VI Semester BBA

E-Business

NOTES

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E-BUSINESS

Introduction, E-Commerce – definition, History of E-Commerce , types of E-Commerce B to B etc. Comparison of traditional commerce and E-Commerce . E-Commerce business models – major B to B, B to C model, Consumer-to-Consumer (C2C), Consumerto-Business (C2B) model, Peer to-Peer (P2P) model – emerging trends. Advantages/ Disadvantages of E-Commerce , web auctions, virtual communities, portals, E-business revenue models.

Introduction of E-Commerce:

E-business, is the application of Information and Communication Technologies (ICT) in support of all the activities of business. Commerce constitutes the exchange of products and services between businesses, groups and individuals and can be seen as one of the essential activities of any business. Electronic commerce focuses on the use of ICT(Information and Communication Technologies) to enable the external activities and relationships of the business with individuals, groups and other businesses or e business refers to business with help of internet (i.e.) doing business with the help of internet network. The term "E-Business" was coined by IBM's marketing and Internet teams in 1996.

In 1997, IBM marketing, with its agency Ogilvy & Mather began to use its foundation in IT solutions and expertise to market itself as a leader of conducting business on the Internet through the term "e-business." Then CEO Louis V. Gerstner, Jr. was prepared to invest $1 billion to market this new brand.

After conducting worldwide market research, in October 1997, IBM began with an eight-page piece in the Wall Street Journal that would introduce the concept of "e-business" and advertise IBM's expertise in this new field. IBM decided not to trademark the term "e-business" in the hopes that other companies would use the term and create an entire new industry. However, this proved to be too successful and by 2000, to differentiate itself, IBM launched a $300 million campaign about its "e-business infrastructure" capabilities. Since that time, however, the terms, "e-business" and "E-Commerce   " have been loosely interchangeable and have become a part of the common vernacular

E-business includes E-Commerce, but also covers internal processes such as production, inventory management, product development, risk management, finance, knowledge management and human resources. E-business strategy is more complex, more focused on internal processes, and aimed at cost savings and improvements in efficiency, productivity and cost savings.

Meaning of E-Business:

E-Business is the conduct of business on the Internet, not only buying and selling, but also servicing the customers and collaborating with the business partners. E-Business includes customer service (e-service) and intra-business tasks.

Example of E-Business:

- An online system that tracks the inventory and triggers alerts at specific
    levels is E-Business Inventory Management is a business process. When it is facilitated electronically, it becomes part of E-Business.

- An online induction program for new employees automates part or whole of its offline counterpart.

  Meaning of E-Commerce:

(a) E-Commerce   is defined as those commercial transactions carried out using the electronic means, in which goods or services are delivered either electronically or in their tangible or intangible form.

Examples of E-Commerce:
(a) Online shopping:
Buying and selling goods on the internet is one of the most popular examples of ECommerce   .
(b) Electronic payments:
When we are buying goods online, there needs to be a mechanism to pay online too. That is where the payment processors and payment gateways come into the picture. Electronic payments reduce the inefficiency associated with writing the Cheque books. It also does away with many of the safety issues that arise due to the payments made in currency notes.

Main difference between E-Business and E-Commerce   :

E-BUSINESS	E-Commerce
E-Business covers the online transactions, but also extends to all the internet based transactions with the business partners, suppliers and customers like: selling directly to the consumers, manufacturers and suppliers; monitoring and exchanging information; auctioning surplus inventory; collaborative product design. These online interactions are aimed at improving or transforming the business processes and efficiency. An E-Business status is received when we handle the business using phone calls, E-Mail orders, postal orders, and also the online activities.	E-Commerce refers to the online transactions (i.e.) buying and selling of goods and/or services over the internet.

A brief history of E-Commerce :
   (1) 1887: US statistician Herman Hollerith (1860–1929) sets up the forerunner of IBM (International Business Machines), a company that will pioneer electronic forms of doing business in the decades that follow.
   (2) 1950s–1960s: IBM pioneers online transaction processing (OLTP): a way of handling money transactions instantly (in "real-time") using sophisticated computerized systems. With American Airlines, IBM develops an OLTP system called SABRE (SemiAutomatic Business Research Environment) that revolutionizes airline reservations. In 1969, IBM's transaction-processing software evolves into CICS (Customer Information Control System), one of its least-known but most successful products.

(3) <u>1970:</u> US company Docutel invents the ATM (automated teller machine, also known as the "cashpoint"), which works using online transactions made through bank computers. The popularity of ATMs leads to even more sophisticated forms of transaction processing.

(4) <u>1980s:</u> CompuServe, Prodigy, and AOL (America Online) let people shop from home using their computers and telephone lines.

(5) <u>1989:</u> Tim Berners-Lee (1955–) invents the World Wide Web, unwittingly laying the foundations for an explosive growth of E-Commerce in the years that follow.

(6) <u>1994:</u> Jeff Bezos (1964–) founds Amazon.com, the iconic e-store.

(7) <u>1994:</u> Marc Andreessen (1971–) develops the Netscape Navigator web browser, which ships with a feature called SSL (Secure Sockets Layer): built-in encryption that allows credit card transactions to be carried out securely online. There is a huge explosion in online shopping and business and the dot.com phenomenon begins.

(8) <u>2000/2001:</u> The dot.com bubble bursts and over 750 online businesses go to the wall. At one point, Amazon.com's share price plunges to less than 10 percent of its original value.

(9) <u>2008:</u> E-Commerce represents about 3.4 percent of total sales.

(10) <u>2012:</u> The US Census Bureau reports that US E-Commerce retail sales for the second quarter of 2012 are $51.2 billion (adjusted for seasonal variation). In 2Q 2012, ECommerce represents about 4.7 percent of total sales (up from 4.2 percent one year before).

Electronic Fund Transfer

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

Now a day, internet based EFT is getting popularity. In this case, customer uses website provided by the bank. Customer logins to the bank's website and registers another bank account. He/she then places a request to transfer certain amount to that account. Customer's bank transfers amount to other account if it is in same bank otherwise transfer request is forwarded to ACH (Automated Clearing House) to transfer amount to other account and amount is deducted from customer's account. Once amount is transferred to other account, customer is notified of the fund transfer by the bank.

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	Communication or transaction can be done in asynchronous way. Electronics system automatically handles when to pass

	intervention is required for each communication to required person or do the communication or transaction.	transactions.
3	A uniform strategy can be easily established and It is difficult to establish and maintain maintain in E-Commerce . standard practices in traditional 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.

Unique features of E-Commerce

(1) Ubiquity:
Ubiquity of E-Commerce means E-Commerce technological features are available anywhere and, we can connect to the Internet at any time, because they are web-based.
It makes it possible to shop from homes, offices, video game systems with an Internet connection and mobile phone devices. The result is called a market space(i.e.) a marketplace which is able to extend its traditional geographic boundaries and operating hours.
Example: An example includes the ability to access the Internet wherever there is a Wi-Fi hotspot, such as a cafe or airport. Moreover, individuals who have cell phones with data capabilities can access the Internet without a Wi-Fi connection.
From the customer's point of view, ubiquity reduces the transaction costs(i.e.) the cost of participating in the market. In order to transact, it is no longer necessary that we spend both time and money, by travelling to a market.
At a broader level, the ubiquity of E-Commerce lowers the cognitive energy required to transact in a market space. Cognitive energy refers to the mental effort required to complete a task. Humans generally seek to reduce cognitive energy outlays. When given a choice, humans will choose the most convenient path, requiring the last effort.

(2) Global reach:
Technologies within ecommerce seamlessly stretch across traditional cultural and national boundaries and enable worldwide access. Pearson Education states that instead of just offering

goods and services to a population within a specific boundary, businesses can market to and serve an international audience. The Internet and multilingual Web sites, as well as the ability to translate a Web page, allows international visitors all over the globe to access company Web sites, purchase products and make business interactions.

Pearson Education is a British-owned education publishing and assessment service to schools and corporations, as well as directly to students. Pearson owns educational media brands including Addison–Wesley, BBC Active, Bug Club, eCollege, Fronter, Longman, MyEnglishLab, Penguin Readers, Prentice Hall, Poptropica and Financial Times Press.

(3) Universal Standards

Individuals, businesses and governments use one set of technological, media and Internet standards to use ecommerce features. Consequently, universal standards help to simplify the interactions. An individual can see these standards while shopping online, as the process to purchase items is similar on Web sites that use ecommerce technologies. Similarly, when an individual creates an online account, the site generally requires an individual to create a username and password so he can access his account.

