    /  Tools
   Info    / Databases

  Function Technologies Security
       network.
```

B2B Electronic Commerce :—

B2B

Transaction B/w a vendor and a purchases of goods will be as under :—

1. A purchase order document is entered in the keyward of a pc by the customers purchase office and sent by e-mail to the vendor in a standard format for the purchase order through EDI standard.

2. The po is stored in the vendor database and is acknowledged electronically through EDI. No. manual transaction of entering the P.O at the venders side. (In the normal way the vender's clerk has to enter manually in his Computer to process

the order which is avoided. And manual entry would have been entry would have been expensive and Involves possibility of errors.

3. The vendor physically depateines the items and the delivery note is sent through EDI standard.
(No need of reentering delivery note manually.)
Delivery not is Compard with Po again through EDI. If no match found, a discrepancy note is released electronically (thro EDI.)

4. The items received at the customer end will have a printed delivery note accompanying them and is sent to the Inspection office at customers end which physically Inspects Items received and compare with the delivery note received electronically.
The accepted Items note is electronically sent via Company's LAN to the stores office by the Inspection office where as the respected Items note is sent electronically to the purchase office similarly the accepted and rejected Items are sent physically

to the respective places.

5. The stores office computer updates the Inventory automatically using the note sent by Inspection office. The items accepted and taken. Into stock report is sent via LAN to the accounts office. Which would be considered as an authorised, payment to the vendor.

6. The accounts office make the payment for the items accepted through electronic funds transfer. Ths Banker is informed electronically to debit Ths account by the specified amount and the same is to the created to the vendor's bank account no necessary of printing a cheque or mailing. It as done in the normal way.

B2B application :—

B2B Involves both electronic business market places and direct market links b/w business.

Ex:—

Mayority of the companies offer the business community a varity of marketing and the product Information on the www. others also rely on electronic data Interchange

via the internet or extranets for direct computer exchange of business transaction documents, with their business customers and suppliers. B2B is the wholesale side of the commercial process.

B2B - In the IT a company wants to build and sell a product to other business, It must buy raw materials and a variety of contracted services from other Companies. The inter relationship with other business needed to build and sell a product make up a network of business relationship. That is called a supply Chain. Electronic commerce systems like EDI and business management process like supply chain management, seek to re-engineer and streamline traditional supply chain processes.

B2B electronic commerce requirements:

1. Each of the businesses must have a LAN interconnection to their respective officers.

2. Every office should have computers for data entry/receipt, comparison etc.

3. System may be a distributed client, server type system (Each office being a client and databases stored in appropriate servers.)
TCP/IP should be the protocal or any other protocal may be used but the protocal used by the LAN is usually the same as that used by Internet (The organisational computer network using this protocal Intranets also have one or more world wide wab severs. Two Intranets must be Interconnected. This can be done in two ways.

— Connect each of the Internets to the internet (an inexpensive solution but may not be secured unless proper precautions are taken.

— Connect the Intranets to consitute extranet (Extranet is a private Interconnection of the Internets of business associates)

— Each internet supports web pages which can be accessed by the members of the extranet.

— The payments for goods or services are made/received electronically. The business partners must know each others bank account details. Funds transfer must be secure;

each transaction should be authorised electronically.

- The assumption is that documents are Interchanged by E-mass This is aceeptable b/w close associates but it is not secure. There is no authentication of documents sent the received. Therefore, for more secure transctions, E-commerce has Introduced data encryption, digital, signatures for signing documents.

virtual supply Technologies:—

These Technologys are not only making IT easy to outsource the manufacture and delivery of products. But also make IT possible to have more accountability and responsibility for the final product to the suppliers. Information portals where all partners can view the whole supply chain and later on measured and rewarded for overall success, make Individuel single entity. Modularisation has become common in automobile Industries by modularising their products and outsourcing the accountability for delivering the wor- modular to the assembly plants.

Volkswagen has completely modularised its truck and car, breaking into several large modules like chasses, frame, engine, body etc. and outsourcing each of them to key vendors who supply them at the assembly line.

