CHAPTER 1

E BUSINESS

Meaning: E-business is the conduct of business on the internet not only buying and selling of goods but also serving the customer and also collaborating with business partner aimed at improving and/or transforming business process and efficiency.

Definition: E-business (electronic business) is the conduct of business processes on the Internet. These electronic business processes include buying and selling products, supplies and services; servicing customers; processing payments etc.

Meaning: E- Commerce is where business on the transaction takes place by our telecommunication network especially through internet it means doing business electronically.

HISTORY OF E COMMERCE

1960: **Electronic Data Interchange**

1979: **Michael Aldrich succeed in launching in online shopping**

1981: **First B2B online shopping Business**

1982: **Telecom company based in France invented a Minitel**

1984: **Tesco launched world's first Business to Consumer (B2C) online shopping system**

1987: **Merchant account was launched for helping software developers to online sell software products**

1990: **Merchant account was launched for helping software developers to online sell software products**

1991: **NSFNET navigating files on the Internet using a browser**

1994: **Netscape come-up with encryption certificate**

1995: **NSF charged fees on the names of domain registration, Yahoo.com was registered.**

1998: **Global commerce company pay pal began and google entered into the market**

2004: **Security Payment Card Industry Security Standards Council (PCI)**

FEATURES OF E COMMERCE

UNIQUE FEATURES OF E-COMMERCE	BUSINESS SIGNIFICANCE
Ubiquity-E-commerce technology is available everywhere: at work, at home, and elsewhere via mobile devices, anytime	The marketplace is extended beyond traditional boundaries and is removed from a temporal and geographic location. "Marketspace" is created; shopping can take place anywhere. Customer convenience is enhanced, and shopping costs are reduced.
Global reach—The technology reaches across national boundaries, around the earth.	Commerce is enabled across cultural and national boundaries seamlessly and without modification.

	"Marketspace" includes potentially billions of consumers and millions of businesses worldwide.
Universal standards—There is one set of technology standards.	There is a common, inexpensive, global technology foundation for businesses to use. Video, audio, and text marketing messages are integrated into a single marketing message and consuming experience.
Richness—Video, audio, and text messages are possible.	Video, audio, and text marketing messages are integrated into a single marketing message and consuming experience
Interactivity—The technology works through interaction with the user.	Consumers are engaged in a dialog that dynamically adjusts the experience to the individual, and makes the consumer a co-participant in the process of delivering goods to the market.
Information density-The technology reduces information costs and raises quality.	Information processing, storage, and communication costs drop dramatically, while currency, accuracy, and timeliness improve greatly. Information becomes plentiful, cheap, and accurate
Personalization/Customization-The technology allows personalized messages to be delivered to individuals as well as groups.	Personalization of marketing messages and customization of products and services are based on individual characteristics.
Social technology User-generated content and social networks.	New online social and business models enable user content creation and distribution, and support social networks.

Difference between Traditional commerce and E-commerce

TRADITIONAL COMMERCE	E-COMMERCE
Heavy dependency on information exchange from person to person	It covers the online transaction buying and selling the goods and services over the internet.
Manual intervention is require for each communication or transaction.	E-Commerce is such as online shopping, internet banking, online ticketing & electronic payment.
It is difficult to establish and maintain standard practices in traditional commerce.	A uniform strategy can be easily established and maintain in Ecommerce.
Communication of business depends upon individual skill.	There is no human upon individual skill.
Unavailability of a uniform platform as it depends heavily on personal communication	Availability of a uniform platform where all information is available at one place
No uniform platform for information sharing	Universal platform to support commercial or business activities across the globe.

Difference between E-Business and E-Commerce

E-BUSINESS	E-COMMERCE
E-Business covers online transaction but also extends to all internet based interaction goods with business partners, suppliers and customers.	It covers the online transaction buying and selling the goods and Services over the internet.
E-business such as selling direct to customer, monitoring & exchanging information auctioning surplus inventory & collaborating product design.	E-Commerce is such as online shopping, internet banking, online ticketing & electronic payment.
E-Business is comprehensive in Essence	E-Commerce is only a subset and branch of E-Business
E-business is refers to aiming at improving or transforming business process and efficiency form of trading using electronic means to connect buyers & seller who gives a boost to any business.	E-Commerce is where business transaction takes place by a telecommunication networks especially with the internet which means doing business electronically.
Business status is received when business is handled using phone Call, email Order, postal order and also the online activities.	E-Commerce status is received on buying and selling of goods on the internet.