This universal technical standards of E-Commerce , greatly reduce the market entry costs. For the customers, it reduce the "search costs(i.e.) the efforts required to find suitable products. And by creating a single, one world market space, where the prices and the product descriptions can be inexpensively displayed to all to see, and so, the price discovery becomes simpler, faster and more accurate. With the E-Commerce   technologies, it is possible for the first time in the history, to easily find all the suppliers, prices and delivery terms of a specific product, anywhere in the world.

(4) Information Richness:

Information provided on the web can be made rich, by adding color to the textual information, and adding audio and video clips. Users can access and utilize text messages and visual and audio components to send and receive the information. Pearson Education states that such aspects provide a rich informational experience in regards to marketing and the consumer experience. An individual may see information richness on a company's blog, if a post contains a video, which is related to a product and hyperlinks that allow him to look at or purchase the product and send information about the post via text message or email. Users can access and utilize text messages and visual and audio components to send and receive the information.

(5) Interactivity:

E-Commerce   technologies are interactive means it allow for two way communication between the merchant and the customer. Technologies used in ecommerce require consumer interactions in order to make an individual feel as though he is an active participant in the transaction process. As a result, ecommerce technologies can adjust to each individual's experience. For example, while shopping online, an individual is able to view different angles of some items, add products into a virtual shopping cart, checkout by inputting his payment information and then submit the order.

(6) Information Density:
Information density means the total amount and quality of information available to all the market participants, consumers and merchants alike.

The use of ecommerce reduces the cost to store, process and communicate information, according to Pearson Education. At the same time, accuracy and timeliness increase; thus, making information accurate, inexpensive much more about the consumers and plentiful. For example, the online shopping process allows a company to receive personal, shipping, billing and payment information from a customer, all at once and sends the customer's information to the appropriate departments in a matter of seconds.

A number of business consequences are resulting because of the growth in the information density. In E-Commerce   markets, prices and costs become more transparent. Price transparency refers to the ease with which the consumers can in out the variety of prices in a market. Cost transparency refers to the ability of the consumers to discover the actual costs, by which the merchants are paying for their products.

Also, there are advantages for the merchants as well. Online merchants can discover much more about the various consumers, and this allows the merchants to segment the market into groups, and permits them to engage in price discrimination(i.e.) selling the same goods, or nearly the same goods to different targeted groups with different prices.

(7) Personalization / Customization :
Technologies within E-Commerce   allow for the personalization and customization of marketing messages groups or individuals receives. Pearson Education states that companies can base such messages on individual characteristics of a consumer. An example of personalization includes product recommendations based on a user's search history on a Web site that allows individuals to create an account. Merchants can target their marketing messages to specific individuals by adjusting those messages.

The technology also permits customization. Changing the deliver product or service based, based on a user's preferences or prior behavior. Given the interactive nature of ECommerce technology, a great deal of information, about the consumer can be gathered in the market place, at the moment of purchase.

With the increase in the information density, a great deal of information   about the consumer's past purchases and behavior can be stored and used by the online merchants. The result is a level of personalization and customization, which is unthinkable with the existing commerce technologies. For example, we may be able to shape what we see on a television by selecting a channel, but, we cannot change the contents of the channel, which we have already chosen.
Emerging trends in E-Commerce

Online businesses have picked up momentum lately, and now people are no more skeptical about shopping online. And why it should be, not like this?

E-Commerce   sites have given you access to the unfathomable market, they do not tax your patience, and they let you save time in traveling. In this collaborative world, here are the 10 rising trend related to E-Commerce   technology.

(1) <u>Real-time Shopping Experience at Online Shopping:</u> There is no doubt the people prefer to talk to real sales person and hold the product in their hand! But do not think that E-Commerce   sites cannot offer you such pleasure. Most online retailers have facilities to chat online, get suggestions and answer all your queries. Online subscription even allow you to hold the product and touch it (i.e. Style mint, Birch box), and some even lets you chat all along while you are shopping with Catalog.

(2) <u>Using Mobiles and Android Apps for Transaction:</u> With the mobile devices outnumbering the desktops, the use of these devices for buying will increase in the near future. Additionally the websites must act like any app and must be very responsive in terms of design. We have many kinds of apps now that assist consumers to check out on his own, use payment wallet, store coupon codes like India plaza coupons (http://www.couponraja.com/indiaplaza.html), loyalties, card numbers and have GPS for proper advertisement of companies. There are also apps that will let you compare the prices of the same product at different outlets.

(3) <u>Multi-channel:</u> Consumers these days expect a very effortless transaction, and they expect that a commodity added to the cart will be available if one calls the customer care or land up in the store. This will encourage the IT directors to invest in commerce packages, E-Commerce   POS systems and CRM systems.

(4) <u>Big Data:</u> Big Data or Hadoop methodology is handling a lot of data. This has been a concept that has been drawing the interest of the E-Commerce   site owners, and it is here to stay. It is synching offline data and online data together so that the retailers' decision-making capacity may be enhanced. In a nutshell, it allows retailers to understand the hidden consumer patterns.

(5) <u>Customization and Personalization:</u> In an extremely volatile market one must be ready for change all times- not otherwise but for personalization. Personalized recommendations will find more prominence in the market!

(6) <u>Valuing Customer Engagements than Conversion Ratio:</u> Till date the conversion rates were given the most priority but with the rise in E-Commerce   sites, gathering new customers will be very tough. So naturally retailers will depend on holding on to the existing customers. Customer engagement will ensure people develop a liking for your site and follow you regularly.

(7) <u>Push Notifications:</u> Pull browsing is the latest trend now, but it is not far when push browsing will overtake it. Messaging notifications, basket notifications for selective items on your home page- are all going to catch up momentum.

(8) <u>Social Networking Sites:</u> As the social networking sites increase in popularity, retailers must be using this platform for marketing and selling their products! Facebook, Twitter, LinkedIn will be the platforms where you will get data about the latest discounts and offers.

(9) <u>Mobile POS and Accessing Via Mobile:</u> The idea of Mobile POS to make each and every employee work and allow the customer transact without being to the billing counter. Thanks to the Android 4.2 Jellybean and iOS 6 that allows apps that lets the customer do endless jobs with such apps.

(10)   <u>Retailers Support to Omni-Channel Consumers:</u> Now that mobile apps are there in the market that lets you compare prices, check the reviews online and share the product

with friends, retailers will be integrating their separate channels into one for offering support to the consumers.

BENEFITS OF ELECTRONIC COMMERCE

E-Commerce   has revolutionized the concept of conducting business by providing equal chance to all the business to mark their global presence. It has also eased the customers with online shopping and easy transactions. With the introduction of E-Commerce   business, communication has become effortless and has also changed a lot in recent years for the better. Still, there are people who think that conventional business practices are far better than the ECommerce   business. The benefits of Electronic commerce is Classified in to three categories those are:

(a) Benefits of E-Commerce   to Businesses

(b) Benefits of E-Commerce   to Consumers
(c) Benefits of E-Commerce   to Society

Its brief explanation is as follows:

(a) Benefits of E-Commerce   to Businesses:
- It helps to reach Global: E-Commerce   enabled business now have access to people all around the world. In effect all E-Commerce   businesses have become virtual multinational corporations. E-Commerce   expands the market place to national and international markets. Internal and web based E-Commerce   helps to reach a more geographically dispersed customer base and more business partners as compared to the traditional business methods.
- Cost effective: E-Commerce   is proved to be highly cost effective for business concerns as it cuts down the cost of marketing, processing, inventory management, customer care etc. It also reduces the burden of infrastructure required for conducting business. It can also collect and manage the information related to the customers efficiently which in turn will assist the consumer in developing efficient promotional strategy.
- New Customers With Search Engine Visibility: Physical retail is driven by branding and relationships. In addition to these two drivers, online retail is also driven by traffic from search engines. It is not unusual for customers to follow a link in search engine results and land up on an ecommerce website that they have never heard of. This additional source of traffic can be the tipping point for some ecommerce businesses.
- It Reduces the Paper Costs: E-Commerce   decreases the cost of creating, processing, distributing, storing and retrieving information through the use of FDI systems. This greatly cuts on the cost of paper work in terms of the time taken and the man power required. Also the date is more secure from theft and destruction.