Electronic Application categories:—

Initatives in the electarnic commerce era have focussed in commer applications that allow transactions and interactions b/w the customer and the Company and the customer over the Internet. Most of the successful on-line ventures have been pure-Net plays - a brand new business model designed specifically for the purpose of buying and selling to consumers on-line with the Invention of new business to consumer business models for selling to and servicing consumers over the internet, several e-application Catgories supported by many different application functionalities have emerged. The dominant ones are

- E-tailing

- Consumer parless
- Bidding and auctioning
- consumer care
- Customer Management
- Electronic Bill payment.

✳ EDI (Electornic data Interchange) :—

Electronic data Interchange is the electronic exchange of business documents in a standard, computer processable, Universally accepted format b/w trading partness. Electronic data Interchange is the Inter organisational exchange of business documentation in structured, machine-processable form.

EDI is often viewed as simply a way of replacing paper documents with electronic documents, and replacing traditional methods of transmission such as mail, phone or inperson delivery with electronic transmission. However EDI is actually a way of replacing manual data entry with electronic data entry. It is the electronic transfer of structured business document in an organization internally among groups of department or externally

with its suppliers, customers and subsidiaries.

* **EDI definition:->** There is no unique definition of EDI. Let us consider two definition of EDI —

1) EDI is the transmission, in a standard form of unambiguous infor? of business or stray strategic significance b/w computer of independent organizations.

2) EDI is the electronic transfer, form from computer to computer of commercial and administrative data using an agreed standard to structured an EDI message.

* **Applications of EDI :->** It spread everywhere some other are :-

1) Railway rolling stock monitoring
2) Ship "bay plans" (cargo plans for container ships)
3) Ship berthing / scheduling notices
4) Notification of the presence of (dangour) dangerous / hazardous goods on ships / trains / planes.

5) The exchange of CAD/CAM documentary
6) Tender tracing.
7) Lodgment of law court document
8) Notification of the lodgement of archive documents.
9) The exchange and lodgment of trade documents
10) Exchange of documents concerned with the purchase and supply of goods.

Let us consider four industries that use EDI enter extensively:-

(a) International or cross border trade
(b) Electronic funds transfer
(c) Health care EDI for insurance claims processing
(d) Manufacturing and retail procurement.
   Some other :-
1) Manufacturing
2) Shipping
3) warehousing
4) Utilities
5) Pharmaceuticals
6) Construction
7) Petroleum
8) Metals
9) Banking, insurance, retalling, government, healthcare.
10) Textiles among others.

* Advantage of EDI :- These are as follows

1) Reduced transaction expenditures.
2) Quicker movement of imported and exported goods.
3) Improved customer service through "track and trace" programs that quickly identify to the many participants in a trade deal where things are located being handled and
4) faster customs clearnce and reduce opportunities for corruption a problem in trade.
5) Improvements in trade overall quality.

Some tangible benefits are as follows:-

1) Reduced data entry errors
2) Reduced processing cycle time
3) Availability of data in electronic form
4) Reduced paperwork
5) Reduced cost
6) Reduced inventories and better planning.
7) Standard means of communications
8) Quick response.
9) EDI payment
10) Competetive advantage
11) improved corporate trading relationships

1) **Reduce data entry errors:-**
Since data is not repentendly keyed, the chances of error are reduced.

2) **Reduced processing cycle time:-**
As soon as orders are entered into the system, they can be processed on the receiving side in seconds. There is a considerable saving in the processing time of document transfer.

3) **Availability of data in electronic form:-**
Data from EDI is in electronic form which makes it easy to share across the organisations.

4) **Reduced paperwork:-**
The entire EDI process can be handled without using a single place of paper. Some companies believe that you may have appropriate paperwork for and legal issues.

5) **Reduce cost:-**
Time is money. Any savings in time are directly linked to saving in money. As data is not reenter at each step in the process, labour costs can be reduced.

6) **Reduced inventories and better planning:→**

Companies do not have to keep a safety stock for the time taken with order processing. changes to planning schedules can be communicated instantaneously.

7) **Standard means of Communication:→**
Because.
EDI enforces standards on the contents of data. uniform naming standards and fields in sizes have emerged.

8) **Quick response:→**
With paper orders it would be several days before the customer was informed of any supply difficulty. Such as product is out of stock. With EDI customer can be informed.