- Reduction in Inventories: A reduction in inventory is desirable to enable reduction in storage, handling, insurance and administrative costs. Internet E-Commerce   can helps firms to reduce inventories by electronically linking the suppliers and buyers.
  The process starts from the customer orders and uses just-in-time manufacturing. Information on inventory levels and production rate is shared between manufacturers and their suppliers. Using such information, the delivery schedules are "fine turned" for justin-time manufacturing, rather than maintaining large inventories.

- Mass Customization and Competitive advantage: The web based interactive ECommerce enables the customization of products/services as per the customer needs. This provides a great competitive advantage to businesses. For example, an online travel agency may customize the literary for a customer who wishes to travel abroad or a computer manufacturer may be able to supply to customized PC to a user.

- No Middlemen: There is a direct contract with customers in E-Commerce through internet without any intermediation. Companies can now focus more on specific customers by adapting different one-to-one marketing strategy.

- Reduced Production lead Time: The production cycle time is the time taken by a business to build a product, beginning with the design phase and ending with the completed product. The internet based E-Commerce enables the reduction of this cycle time by allowing the production teams to electronically share design specifications and refinement processes. The reduction in the production cycle time helps to reduce the fixed overheads associated with each unit produced. This saving in the cost production can be passed onto the customer or may be used to achieve higher profits.

- Improved Customer relationship: Customer service can be enhanced using the internet based E-Commerce by helping the customer to access information before, during and after a sale. Customers may need to retrieve information on product specifications and pricing. On the status of an order or may need online help in the installation or use of a product he has purchased. A prompt customer support service can help businesses to earn goodwill of customers in the long run.

- Lower Sale and Marketing Costs: The internet allows businesses to reach many customers globally at lower costs. Thus by shifting the sale and marketing functions to the electronic processes, the organizations can bring down greatly the marketing overheads. For example, advertisements on the internet can cut down the cost of printing and mailing the pamphlets or brochure. Any charge in product specifications in the case of paper- based advertisements may mean re-printing, how-ever in web based advertisement it may mean changes only in the web site.

- Lower Telecommunication Costs: The Internet is much cheaper than value added networks (VANs) which were based on leasing telephone lines for the sole use of the organization and its authorized partners. It is also cheaper to send a fax or e-mail via the Internet than direct dialling before the coming internet, only few organizations were using the private networks and VANs for their EDI. The cost of installation and running these systems was very high and beneficial only to the larger firms and enough business volumes to justify the cost.

- New Found Business Partners: Internet based E-Commerce enables businesses to find new business partners globally on the web, thus not restricting themselves to a specific choice of suppliers.

- Increased supply chain efficiencies: E-Commerce minimizes supply chain inefficiencies, reduces inventories, reduces delivery delays.

☐☐☐ <u>Digitization of Products and Processes:</u> Particularly in the case of software and music/video products, this can be downloaded or e-mailed directly to customers via the Internet in digital or electronic format. The internet helps to expedite access to remote information, thus adding speed to transactions and processes.

☐☐☐ <u>Information sharing:</u> It takes only few seconds to share information over the internet. a firm can e-mail its customers relating new products and new offers and can solve their product related quires and welcome suggestions.

(b) <u>Benefits of E-Commerce   to Consumers:</u>
☐☐ <u>Gives freedom to make choices:</u> It also gives customers an opportunity to look for cheaper and better quality products. With E-Commerce   , consumers can search the specific product or service they require and can even find the direct manufacturer from where they can purchase products at comparatively less price. Shopping online is time saving and convenient. In addition to it, consumers also get to see the reviews of other consumers that will help in making beneficial purchase decision.

☐☐ <u>Increase in variety of goods:</u> As the market will expand the variety of goods available will also expand. Wide variety of goods are available than ever before.

☐☐ <u>It gives more choice and alternatives:</u> E-Commerce   provides more choice and alternatives to customers that will increase the choice of vendors or products because they are no longer geographically constrained to reach a vendor or a product. A large number of vendors/manufacturers are marketing and selling their products/services on the internet.
Virtual shops (e.g.Homeshop18, snapdeal, flipkart) can offer the consumers a large number of products/services at a single site.

☐☐ <u>Convenience of Shopping at Home:</u> allows the consumers to shop went it is convenient for them not strictly during store hours. Also for handicapped or ill consumers, home shopping on the internet provides a lot of opportunity and convenience.

☐☐ <u>Ensure Secrecy:</u> the various security measures that are in built are used in ECommerce transactions to prevent any unauthorised access to information on the internet for ensure secrecy they maintain encoding, encryption and passwords.

☐☐ <u>More Competitive Prices and Increased Price comparison capabilities:</u> The large amount of information available on the internet is giving more and more power to the consumers. Consumers can make comparison shopping. There are several online services that allow customers to browse multiple ecommerce merchants and find the best prices.

☐☐ <u>Access to Greater Amounts of Information on Demand:</u> Consumers can have access to large amount of information online on products and services, their features and prices. This further translates into more choice to customers in shopping and greater price comparison opportunities.

☐☐ <u>Time compression:</u> Time is not a factor with Internet communication between firms and their stakeholders. Online stores can be open 24/7; people can communicate as their schedules permit; time zones disappear for managers collaborating with partners on other continents.

- Quick Delivery of Digitized Products/Services: E-Commerce allows quick delivery in the case of digitized products such as music, software etc.
- Provide Comparison Shopping: Economic facilitates comparison shopping. There are several online services that allow customers to browse multiple ecommerce merchants and find the best prices.
- E-payment system: The electronic payment system on the internet is facilitated by payment gateways or intermediary between the business firm and customers and between the business firms for assuring the payments from the customers.

(c) Benefits of E-Commerce to Society:

- Enables More Flexible Working Practices: Which enhances the quality of life for a whole host of people in society, enabling them to work from home. Not only is this more convenient and provides happier and less stressful working environments. It also potentially reduces environmental pollution a fewer people have to travel to work regularly.

- Connects People: Enables people in developing countries and rural areas to enjoy and access products, services, information and other people which otherwise would not be easily available to them.

- Facilitates Delivery of Public Services: The health services available over the Internet on-line consultation with doctors or nurses, filing taxes over the Internet through the Inland Revenue website.

DISADVANTAGES OF ELECTRONIC COMMERCE

The following are the important drawback/disadvantages of electronic commerce:

- Ecommerce Lacks That Personal Touch: Not that all physical retailers have a personal approach, but we do know of several retailers who value human relationship. As a result, shopping at those retail outlets is reassuring and refreshing. Clicking on "Buy Now", and piling up products in virtual shopping carts.

- System and data integrity: A computer virus is a program that clones itself when an injected piece of program code is executed. it is malicious program. data protection from the viruses that causes unnecessary delays and can clean up all stored information must. In order to create cost effective response to the varied technical and human threats to web site security.

- E-Commerce Delays Goods: Ecommerce websites deliver to take a lot longer to get the goods into consumer hands. Even with express shipping the earliest consumer get goods in next day. An exception to this rule is in the case of digital goods an e-book or a music file. In this case, ecommerce might actually be faster than purchasing goods from a physical store.

- System scalability: It means regular up graduation of the website is required when the number of website users increase over period of time or during busy seasons. As a result of rush of enquiries on the companies site, it might cause slow down of the system performance and eventually loss of customers.