9) **EDI Payment :→**
payment Can also be made by EDI. The EDI payment system Can also be generate an EDI payment advice that can be electronically matched against the relevents invoices, again avoiding query and delay.

* 10) **Competative advantage:→** In many cases, Companies that have EDI implemented have an advantage

over their competitions, especially when dealing with govt agencies or large corporations.

11) **Improved ~~corporate~~ corporate trading Relationship:**

Companies are willing to share infor? and participate in interorganisational issues. This environment enhances SCM.

* Limitations of EDI :→

These are as:-

1) **High Cost:→**
Applications are costing to derlop and operate. Specially new entranets find this more difficult to have EDI.

2) **Limited accessability:→**
It does not allow Consumers to communicate or transact with vendors in an easy way. A subscriber must subscribe to an online service called VAN (value Added network)

3) **Rigid requirements:→**
Needs highly structured protocols, previously established arrangments unique proprietary bilateral infor? exchange.

4) EDI applications automate any certain portion of the transaction.

5) Application are narrow in scope.

✳ Instant messaging :→

Instant messaging is the newest way of keeping in touch with family and friends spread across the globe. It is more spontaneous then e-mail. One can interact with the client abroad as well as chat with his wife and friends, all at the same time, thanks to the instant messaging service.

A software based communication service that allow you to create private, real time chat rooms over the internet with one or more individuals is instant messaging. You select a person or group of pers people to chat with. Instant messaging is a user friendly service. If you log on to any of the instant messager services like Yahoo, MSN and rediff. Com and other service providers. Your presence is alerted and you can initiate a conversation. The popularity of this service is increasing and the profile of users ranges from husband to wives, children, friends, and colleagues living all over the world. Instant messaging is convi convenient and creates fun. Unlike chat rooms, here you know and their is a lot of privacy in this service. People

Can chat for a long time without bothering about the telephone bills.

Even bussiness people can use instant messaging to their advantage. Eg.— Broker can alert clients to buy or sell stock. few service deliver tailored news headlines and stock quotas. There is limitless scope for for use this.

E-mailer can score instant messaging in one area. When an e-mail account is opened at rediff portal. You may mail it to another portal. Similar thing is not done done here. Eg.— Someone is using yahoo's instant messenger, he can not communicate with someone using microsoft's instant messaging. Instant messaging assumes that you have an always-on internet connection, or that you are online frequently.

Once high-speed internet connections such as broad band are in place, Instant messaging will support full video conversations.

✳ **Differentiation in Cataleg for B2B as opposed to B2C :—**

I. **Consumer oriented Catalogues→**
These tend to be stronger on penetration to be

sold on the basis of eye appeal.

II) **Business oriented Catalogues:→** These are focussed on quick access to other business needs. These tend to be high volume and fairly routing Eg- supermarkets issue stock replenishment orders from their automated stock control systems.

III) **Payment:→** The core of any business is profit. It is the money that feeds the desire to trade. E-bussiness needs to emulate in some way the customery direct exchange of cash for goods.

IV) **Facing Global electronic Business challenges:-**

1) Any foreign language issues.
2) Technical incompatibilities.
3) Dealing with Tanation issues.
4) Reconcling monetary conversion issues.

V) **Actual Content hosting of electronic Business infon:→** 1) electronic catalogs, 2) Imagery, (3) Pricing and conditions rights. 4) Registration, (5) Authentication, (6) Catalog updates, (7) on demand product pricing topics, (8) Security, (9) Billing & right (0) other complicated lower level topics.

B2B - B2C Comparison

B2B	B2C
1) Meets the needs of inter business trade over the web.	1) customer use a PC to buy small things.
2) includes diverse players such as auctioners & aggregators.	2) B2C sites can be operated even through a home PC.
3) B2B sites enable business to quote, evalute multiple bids received, place or receive order. Invoice one another & settle transaction online	3) These site have multipled because of the virtual absence of entry barriers.
4) Buyers & sellers meet online in market place to transact business as intrade farms	4) Localised and specialist operations with a personal touch can create winning business models.
5) Many sites may net even provide any trading facilities and may be just infor" pertals. Other area include better of common business internet such as online corporate credit card and certification transactions form the bulk hearly, 80% of e-commerce. B2B lacks the glamour associated with B2C.	

* ## E- Tailing :->

E- tailing is the selling of retail ↓ goods on the internet short internet discussion as early as 1995. The term seems as almost same to e-mail, e-business, and e-commerce. E-tailing has resulted in the development of e-tail ware. Software tools for creating online data logues and managing the business connected with doing e-tailing. A new trend is the price comparision site that can quickly compare price from a number of different e-tailing and link to them.

The word e-tail has its routes in the word retail. Here the latter 'e' stands for electronic. Since the shopping process happens through the electronic media.

With the use of web space a virtual shop is created and products are displayed through images on their space with the features and price tags. By accessing this shopping a customer can choose his or her products into the carts. The payment to this products can be done to the various made as infor⁵ by shopping site. The product would be delivered the address specified by the customer.

* Step include in e-tailing process:-

1) Customer visit
2) Choice of products
3) Payment on-line
4) Product delivery
5) Customer feedback.

* Benefits of E-tailing:→

1) It reduce the space occupied by retail outlets in the real world.

2) It gives quick and easy access to shopping space at any time and from any place where there is access to internet.

3) It saves time of customers that is spend on travelling to a shopping place in the real world.

4) It creates a new platform for goods from different part of the world which could be imported by placing an order.

* Some Examples of E-tailing tailers in india:-

1) Flipcart.com.
2) Amazon.com.
3) Home shop 18.com
4) OLX.com.

* **E-tailing in India:→**

(i) **Introduction:-**

E-tailing is online sales of retail style goods. Many consumer and specialist goods are now available via these online e-tailers.
Who are beneficiaries from e-commerce. Many people say retailers would benefit maximum from the e-commerce boom. We could not have imagined in our earlier days that the world would become so small and it would soon become a dynamic market place where anybody could transact business or receive inform with negligible or no human interface, as we are experiencing now as under:-

1) A seller's market has becomes buyer's market.

2) World has been moved from an industrial economy to the service economy. It has become popular due to —:

(a) low set-up cost
(b) Provides more opportunities to sell and market the product.
(c) Global access
(d) Multiple opportunities
(e) Provide new market place.
(f) Availability of technology.

(g) Greater competitive advantage.
(h) fast inform transmission &
(i) Global free market

It encompasses the entire online process of developing, marketing, selling, delivery services and paying for products and services. It is one of the most exiting, economic & technology trends of recent parts.

for retailing purposes, many companies decided to set-up their websites for netting & the following favourable situational factors could be identified for the same in india.

I. Customer related favourable situational factors-
   — Increased energy cost give in incentives to cut down on trips to retail centres.
   — technological factor
   — Govt. factor
   — other factor
II. Present scenario → इसम लेख
III. The website
IV. The fulfilment process
V. The payment mechanism
VI. outsourcing
VII. Long term viability of e-tailers.

2) <u>Situational factors :→</u>

Non - store innovations are increasing. The popularity and curiosity among consumers of such recent non-store innovations like pay by phone, special interest mail order categories, televised direct marketing etc. are increasing. This has made the people to adjust themselves to the new forms of shopping psychologically.

I. Women working force is now high. They have less time to shop and hence resort to non-store purchases, sitting at home.

II. People want increased leisure (अवकाश) time for self development and creative expression requires reduced shopping time to go from store to store.

III. Consumer demands for (specially) speciality products and services are increasing. These are not available in the regular shopping center. Non-stored based companies are selling the products at reduced prices than store based selling companies.

3) <u>Present Scenario :→</u>

Many companies, in a mad rush to build internet business, concentrate all their

attention in attracting new customers rather than retaining the old ones. Very few understand the profitability of e-loyal customers by retaining them. Web stores can extend their range of product production, sell more and more kind of goods to loyal customers, thus broadening as well as deepening relationship with customers over time.

Many companies believe that majority of the e-tailing customers are willing to pay more for the convenience. The way a site is designed and marketed has a large impact on the type of customers it attacks.

4) <u>Five Determinat Determinates of e loyality:</u>

The five determinants of e-loyality are identified globality as under. The onus on indian marketers to go online raises questions about

(a) the process
(b) Patterns
(c) Customers psyche (involve in shopping online or otherwise).