- Dependent on internet: E-Commerce   is dependent on internet. Mechanical failures in the system can cause unpredictable effects on the total processes. Furthermore, there are many hackers who look for opportunities, and thus an ecommerce site, service, payment gateways; all are always prone to attack. Things such as viruses could mean losing the site or affecting the customer's computers while on purchasing from the website.
- Many Goods Cannot Be Purchased Online: Despite its many conveniences, there are goods that consumer cannot buy online. Most of these would be in the categories of "perishable" or "odd-sized". It could order both of them online, but consider the inconvenience. The Popsicle would have to be transported in refrigerated trucks. Unless the seller was willing to make a huge loss, the cost of shipping that Popsicle would far exceed the cost of the Popsicle.
- Products people won't buy online: There are various products which the customers would like to first touch and feel and then buy it. For example: Furniture users want to touch ant they want to sit on it, feel the texture of the fabric.
- Ecommerce Does Not Allow Experiencing the Product before Purchase: It cannot touch the fabric of the garment when consumers wants to buy and it check how the shoe feels on our feet, consumer cannot "test" the perfume that consumer want to buy. In many cases, customers want to experience the product before purchase. Ecommerce does not allow that. If they buy a music system, they cannot play it online to check if it sounds right? If they are purchasing a home-theatre system, they would much rather sit in the "experience centre" that several retails store set up.
- Loyal customers: Great amount of effort is put on building a customer relationship buy the organizations and retaining them is rather a bigger job. A business cannot survive without a loyal customer.
- Shopping is Social Experience: People love to shop in the mall because it gives them an opportunity to have fun with friends and family. It's something online stores lack of.
- Anyone one Can Set Up an Ecommerce Website: Where online storefront providers bring the ability to set up an ecommerce store within minutes. The lowered barriers to entry might be a great attraction to the aspiring ecommerce entrepreneur. But for the buyer, reliability can be an issue. This could lead customers to restrict their online purchases to famous ecommerce websites.
- Too Many Competitors: If there are thousands of online stores selling similar products, how company can attract visitors, so they actually but from it and not from others? As the technology has boomed the competition is increasing because more and more people are opening their businesses on internet

- Security: When making an online purchase consumer have to provide at least credit card information and mailing address. In many cases ecommerce websites are able to harvest other information about our online behaviour and preferences. This could lead to credit card fraud, or worse, identity theft.

Some of the very important E-Commerce   models are elaborately explained as follows:

(1) Business - to - Business (B2B):

Business - to - Business (B2B) is a transaction that occurs between two companies, as opposed to a transaction involving a consumer. This term may also describe a company that provides goods or services for another company.

Business - to - Business (B2B) is a transaction that exists between businesses, such as those involving
  •   a manufacturer and wholesaler, or,

  •   a wholesaler and a retailer.
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.
Example:
    Examples of B2B Model:

  ☐ Let us take an example of www.amazon.com. As we know, www.flipkart.com is an online store that sells various products from various companies. Assume that the skyward publishers want to sell the books online. In this case, the publishers have the option of either developing their own site or displaying their books on the Amazon site (www.flipkart.com), or both. The publishers mainly choose to display their books on www.flikart.com at it gives them a larger audience. Do Now, to do this, the publishers need to transact with flipkart, involving business houses on the both the ends, is the B2B model.
  ☐ Consider another example. ABC company sells automobile parts and XYZ company assembles these parts and then sells the automobile to customers. XYZ company comes across the website of ABC and finds it suitable. XYZ therefore, a request for more information about ABC and finally, decides to purchase automobile parts automobile from ABC. To do this, XYZ places an order on the website of ABC. After ABC receives the order details, it validates the information. As soon as the order is confirm, the payment procedures are settled. Finally, ABC sends an acknowledgement of payment to XYZ and delivers the goods as per the shipment details decided between the two organizations.

  ☐ Following are the leading items in B2B r-Commerce:- ☐ Electronics
  •   Shipping and Warehousing
  •   Motor Vehicles

Examples of some of the B2B Websites:

  1. [www.Getrespons.com:](www.Getrespons.com) It is an innovative B2B service based company that has revolutionized the small business email marketing niche. Providing a web based email marketing platform aimed at the small business owner wanting to market their own business online.

2. www.Incorporate.com: Incorporate.com who have reduced the cost and streamlined the process of creating, limited liability companies. In a few easy steps online, anyone can create their own company for a fraction of the cost a corporate lawyer would charge

The impact of B2B markets on the economy:

B2B E-Commerce   have a significant impact on the economy as they help to lower various cost involved in business transactions. There are the cost areas that are significantly reduced through the conduct of B2B E-Commerce   :

(a) Search costs:
Buyers need not go through intermediaries to search for information about suppliers, products and prices as in a traditional supply chain. Internet is more efficient information channel then its traditional counterpart. So effort, time and money can be saved. In B2B, buyers and sellers are gathered together into a single online trading community and reducing search cost even further.

(b)Processing cost:

Reduction in the costs of processing transactions (e.g. invoices, purchase orders and payment schemes), as B2B allows for the automation of transaction processes and therefore the quick implementation of the same compared to telephone and fax.

(c) Avoid intermediaries:

Through B2B e-markets, suppliers are able to interact and transact directly with buyers there by eliminating intermediaries and distributors.

(d) Transparency in pricing:

The gathering of a large number of buyers and sellers in a single e-market reveals market price information and transactions processing to participants. Thus increases the price transparency.

Advantages and Disadvantages of B2B Model

Advantages:

- It can efficiently maintain the moment of the supply chain and the manufacturing and procuring processes.
- It can automate corporate processes to deliver the right products and services quickly and cost-effectively.
- B2B is global trade market, where we can but anything at anytime.
- Creates new sales opportunities
- It lowers the search cost and time for buyers to find products and vendors

- Delay of goods where the earliest to receive goods would be the next day
- Some goods cannot be purchased online such as perishable items
- Enable to experience the product before purchasing
- Fraudulent websites and scams
- Security issues leading to credit card fraud or identity theft

(2) Business - to – Consumer(B2C):

Business - to – Consumer(B2C) is a transaction in which the businesses sells their products or services to the consumers directly. It refers to the online online selling of products, or, e-tailing, in which the manufacturers or retailers sell their products directly to the consumers over the internet.

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.

Business2consumer (B2C) :

☐Online transactions are made between businesses and individual consumers

☐e-Tailing (online retailing)

☐Examples: amazon.com, dell.com

Examples of B2C Model

- Consider an example in which a transaction is conducted between a business organisation and a consumer. A business house, www.bagskart.com, displays and sells a range of bags on their Website. The details information of all their products is wants to buy a gift for his wife. He therefore, logs on to the site and selects a gift from the catalog. He also gets the detailed information about the gift such as, the price, availability, discounts, and so on from their catalog. Finally, when he decides to buy the gift, he places an order for the gift on their Web site. To place an order, he needs to specify his personal and credit card information on the site. The credit card details will be passed to the bank for verification. This information is then validated by bank and stored in their database. On verification of the information the order is processed. Therefore, as we can see, the B2C model involves transactions between a consumer and one or more business organisations.
- The example of the www.flipkart.com site also involves the B2C model in which the consumer searches for a book on their site and places an order, if required. This implies that a complete business solution might be an integration solution of more than one business model. For example, www.flipkart.com includes the B2B model in which the publishers transact with flipkart and the B2C model in which an individual consumer transact with the business organization.

Examples of some of the B2C Websites:
1. Fashion & Lifestyle
   Sunglassesindia.com, Brandsndeals.com, Shopperstop.com
2. Custom designed T-shirt, mug, calendar etc Myntra.com, Zoomin.com
3. Gifts, cakes etc.
   Infibeam.com, IndianGiftsPortal.com, Giftsandlifestyle.com

Key features of a B2C model:

- Heavy advertising required to attract large number of customers.
- High investment in terms of hardware/ software.
- Support or good customer care service.
- Consumer Shopping Procedure <u>Steps used in B2C E-Commerce</u> :

<u>Types of B2C:</u>

Different types of B2C Ecommerce are: direct sellers, online intermediaries, advertisingbased models, community-based models and fee-based models. Each type is so different from the other that they are not directly comparable. Some B2C businesses utilize more than one type to reach different audiences.

Type of B2C	Description

(a) Direct Sellers Direct sellers, such as online retailers, sell a product or service directly to the customer via a website. Direct sellers are divided into e-tailers and manufacturers. Etailers are electronic retailers that either ship products from other their own warehouses or trigger deliveries from other companies Product manufacturers use the Internet as a catalog and sales channel to eliminate intermediaries.

(b) Online Intermediaries Online intermediaries perform the same function as any other broker. The business allows non-B2C companies to reap some Altering the price-setting processes. Of the benefits. Brokers offer buyers a service and help by

<u>Advantages and Disadvantages of B2C Model:</u>

<u>Advantages:</u>

1) <u>Advantages for the Business:</u>
   - It can reach worldwide market with unlimited volume of customers.
   - It can display information, pictures, and prices of products or services without spending a fortune on colourful advertisements.
   - Order processing an easier task than before.
   - It can operate on decreased, little, or even no overhead.

2) <u>Advantages for the Consumers:</u>
   - <u>Convenience:</u> Consumers can shop at any time of day, from the privacy of their own home. Internet shopping can be done at time either day or night.
   - <u>Many choice:</u> Consumers is offered many choices for the same products under various brands
   - <u>Less Hassle:</u> Consumers can shop online without hassles like traffic, congestion of the malls etc.

   <u>Disadvantages:</u>

   1) <u>Disadvantages for the Business:</u>
      - Many websites offering the same product to the customers
      - Technological problems can cause the website to not operate properly thereby loosing the customer.

- People are hesitant to enter the credit card details if the website does not have proper security norms.

2) Disadvantages for the consumer:
- Security issues, especially credit card information which is very sensitive. Fraud, rip-offs are very common on the web.
- Customer service may not be satisfactory for the consumers.

(3) Consumer - to - Consumer (C2C):

C2C, or customer-to-customer, or consumer-to-consumer, is a business model that facilitates the transaction of products or services between customers.

An example of C2C would be the classifieds section of newspaper, or an auction. In both of these cases, a customer, not a business, sells goods or services to another customer. The goal of a C2C is to enable this relationship, helping buyers and sellers locate each other. Customers can benefit from the competition for products and easily find products that may otherwise be difficult to locate.

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-consumer (C2C)

□Consumers sell directly to other consumers

Example of Consumer to Consumer (C2C) Model

Let us take an example of E-Bay. When a customer plan to sell his products to other customers on the Website of E-Bay, he first needs to interact with an E-Bay site, which in this case acts as a facilitator of the overall transaction. Then, the seller can host his product on www.E-Bay.in which in turn charges him for this.

Any buyer can now browse the site of E-Bay to search for the product he interested in. If the buyer comes across such a product, he places an order for the same on the Web site of E-Bay. EBay now purchase the product from the seller and then, sells it to the buyer. In this way, though the transaction is between two customers, an organization acts as an interface between the two organizations.

Examples of C2C websites:

1) Craigslist: Craigslist is one of the top websites in the world and the leading service for classified ads. Consumers can not only buy, sell and trade items, but also conduct other transactions such as housing and job searches.
2) E-Bay: E-Bay is a global online shopping and auction website that offers millions of consumers a wide variety of goods and services. Sellers pay a fee or commission to sell their items and buyers can shop and make purchases for free. Buyers place bids just like in a traditional auction and only acquire an item if they are the highest bidder. Monetary transactions are typically completed through PayPal, a service for online money transfers.

Once a transaction is complete, buyers and sellers can rate each other based on their trustworthiness.

3) Examples of other C2C websites:
- www.olx.in   (internet classified)
- www.carwale.com   (internet classified)
- www.gaadi.com   (internet classified)

Key features of a C2C model:
☐ Consumers interact directly with other consumers. They exchange information such as :
- Expert knowledge where one person asks a question about anything and gets an email reply from the community of other individuals.
- Opinions about companies and products
☐ There is also an exchange of goods between people both with consumer auction sites such as e-bay, swapitshop.com, where individuals swap goods with each other without the exchange of money.
☐ In more recent times the blogging phenomenon has incorporated this business model well. The development of online communities with specific niche interests can gain huge followings. Most current C2C sites, such as E-Bay, have both streamlined and globalised traditional person-to-person trading, which was usually conducted through such forms as garage sales, collectibles shows, flea markets and more, with their web interface. This facilities easy exploration for buyers and enables the sellers to immediately list an item for sale within minutes of registering.
☐ C2C sites make money by charging fees to sellers. Although it's free to shop and place bids, sellers place fees to list items for sale, add on promotional features, and successfully complete transactions.

Advantages and disadvantages of C2C Model:
Advantages:
- Customers can directly contact sellers and eliminate the middle man.
- Anyone can now sell and advertise a product in the convenience of one's home.
- Sellers can reach both national and international customers and greatly increase their market.
- Feedback on the purchased product helps both the seller and potential customers.
- The transactions occur at a swift rate with the use of online payments systems such as paypal.

Disadvantages
- Although online auctions allow one to display his or her products, there is often a fee associated with such exhibitions. Other times, websites may charge a commission when products are sold. With the growing use of online auctions, the number of internet-related auction frauds has also increased.
- Identity theft has become a rising issue. Scam artists often create sites with popular domain names such as "e bay " in order to attract unknowing E-Bay customers. These sites will ask for personal information including credit card numbers. Numerous cases have been documented in which users find unknown charges on their credit card statements and withdrawals in their bank statements after purchasing something online.

- Illegal or restricted products and services have been found on auction sites. Anything from illegal drugs, pirated works have appeared on such sites.

(4) Consumer - to - Business (C2B):
Definition of Consumer to Business (C2B):
Consumer to business E-Commerce refers to the transactions taking place between consumers to business organisations. The C2B model completely transposes the traditional business-toconsumer (B2C) model, where a business produces services and products for consumer consumption.

Customer to business (C2B), sometimes known as Consumer to Business is the most recent ECommerce   business model. In this model, individual customers offer to sell products and services to companies who are prepared to purchase them. This business model is the opposite of the traditional B2C model. The idea is that the individual/end user provides a product or service that the business can use to complete a business process or gain competitive advantage.
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 that fulfils the consumer's requirement within specified budget approaches the customer and provides its services. Consumer2business (C2B)

☐Individuals use the Internet to sell products or services to organizations

The C2B model involves a transaction that is conducted between a consumer and a business organization. It is similar to the B2C model, however, the difference is that in this a case the consumer is the seller and the business organisation is the buyer. In this kind of a transaction, the consumers decide the price of a particular product rather than the supplier. This category includes individuals who sell products and services to organisations. In the C2B model, a consumer provides a business with a fee-based opportunity to market a product or service on the consumer's website or blog. In this type of relationship, a website owner is paid to review the product or service through blog posts, videos or podcasts. In most cases, paid advertisement space is also available on the consumer website.

For the C2B relationship to be fulfilled, the players must be clearly defined. The consumer could be any individual who has something to offer a business, either a service or a good. Examples could be a blogger, as mentioned before, or a photographer offering stock images to businesses. This could also be someone answering a poll through a survey site, or offering job hiring service by referring someone through referral hiring sites.

Example of C2B Model:
There are only a few kinds of companies whose trading models could be considered as C2B.
- Online Advertising sites like Google Ad sense, affiliation platforms like Commission Junction and affiliation programs like Amazon are the best examples of C2B schemes. Individuals can display advertising banners, contextual text ads or any other promotional items on their personal websites. Individuals are directly commissioned to provide an advertising/selling service to companies.

- Online surveys (GozingSurveys, Surveyscout, and Survey Monkey) are also typical C2B models. Individuals offer the service to reply to the company's survey and companies pay individual for this service.

Key features of a C2B model:
Exchange of products, information or services are from individuals to business. A classic example of this would be individuals selling their services to businesses.

Steps involved in C2B model:
- Consumer approaches website showing multiple business organisations for a particular service. Consumer places an estimate of amount he/she wants to spend for a particular service.
- Business organisation who fulfils the consumer's requirement within specified budget approaches the customer and provides its services..

    Example: Comparison of interest rates of personal loan/ car loan provided by various banks via website.

Peer – to – to peer (P2P) - A New Model:

Definition of Peer to Peer Model:

A peer-to-peer (P2P) network is a type of decentralized and distributed networks architecture in which individuals nodes in the network (called "peers") act as both suppliers and consumers of resources, in contrast to the centralized client-server model where client nodes request access to resources provided by central servers. Users in a P2P network can pool their resources, sharing each other's files, storage systems, and applications, thereby paving the way for extensive collaboration and efficient information sharing.

P2P is not only a E-Commerce type,   but also a technology that allows people to share computer files and computer resources without going through a central web server. The required software should be installed by both sides so that they can communicate on the common platform. As from the beginning this type of E-Commerce   has been launched to the free usage, it has quite low revenue. It consists in mutual help of consumers. The main disadvantage of this model of transaction often entangles cyber laws.
Peer – to – to peer (P2P) technology enables the internet users to share the files and computer resources directly without going to the central web server. Therefore, P2P works without an intermediary.

Example:

 (A) Napster.co.,   which was established to aid the internet users in finding and sharing the online music files known as MP3 files, is perhaps the most well known example of

Peer – to – to peer(P2P) E-Commerce   . Also, it is important to note that Napster is partially

Peer – to – to peer(P2P), because, it relies on a central database to show which users are sharing the music files.