5) <u>The Process:→</u>

To Customers first experience a need that drives their demand for the product, secure.

II: Repeat purchases desen't pose a problem (customer is aware with his experience decisions making is simple, straight forward).

III. For the first time purchase, customers goes through a series of informative cycles based on importance and urgently of the product. Inforn can be obtained from:

(a) Collaterals → प्रमाणित करने वाला
(b) Experiences of other users or customers
(c) Adversitments.

IV: In india people do not have confidence on all companies - what you see, is not what you get. Hence one needs to touch it, feel it and experience it before one buys it. This fear psychosis enists a typical indian consumer.

(6)→ E- Retailer's Vows (शैलीं) :→

I. Entent of penetration of credit cards in the country. Small section of the contrg's population have credit cards.

II. Sales tan → common to all players, working out how products bought online should be toned, is a major headache.

III: Delivery is a danger zone, since logistics in our country is poor.

IV. Some websites are little unfriendly to the first time to users.

7) <u>The website:→</u>
The website generally consists of the following divisions in e-tailing:-

I. Food world shop.
II. Music and book world shop.
III. Health and glow shop
IV. Consumer electrical Durable appliances (CEDA).

8) <u>The fulfilment process:→</u>
Dot Com companies are consumer fulfilment process can be broadly classified as:

I. <u>Sourcing:→</u>
Involves collecting various customer orders from wholesalers/ distributors/ production agencies on an ongoing bases.

II. <u>Order Consolidation:→</u>
Source items from the wholesaler are segregated according to individual consignments. once the allocation of each order is computed, shipments are made through couries.

III. Delivery

<u>The payment mechanism:-</u>

I. Debit, credit Card transactions and
II. confidentiality of personal details.

9. <u>Outsourcing:→</u>
outsourcing is turning
over all part of an organisations infor'
systems operation to outside contractors,
known as system integrators or
facilitate facilities management companies.
Example is fabmart. It outsource
more functions.

Hosting is managed by bharti
telecom. Payment gateways out sourced
to citibank.
Networking to wipro and compaq

10. <u>Pricing and legal factors:→</u>

11. <u>Organisation culture:—</u>

12. <u>Time line:—</u>
It can be involve
that product that the customer want
should be ready in time and
reach in certain time to the final
cesumer.

13) <u>Prototypes:—</u>
Building prototype in
the e-commerce program is to be
considered, since they help gain
agreement on sensitive issues
of

1) User interface

II. Look and feel.

iii) Address the target audience. (प्रश्न)

Prototype consist of dummy views and show users how the site will look, be navigated and the type of content included.

The advantage of prototype in e-Commerce is that it —

I. Ensure that the working group agrees on direction.

II. Provides a visual aid to show how and where things will be-

III Yields great feedback for the web master in the development process and

IV: Allows change to occur quickly when necessary.

14) <u>Go to market strategy (GTM):-></u>
This strategy provides the vehicle for process change, marketing sales programes & other dis aspects of the introduction to be successful-

I. Marketing plan and tactical actions
II. Process plan and tour.
III. Introduction to existing and new clients.
IV Pricing and (packing) (in) packaging infor
V Introductory factors.

15) **Development works →**

Development can start after the specifications are firm. The skills and cost to maintain the the site make have a profound impact on the approach taken by you. Many companies have spent significant money of the development of their first e-commerce system. only to find that. It failed to meet the market needs.

16.) **Implementation →**

Next step is Implementation, training and roll out of the system. Your program is to ensure that good acceptance of the system will occur. This will also allow for further feedback of the characteristics of the e-commerce system, So that you can fine time the final application

17) **Market Roll out →**

After the application has been throughly tested, the system is ready for release to the world.

(8) **Testing E-commerce system :—**

I. Purchase procedures
II. Access Controls
III. Navigation and critical links

IV) Affinity (अर्थात्) and related sites.
v) Pricing
VI) Legal agreements and contracts.
VII) Confidentiality and privacy concerns.

19. <u>Network infrastructure :→</u>
The internet is an infor^n distribution system spanning several continents.
The internet is more about the sharing and exchange of ideas in a free manner than about data transfer b/w machines.