Since 1999, entrepreneurs and venture capitalists have attempted to adapt various aspects of peer-to-peer technology into peer-to-peer (P2P) E-Commerce   . In a peer-to-peer network, tasks such as searching for files or streaming audio/video are shared amongst multiple interconnected peers who each make a portion of their resources such as processing power, disk storage or network bandwidth directly available to other network participants, without the need for centralized coordination by servers.

Security, of course, is a major concern for businesses looking to implement P2P networks. Since P2P allows users direct access to other's hard drives. Another obvious security concern was the heightened need to safeguard against malicious or careless P2P users uploading viruses directly into other's computers.

P2P or Peer to Peer is sometimes unified with E-Commerce type, C2C,   because of the same parties participating in the transaction. Like C2C model, P2P model links users, enabling them to share the files and computer resources without a common server. The focus in P2P companies is on helping individuals make information available for anyone's use connecting users on the web. Historically, P2P software technology has been used to allow the sharing of copyrighted music files in violation of digital copyright law. The challenge for P2P ventures is to develop viable, legal business models that will enable them to make money.

Internet revenue model:

For a publisher or other media site owner, eight types of revenue model are possible online.

1. Revenue from subscription access to content:

The subscription model applies to the companies that charge subscribers a fee, normally to view text or graphical information. A range of documents can be accessed for a period of a month or typically a year. Here, one of the main challenges the companies are facing is, marketing to a much smaller niche audience who are willing to pay the regular fees, as opposed to a much larger audience that might use the services at no charge.

For example, I subscribed to FT.com for access to the digital technology section for around , 80 GBP per year a few years ago. Smart Insights Expert members have an annual subscription in this form.

2. Revenue from Pay Per View access to document:

Here payment occurs for single access to a document, video or music clip which can be downloaded. It may or may not be protected with a password or Digital Rights Management.

For example, I've paid to access detailed best practice guides on Internet marketing from Marketing Sherpa.

Digital rights management (DRM) The use of different technologies to protect the distribution of digital services or content such as software, music, movies, or other digital data.

3. Revenue from CPM display advertising on site:

(e.g. banners ads and skyscrapers).

This model relies on advertising to make money. CPM stands for "cost per thousand" where M denotes "Mille". The site owner such as FT.com charges all the advertisers a rate card price (for example 50 GBP CPM) according to the number of its ads shown to site visitors. Ads may be

served by the site owners' own ad server or more commonly through a third-party ad network service such as Google Ad Sense as is the case with my site.

4. Revenue from CPC advertising on site (pay per click text ads):

CPC stands for "Cost Per Click". Advertisers are charged not simply for the number of times their ads are displayed, but according to the number of times they are clicked. These are typically text ads similar to sponsored links within a search engine but delivered over a network of thirdparty sites by on a search engine such as the Google Ad sense Network.

Typical costs per click can be surprisingly high, (i.e.) they are in the range GBP 0.10 to ", GBP 4, but sometimes up to GBP 40 for some categories such as "life insurance" that have a high value to the advertiser.

The revenue for search engines or publishers from these sources can also be a fair proportion of this.
Google Network Revenues through Ads generate around one third of Google's revenue. For me, the Google's content networks are one of the biggest secrets in online marketing with search engines such as Google generating over a third of their revenue from the network, but some advertisers not realizing their ads are being displayed beyond search engines and so not served for this purpose.

Google is the innovator and offers options for different formats of ad units including text ads, display ads, streamed videos and now even cost per action as part of its pay per action scheme.

5. Revenue from Sponsorship of site sections or content types (typically fixed fee for a period):

A company can pay to advertise a site channel or section. For example, bank HSBC could sponsors the Money section on a media site. This type of deal is often struck for a fixed amount per year. It may also be part of a reciprocal arrangement, sometimes known as a "contra-deal" where neither party pays.

A fixed-fee sponsorship approach was famously used by Alex Tew in 2005, a 21-year-old considering going to University in the UK who was concerned about paying off his university debts. This is no longer a concern since he earned $1,000,000 in 4 months when he set up his [Million Dollar Homepage](#).

His page is divided into 100-pixel blocks (each measuring 10x10 pixels) of which there are 10,000 giving 1,000,000 pixels in total. Alex spent £50 on buying the domain name (www.milliondollarhomepage.com) and a basic web-hosting package. He designed the site himself but it began as a blank page.

6. Affiliate revenue (CPA, but could be CPC):

Affiliate revenue is commission base. For example I display Amazon books on my personal blog site [DaveChaffey.com](#) and receive around 5% of the cover price as a fee from Amazon. Such an arrangement is sometimes known as Cost Per Acquisition (CPA).

Increasingly this approach is replacing CPM or CPC approaches where the advertiser has more negotiating power. For example, in 2005 manufacturing company Unilever negotiated CPA deals with online publishers where it paid for every e-mail address captured by a campaign rather than a traditional CPM deal.

However, it depends on the power of the publisher who will often receive more revenue overall for CPM deals. After all, the publisher cannot influence the quality of the ad creative e to click which will affect the Click through rate on the ad and so the CPM.

7. Subscriber data access for e-mail marketing:

The data, a site owner has about its customers, is also potentially valuable since it can said different forms of e-mail to its customers if they have given their permission that they are happy to receive e-mail either from the publisher or third parties. The site owner can charge for advertisements placed in its newsletter or can deliver a separate message on behalf of the advertiser (sometimes known as list rental). A related approach is to conduct market research with the site customers.

8. Access to customers for online research:

An example of a company that uses this approach to attract revenue from surveys is the teen site Dubit.
Considering all of these approaches to revenue generation together, the site owner will seek to use the best combination of these techniques to maximize the revenue. To assess how effective different pages or sites in their portfolio are at generating revenue, they will use two approaches. The first is eCPM, or effective Cost Per Thousand.

This looks at the total they can charge (or cost to advertisers) for each page or site. Through increasing the number of ad units on each page this value will increase. This is why you will see some sites which are cluttered with ads. The other alternative to assess page or site revenue generating effectiveness is Revenue per click (RPC), which is also known as Earnings Per Click (EPC).

This is particularly important for affiliate marketers who make money through commission when their visitors click through to third party retail sites such as Amazon, and then purchase there.

Web Auction:

   A web auction/online auction is an auction which is held over the internet. Online auctions remove the physical limitations of traditional auctions such as geography, presence, time, space and target much wider audience. This arrival in reach ability has also made it easier to commit unlawful actions within an auction.
Web Auction is a simple auction designed for organizations or individuals who want to hold an auction. It is not like E-Bay in the sense that only Administrator can add products. Products can have pictures, price, minimum bids, bid increments, and more.

   Definition and Examples: Web Auction or Online Auction
   Online auctions are places that people can go in order to buy or sell goods or services online for a small fee. Anyone can sell an item and anyone can bid on an item. The highest bidder wins the auction and pay for the good or service and then expects for to receive their winning in the next couple of days through the mail or some other way of delivery.

   The largest online auction website is E-Bay followed by other sites such as Yahoo ad Amazon. These sites allow ordinary web citizens to sell their goods. The sale is generally based on a

system of trust, but some people are finding profit in abusing the trust of others, while some are stretching the limits of the law via online auctions. Below is a listing of some of the major online auction sites on the Internet.

- Auction-Warehouse - http://www.auction-warehouse.com
- Craigslist - http://www.craiglist.org
- E-Bay – http://www.ubid.com

Online auctions are a widely accepted business model for the following reasons:

- No fixed time constraint
- Flexible time limits
- No geographical limitations
- Offers highly intensive social interactions
- Includes a large numbers of sellers and bidders, which encourages a high-volume online business

Online auctions include business to business (B2B), business to consumer (B2C), and consumer to consumer (C2C) auctions. E-Bay is the best example of an auction site that uses all three methodologies.

The online auction business model continues to evolve according to market needs. Examples include E-Bay, Web Store, Online Auction and Overstock. E-Bay and other providers encourage legitimate bidding activity through bidder block lists. E-Bay also offers Dutch auctions for large inventories, where auction bidders pay according to an item's highest sale price.

Like other online services and activities, online auctions can attract stolen or pirated products.

Setting up an auction with Web Auction:

Setting up an auction with Web Auction is quick and simple. We can either host the auction on our own web server or set up our own auction on our servers for free. We have full control over our auction. We can create your own categories, set the start dates and end dates for our auction, select a custom header and footer, and enter the product categories that we want to have in our auction. Once the auction is installed and set up, we can begin adding the products immediately. Each product can have a minimum bid, open and close date, a photo, and a preferred bid increment associated with it.

Users of our auction can browse the products that are up for auction and submit the bids. The winner will receive an email when the auction is closed with instructions on how to proceed. In e auction is a service in which auction users or participants sell or bid for products or services via the Internet. Virtual auctions facilitate online activities between buyers and sellers in different locations or geographical areas. Various auction sites provide users with platforms Powered by Different types of Auction Software

An online auction is also known as a virtual auction.

Types of Online Auctions:
There are six different basic types of online auctions:
Benefits of Online Auctions:

Online auctions hold two other potential benefits for small businesses, as well. First, buying and selling over the Internet can help expand the global reach of a small business, opening international markets that would have been impossible to reach via normal marketing channels.

Second, auctions can help new businesses-or those offering new products-to establish market prices based on supply and demand. Small businesses can use online auctions to gauges interest in their products and find out what customers are willing to pay. Furthermore, companies can collect such information quickly and informally, rather than investing in time-consuming and expensive market research.

VIRTUAL COMMUNITY:
 A Virtual community is a community of people sharing common interests, ideas, and feelings over the internet or other collaborative networks.

Virtual Community:
A virtual community is a group of people who share common interests, feelings or ideas, or pursue similar goals over the Internet or over any collaborative network. Social media is the most common vehicle for this sharing and interaction, which can potentially transcend geographical boundaries, race, culture, political views and religion when people are connected by another common interest or agenda.

One of the most pervasive types of virtual community operates under social networking services consisting of various online communities. In a virtual community group of individuals interact through specific social media, potentially crossing geographical and political boundaries in order to pursue mutual interests or goals.
One of the first champions virtual community was Howard Rheingold, who created one of the major first major Internet communities, called "The Well" In this book, The Virtual Community, (1993) Rheingold defines virtual communities as "social aggregations that emerge from the Internet when enough people carry on public discussions long enough and with sufficient human feeling to form webs of personal relationships in cyberspace".

This term is originally attributed to Howard Rheingold's book "The Virtual Community," which was published in 1993. In it, Rheingold describes the virtual community as social aggregations that emerge from the Internet when people continue discussions long enough and with enough emotion to form real human relationships within cyberspace. For whatever other reason, virtual communities are built around certain needs and goals. Here are some common examples of virtual community types: Forums, online chat rooms, and specialized information communities, email groups these are made up of people who either discuss or share about a common topic/theme. They may also act as a place to ask experts in a specific field for help. Virtual worlds the people in virtual worlds share the common interest of the world itself. These worlds are often massively multiplayer games like "World of Warcraft." Social networks Facebook, Twitter and Google+ are the most common social networking hubs, and they all allow people to form smaller communities based on other interests. Other communities in this category, such as YouTube, focused on media sharing.

Benefits of Online/Virtual Community:

- Gives your business worldwide exposure: One of the benefits of online communities is that it gives your business a worldwide exposure. Reaching out to people from any part of the world, from all walks of life is the first benefit of online community. An online community was developed so that people have a common place where they can share information on significant topics.

- Gain knowledge from other online community members: The second benefit of online community is that you gain knowledge from other members of the online community you will join. Interact with other people who are members of your online community and put their principles into practice, whenever it is appropriate.

- Form a formidable partnership: The third benefit of online community is that we you get the chance to form a formidable partnership with other members. Approach people/businesses, which complement yours and ask them if they are interested in working with you towards a common goal. The online community is where you will build your credibility as an entrepreneur, before you approach complementing businesses.

- Maximize your presence in your online community: Keep in mind that you are not only building a relationship when you join an online community you are also marketing your business in a subtle way. So as a marketer be sure that your online profile is complete, which means that you need to include more information about yourself and of course your business.

- Be wise in choosing your online community: Verify who the members are in the online community you are planning to join. Be selective with the online community you will join to avoid mixing in with the wrong type of people/business. It would be to your advantage if you go with people/businesses that are highly relevant to your business. Also be sure that the other members of the online community you will join have enough in common with you and your business and really excited about interacting with you online.

- Builds relationships: The last and probably the most important benefit of online community is that it gives you a chance to build a relationship with people. We all know the importance of relationships when it comes to business. And one of the least expensive ways to build a relationship with customers/prospects is through the use of online communities. The major comfortable your customers/prospects with your business the bigger opportunities that you will get. Keep in mind that this relationship that you build is not for a one time sale only but you are building a relationship through online communities for the long term.

WEB PORTAL

The definition of a portable:
The definition of a portable is a gateway or entry to something else.

a. An example of a portable is a door into a room.
b. An example of a portable is a website that takes you to many other websites.

WEB PORTAL:

A web portal or Public portal refers to a Web site or a service, that offers a broad array of resources and services, such as E-Mail, forums, search engines and online shopping malls.

A web portal is specially-designed Web page at a website which brings information together from diverse sources in a uniform way.

The first web portals were online services, such as AOL, that provided access to the Web, but, by now, most of the traditional search engines have transformed themselves into web portals to attract and keep a larger audience.

A web portal is a single Web interface that provides personalized access to information, applications, business processes, and much more. By using portal technology, an organization can lower development and deployment costs and significantly increase productivity. Using a portal, information can be aggregated and integrated within a particular working environment application, or service, or a single interface can be used to target an individual user's needs and interests. Portals help to harmonize content, commerce, and collaboration with business goals.

 Features of Web Portals:

- Each information source gets its dedicated area on the page for displaying information called as a portal the user can configure which ones to display. The role of the user in an organization may determine which content can be added to the portal or deleted from the portal configuration.
- A portal may use a search engine API to permit users to search intranet content as opposed to extranet content by restricting which domains may be searched. Apart from this common search engines feature, web portals may offer other services such as e-mail, news, stock quotes, information from databases and even entertainment content.
- Portals provide a way for enterprise and organization to provide a consistent look and feel with access control and procedures for multiple applications and databases, which otherwise would have been different web entities at various URLs. The features available may be restricted by whether access is by an authorized and authenticated user (employee, member) or an anonymous site visitor.

Types of Web Portals:
The portals can be differentiated on the basis of their content and intended users. There are different types of portals, they can be categorized into:

- (1)   Vertical Portals:
- (2)   Horizontal portal Its brief explanation is as follows:

(1) Vertical Portals:
 A vertical portal (also known as a "portal") is a specialized entry point to a specific market or industry niche, subject area, or interest. They provide access to a variety of information and services about a particular area of interest.

These are web portals which focus only on one specific industry, domain or vertical. Vertical portals provide tools, information, articles, research and statistics on the specific industry or vertical. As the web has become a standard tool for business.

Example:
"http://www.wine.com" is a vertical portal. Such portals offer information and services customized for the niche audience.
Some vertical portals are known as "vertical information portals" (VIPs). VIPs provide news, editorial content, digital publications, and E-Commerce capabilities. In contrast to traditional vertical portals, VIPs also provide dynamic multimedia applications including social networking, video posting, and blogging.

(2) Horizontal portal:
A horizontal portal is used as a platform to several companies in the same economic sector or to the same type of manufacturers or distributors.

These are web portals which focus on a wide array of interests and topics. They focus on general audience and try to present something for everybody. Horizontal portals try act as an entry point of a web surfer into the internet, providing content on the topic of interest and guiding towards the right directions to fetch more related resources and information. Classic examples of horizontal portals are yahoo.com, msn.com etc which provide visitors with information and on a wide area of topics.

They are often referred to as "mega portals", target the entire internet community. Sites like
"http://www.yahoo.com"
 "http://www.netscape.com"

 These sites always contain search engines and provide the ability for a user to personalize the page by offering various channels(i.e.) access to the other information such as regional weather, stock quotes, or news updates. The Providers of mega portals hope the individual users to go their sites first, so as to access the rest of the internet. Their financial models are built on a combination of advertising and/or "click-through" revenues.

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UNIT :II

Hardware and Software Requirements for E-Commerce

Web Server

Meaning

It refers to a common computer, which provides information to other computers on the internet. It is either the hardware (the computer) or the software (the computer programs) that stores the digital information (web content) and delivers it through Internet whenever required.

The three components to a web server
☐The Hardware
☐Operating system software
☐web server software

Website & Internet Utility Programs

Meaning of Website

A Website is a collection of related web pages on a web server maintained by any individual or organization .