20) <u>Information superhighway :→</u>
During 1992-1993, the infor^n. superhighway also known as I- way. propelled the internet from a virtual unknown to a chic media cliche. The internet was found very useful and it become quickly and a front page story in every news paper story.

※ <u>Essentials elements of an e-business:</u>

<u>Questions of technical capabilities are^h</u>

1. <u>Technical Aspects:→</u> Hardware, software networks that are needed to connect a community of interest

and allow them to share inform,
design and presentation of that
inform.

(a) Specialised software used for payments.

(b) Service support.

2) Business model :-

How businesses
interwork, How it influences the way
they are established, the way
in which technology is deployed
enamanging typical flow of order, payment
how various players cooperate to
provide an end product or
service to the consumer and the
various ways in which a
virtual market is established.
Perspective is intended to be general,
show fit B2B trade as well
as the case where indivisual
consumers interact with an online
business.
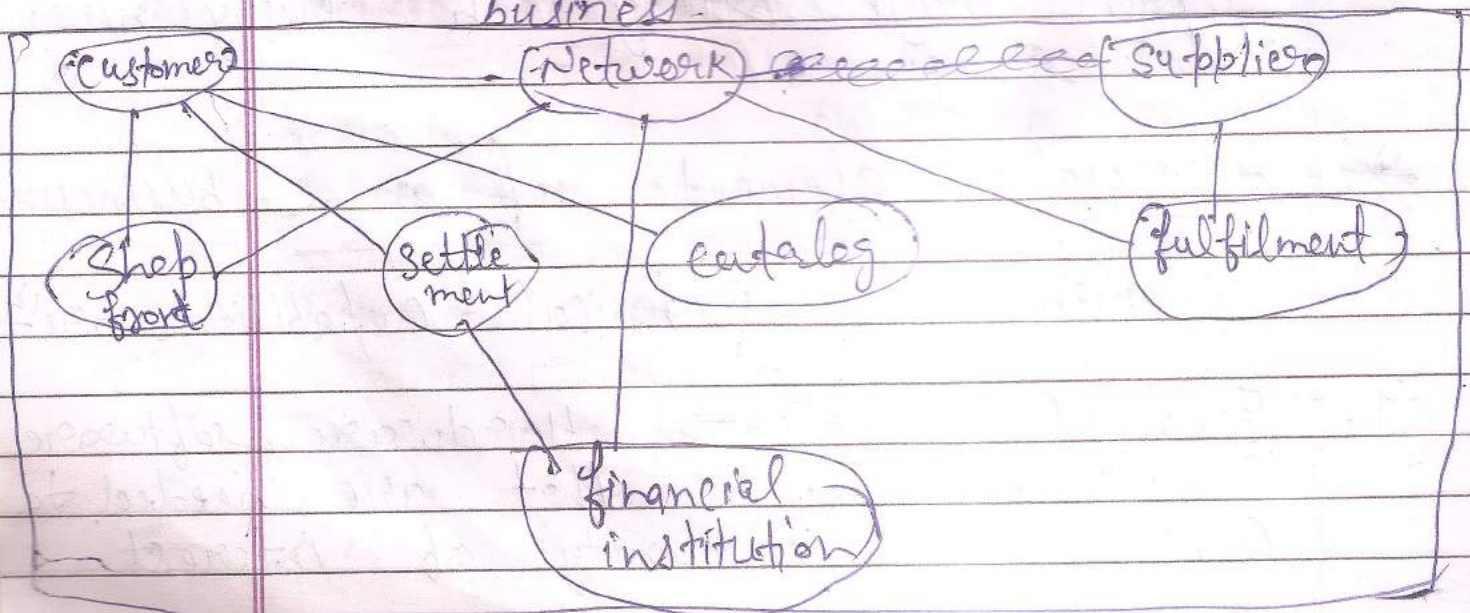
You can daily chain the picture and
some one take the

1) role of supplier → to one set of customer
2) role of customer → to different supplier

All have to be on a shared network
from the same catalogue, have some
means of delevering goods and be able to
settle up after the transaction.

E- business = mass marketing
    capability (should possess)

= internet's global + vast resourcesol
    Search   traditional IT

Constituent Parts of trading over a network

- The market place — It is a virtual trading area
    where the deals are struck over
    a network.
- Shop front — Computer server is the warehouse
- Conventional — including bogus traders, inferior
    goods, doing bargains.
- Size and scope
- of market place — Different from Conventional
  (high steal model) — Size does not matter.

Large volume of business over a wide
    area with little overhead can be
Conducted.

Infer^n Toblex Can Conpete equally with the mnc. Amazon-com. on the internet probably has no idea how it Compares in size with say W.H. Smith, who has bookshops in various places in UK or black wells who position themselves as globle suppliers for academic books. To be an effective player as well as potential technology to enter the market. You need a brand, some content, service support and a means of fulfilment that is, search delivering the goods. One supplier might provide the online Content, service support and a means of fulfilment. One supplier might provide the online content; another the application hosting. An electronic business that looks like a cogent entity to the consumer may in reality be a host of cooperating suppliers. It lends itself to more than one trading model. The age old ideas of a market places owned by one organization, populated by traders is quite tenable. Model can be extended to add the idea of having guilds that controls standards within their particular area.

* <u>Auctions and the Emerging electronic</u>
<u>marketplace:-></u>

A lot more exists to
the physical consumer than the retail.
Retail is easier to see when we walk
around an urban centre. But on the web,
every type of experience is only few
clicks away. Step rightly to the side of
e-commerce retail and you enter a whole
new world of frenzied activity the
online auction. Auction sites such as
e-bay make a huge range of items
available to web users who wish to
big against each other for their
ownership. e-bay members can buy and
& sell items and make comments about
the trust worthiness and efficiency of
each other, comments that are posted for
all to see.) At first sight, ebay has
gone beyond B2B e-commerce. It seems
actually to be facilita-ring cec e-
commerce.

1) <u>E-Bay:-</u>

Consider the list of functions
e-bay has developed to its users. The
company does not decide what product
areas it should be in because the
user defines these with their offers
e-bay doesn't have to describe the
goods being exchanged. It cretainly
doesn't set their prices because

value setting is the prime user benefit of the service. And not only does e-bay have zero stock. It doesn't under-take fulfilments, e-bay users organize their own shipments e-bay is active here as a classic broker

I. Website feature such as site maps & search engines should be easy to find and use.

II. Website feature such as site Website design should be made simple, easy to navigative and follow general internet standards.

III. Website content should be continually updated to keep visitors coming back.

IV. Listening and responding to visitors coming back.

V. Colors and aesthetics (सौंदर्य शास्त्र) during representation are important.

VI. Links to business partners and other interesting sites can be help make your website a vital resource to visitors.

2 III. Optimising the value chain with a Digital Nervous system :-
A digital nervous system is to provide original departments with the ability to feed up to inform up and down the value chain to continually improve products and customer service

3. IV. Next generation is :-

Next generation is " Networked generation"

Networked generation is important because :-

- As buyers, they are familiar with online and electronic commerce approach.
- As professionals, they will approach work in collaborative ways
- As decision makers, they will influence network designs:
- Their networked devices will be pervasive.

The internet and its many electronic commerce enviornment have introduced diverse changes across a wide variety of industrial segments.

Greatest impact is found in inforn intensive industries with customer dialegue.

4.) V. Key Ingredient of source success in e-business :-

You may like to sell directly to customers or to other business.

The key ingredients of success in e-business include.

- Security :- Guaranted safe transactions and record keeping.
- flexibility :- The ability to extend your business solution to accomedate

new products and technologies.
- Integration— Your site's software and scripts keep ~~out~~ you in touch with your customers, partners and suppliers.

It is a complex and dynamic area that ~~and~~ no one can know everything about it.

5) IV. <u>Online Auction</u>:—
The auction offers the ability of buyers, traders and sellers to interact in a controlled commercial environment. These systems are still very specialised in ~~pricing~~ nature, but extend the pricing and competitive nature of procurement. The auction allows the buyers and sellers to reach an agreement. Auction and exchange are the other two models involved in the B2B space today.

online auctions offer a combination of beguiling capabilities to the electronic commerce players. The auction enables producers to opportunity to offer related services to those using the auction. The auction enables producers to control desirability of their offers.