A website is hosted on web server, accessible via internet or private LAN through an internet address called URL(Uniform Resource Locator). All publicly accessible websites collectively constitute the WWW(world wide web)

Meaning of Utility Programs

These are software tools to help users in developing, writing and documenting programs(a sequence of instructions to a computer)

There are 2 types of utility programs

1) File Management Utilities – it helps in creating, copying, printing, erasing and renaming the files.

2) Program Development Utilities – it is useful in assembler, compiler, linker, locator etc,

Website & utility programs include:

Electronic Mail – sending & receiving messages globally via internet

UseNet News – its a software that enables a group of internet users to exchange their view, ideas, information on some common topic of interest with all members belonging to the group. Ex:-politics, social issues, sports etc.

Real Time Chatting – It is an internet program available to users across the net to talk to each other, text messages ,video chat and video conference via internet.

Finger and Ping

Finger – it is the utility program used to find some information about the users that are on the network. Ex: - last time a user logged on to the network

Ping(Packet Internet Groper) – it is a program used to test the connectivity between two computers connected to the internet .Connection with the internet to ensure proper network

Tracer (Route Tracing Program) – it is a program that sends data packets to every computer on the path between one computer to another computer in the network and records the time it takes to reach the destination computer from the originating computer.

Telnet and FTP

Telnet – it is a software that allows one computer user to access files and run programs on another computer that is connected to the internet .

FTP -(FILE TRANSFER PROTOCOL) -it is a service used on internet to exchange files between computer.

<u>Indexing & Searching Utility programs</u> it helps the search engine to search the

specific website (Search for Information)

<u>Data Analysis Program</u> – it is software used to obtain the visitor information. i.e., website visitor is accessing, time lag the website viewed, the date and time of each visit, pages viewed etc.,

<u>Line checking utility program</u> – it examines each page on the website and reports any URLs broken or someway incorrect .Besides checking links, link checker programs sometimes check spelling and other structural components of web pages.

<u>Remote Server Administration Program</u> – this software allows the web administrator to manage and monitor a website from any Internet connected computer.

<u>Web Hosting</u>

It means to store website contents on a web server. It is a type of service, provided by Internet Service Providers that allow individuals and organizations to make their website accessible when people browse via the www.

Thus web hosts are companies that provide space on a server owned or leased for use by clients.

There are two choices to host the website:-

i) On own web server platform (in house) ii)

On the platform of someone else (i.e.,ISP's)

<u>TYPES OF WEB HOSTING -Choice of web hosting</u>

i)   Home Server – it is a single machine placed in a private residence used to host one or few websites from a broadband connection.

ii)   Free Web Hosting service – it is the type of service provided by web hosting companies free of cost with limited services. The hosting companies offer free space on their web server with a condition that some advertisements are allowed on the web pages. Later the business can change the package by paying

iii)   Shared Website Hosting - it refers to hosting of multiple websites simultaneously on the same web server. The web host also maintains the server and provides technical support on it.

iv)   Virtual Dedicated Hosting – In this type the client or user will have a dedicated web server with separate bandwidth and RAM. The user will be given ID and password to maintain the web server – the user can install or remove any software.

V) Dedicated Hosting – the service provider makes a web server available to the client and has control over it. The service provider owns server hardware and software but leases it to the client.

vi)Managed Hosting – in this type ,the client user gets his own web server but is not allowed full control on it.(no install or remove software)

vii) Collocation Hosting – in this type the service provider rents a physical space to the client to install his/her server hardware. In other words, co-location allows a client to put his machine in a service provider's premises to avail all the available facilities. The client installs his own software and maintains the server. The service provider is responsible only for providing a reliable power supply, internet connection and other networking hardware.

Viii) Cloud hosting – it is a new type of hosting platform that allows clients a decentralized, powerful, scalable (i.e., can be upgraded or a new server added as necessary) and reliable hosting, based on clustered load-balanced servers and utility billing. A cloud hosted website may be more reliable than other choices since other computers in the cloud can compensate when a single piece of hardware goes down.

ix)Clustered Hosting -Multiple servers hosting the same content for better resources is called Clustered Hosting.
x)Grid Hosting – it is a form of distributed hosting where a server clusters acts like a grid and is composed of multiple clients.

E-commerce Requirement

Telecommunication Infrastructure Requirements – it is entailed with bandwidth and security. Bandwidth varies from one e-commerce to another. Two main components of security requirements for e-commerce are type of firewall and encryption/algorithm mechanism. Security requirements area crucial part of e-commerce.

Hardware Requirement for E-commerce - Pentium II/III based Intel server running Linux can serve hundreds of unique customers each day. Low traffic sites can be easily served from a single machine depending on the needs of the business. High traffic sites require a backup of servers which automatically takes over operations in case of failure of primary ones.

Software Requirements for E-commerce – Several software are available free on the internet that can be used to build e-commerce exchanges. Ex:- Linux OS, mySQL database ,Apache web server etc.,

Technical Skill -A systems administrator must have a good knowledge of computer hardware, must be able to maintain and upgrade hardware including hard drive, processor and motherboard. He/she must also have the skill to install and compile Apache,mySQLand Java servlet engine.

Financial Infrastructure -

i) Dependable telecommunication network ii) Use of integrated banking software for

back office and front office data processing iii) Use of WAN and internet for

banking operations iv) Availability of legal infrastructure supporting online payment

mechanism.

V) Availability of EFT

Legal and Policy framework – policies that ensure legal certainty, security and consumer protection for online transactions and interactions should be enacted. These include the resolution of issues such as transactional security, electronic contract enforceability and authentication of individuals and documentation.

E-commerce software

Catalog display
A catalog is an organized list of goods & services being sold. An e-catalog is a simple list of goods and services in HTML form that appears on a webpage on the website of an ecommerce company. Two types (i)static catalog -providing simple list of goods and services on offer.(ii) dynamic catalog -providing a detailed features about items on sale in a database, detailed descriptions ,shipment time etc.,

Shopping Cart

It is an electronic basket provided by E-commerce service providers to be used by net users to keep track of the products selected in the basket, compare and review them, modify it by adding new ones or removing unwanted goods before finally deciding to purchase. After the shopping is completed the customer will make the payment through online.

Features or Procedures for Shopping cart
☐Compare and select the goods before purchasing

☐Select the goods easily -by clicking

☐Customize the product based on the size, quantity ,color etc., before proceeding to order

☐Getting information about the offers, discounts & price

☐Specify the payment mode like credit card, debit card, cheque ,online payment, payment at the time of delivery etc.,

☐Mention the venue for delivery of selected goods

☐Compute shipping charges and obtain information about taxes to incur

☐Get information about delivery time

☐Have transaction confirmation message and transaction report through an email or SMS

☐Transact securely with the web seller

Transaction Processing

It is the software that prompts processing the transaction when an online customer orders for a purchase. Transaction processing software calculates volume discounts to be allowed, sales tax or VAT to be charged; shipment cost etc., and arranges to receive payment as agreed. It also maintains the sales and inventory management modules in accounting software.

Additional component of e-commerce software includes

1)   Middleware – it is the software that establishes the connection between e-commerce software, accounting and inventory management databases or application
2)   Enterprise Application Integration- it performs a specific function such as creating invoices, calculating payrolls, processing payments, etc., logically integrates them.

3)   Enterprise Resource Planning (ERP)- It is a software package that integrates all facets of business, including accounting ,logistics ,manufacturing, marketing, planning, and finance function. Example:-SAP

4)   Customer Relationship Management (CRM) – It is a software that conducts activities like sales automation, customer centre operations and marketing campaigns. It gathers information about customer activities on the company's website and meets they need.

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4)Customer Relationship Management(CRM) – It is a software that conducts activities like sales automation, customer centre operations and marketing campaigns. It gathers information about customer activities on the company's website and meets they need.

5)Supply chain Management – it is a software which helps the companies to integrate planning and coordinates activities of supply chain partners with the aim of efficiently reaching customers.

6)Web service – it is a set of software's and technologies that allow computers to use the web to interact with each other directly, without human operators directing the specific interactions.

☐Content Management Software – it helps companies control the large amount of text,graphics,drawings,photographs and media files that have become important in doing ecommerce business. this software easily allows the company to perform regular maintenance activities like adding, creating or deleting categories on the web page.

8) Knowledge Management Software – it is used by companies to collect and organize information, share information among users, enhance the ability of users to collaborate. It includes tools that read electronic document, scanned paper documented-mail messages, web pages etc., to help users in decision making