UNIT - II

E - Market Category :-

Market are Categorised in the parts Seller, buyer and open.

Seller driven market - large, dominant retailers and manufactures who set the price. their brand or product is sough after, gt's price is not really for negotiation. Buyer driven market - many people selling in the market with similar or Competitive goods, only a small no. of dominant buyer are looking to get the best deal.

Supplier driven market - many people selling in the market with similar or Competitive with similar or Competitive goods, only a small number of dominant buyers are looking to get the best deal

Supplier enter product & service information, onto a Central system in at the buyer then search.

Focus is Very much on the central data store which is Centralled managed and securced.

A Distributed Catalogue or a retail Catalogue —

Supplier — Trading Place Server — Buyers — A Centra-used Catalogue
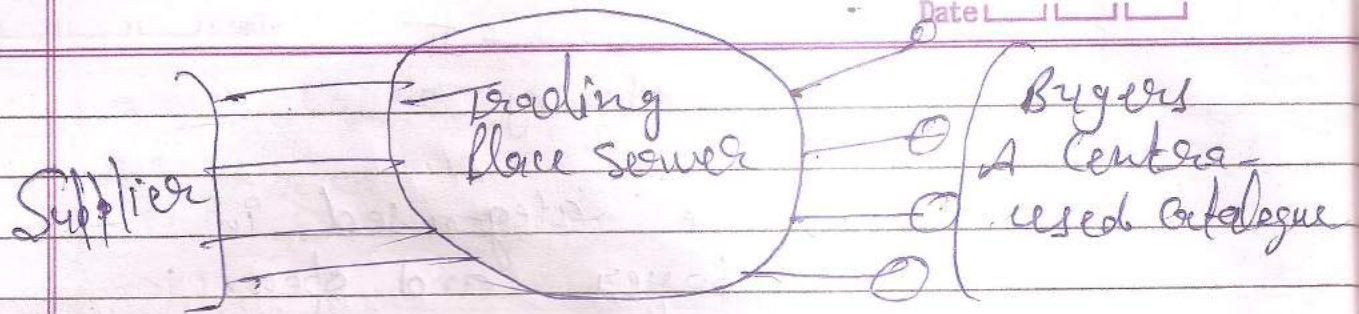
Open market :→

There are also open markets in which the buyers and seller negotiate on a large free market, where the behaviour of the market itself sets price.

Eg.- Insurance brokering.

Today, most companies are setting up trade online and service their customers through this new channel to market unilaterally. The supplier will be advertising product or service in some kind of catalogue. Business customers will only use the online medium If it offers significant advantages over traditional means. They will be motivated → be able to target quickly and efficiently and may well be put off by complex sites offering a 'shopping experience.

Buyer Markets :-

Another class of trading environment is one in which an organisation

has sufficient power as a buyer that they are able to dicate (इंकार टैरिफ) terms to their suppliers. In order to trade with the buyer, they must participate in the buyer's own market place.

A major purchaser could dicate the terms under which they would do business with their many but smaller suppliers. Goods Goods purchased can be broadly grouped into two types—

i) Business — Critical procurement such as raw material and components for the manufacture of product for a retailer.

ii) Non — Critical items used for MRO such as stationary, it equipments etc. also known as goods.

(a) In the first case, procurement specified by a small group of specialised buyers perhaps assisted by MRP systems which need to be able to source goods reliably and quickly identify alternative supplier. In the retail sector, access to a broad supplier base is required.

(b) For MRO goods, purchase will be originated from personnel throughout the enterprise and one of the

major challenges is to rationalise the supplier base for particular products and drive down rogue purchasing to maximise the ability of the enterprise to negotiate favourable trading terms with the suppliers. The drive here is for the buying organisation to be able to significantly reduce the cost of their MRO expenditure as well as be able to accurately monitor and if neccessary control expenditure. It is anticipated that opportunity for providing MRO solutions will be greater than that for buyers' critical procurement.

☀ Auctions & emerging e-marketplace :→

Ⅰ E-bay's Diagram

R&D → Engi-neering → Marketing → Sales → Logistics & distribution → Customer support

Ⅱ Next Generation IB →

Diagram

Business internet link to business partners

Original business 'intranet' enabled by a digital neroung system

Business internet linked to Customer