E COMMERCE BUSINESS MODEL

B2B: Business To Business Ecommerce

A B2B model focuses on providing products from one business to another.

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.

Some of the examples of B2B models are Alibaba (world's largest online business to the business trading platform), Amazon business, etc.

Advantages of B2B

❑ Encourages online business

❑ Improved efficiency in ordering material (loyalty)

❑ Lower the search cost.

❑ Just-in-time environment that minimizes inventory sitting in the warehouse

❑ Increase opportunities for collaboration. (one or more people)

Disadvantages of B2B

❑ Possible antitrust violations. (price fixation, monopoly)

- ❑ Low barriers to entry for competitors. (difficult to new entry, tax cost, harder to enter if competitor has a mature offering)
- ❑ Delay of goods delivering
- ❑ Fraud websites and scams
- ❑ Perishable goods cannot be purchased online.

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.

Advantages of B2C

- ❑ Unlimited Market Place
- ❑ A 24 Hour Store
- ❑ Eliminate Middlemen
- ❑ Workflow Automation (verification, creation of account)
- ❑ Greater customer loyalty
- ❑ Cheaper electronic transactions

Disadvantages of B2C

- ❑ Catalogue Inflexibility
- ❑ Making purchases offline
- ❑ Highly competitive
- ❑ Little difficulty in sourcing hot and cheap products

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.

Advantages of C2C

- ❑ Less or no cost
- ❑ The product gallery is unlimited
- ❑ Any online platform
- ❑ 24/7 accessibility

Disadvantages of C2C

- ❑ Payment made has no guarantee

- ❑ Lack of controlling quality of the products.

- ❑ Theft or Scammers

- ❑ Lack of trust

Consumer – to – Business (C2B)

In this model, where the end users create products and services which are consumed by business and organisations. It is an idea generated by an individual which may be used and implemented by an organisation. Ex: A photographer offering stock images to business or Social media users filling in surveys

Advantages of C2B

- ❑ Channel for the companies to source and hire variety of service talents and products

- ❑ Service providers gain work experience and also paid well

Disadvantages of C2B

- ❑ High level of communication skills is required

- ❑ Sub standard service

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. (such as payments, selling and acquisition of goods and services, etc.)

Examples:

- Dell.com | supplies computers to public sector organization

- ppra.org.pk | Public Procurement Regulatory Authority

(monitoring procurement by public sector agencies/organizations)

Government – to – Business (G2B)

Government uses G2B 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.

Peer to Peer Model:

In a P2P network, the "peers" are computer systems which are connected to each other via the Internet. Files can be shared directly between systems on the network without the need of a central server.

Advantages of Peer to Peer Computing

- ❑ Each computer in the peer to peer network manages itself. So, the network is quite easy to set up and maintain.

- ❑ In the client server network, the server handles all the requests of the clients. This provision is not required in peer to peer computing and the cost of the server is saved.

- ❑ It is easy to scale the peer to peer network and add more nodes. This only increases the data sharing capacity of the system.

- ❑ None of the nodes in the peer to peer network are dependent on the others for their functioning.

Disadvantages of Peer to Peer Computing

- ❑ It is difficult to backup the data as it is stored in different computer systems and there is no central server.

- ❑ It is difficult to provide overall security in the peer to peer network as each system is independent and contains its own data.

ADVANTAGES

- ✓ **No Geographical limitation:** No limitation of distance is there. E-commerce has converted world into a global village. Buyers and sellers meet via internet.
- ✓ **Savings:** Sellers need not to go to the store physically. Hence ,it saves both time and money.
- ✓ **24 X 7 Availability:** E-commerce is a 24*7 business. There is no opening and closing time for the stores.
- ✓ **Huge variety**: Customers can easily select products from different providers without moving around physically
- ✓ **Least capital required:** High initial cost is not required. Business can be started with least amount of capital.
- ✓ **Marketing and advertising:** E-commerce facilitates businesses to advertise their product for marketing purpose which has a global reach. This is easy, less expensive and has more reach than advertising on paper.
- ✓ **Quick Comparison and Instant Order:** A buyer can search products and can also filter found products by various factors, which helps to compare product's price and specification and order the product instantly including making the payment
- ✓ **Creates New Employment Opportunities**: As web developers and designers are required to design and develop e-commerce websites and applications, IT persons are required to maintain the system, customer service providers are required to provide supports etc.
- ✓ **Increases Competition Among Businesses:** As businesses can view each other products and study their description along with prices, the competition among them will increase to provide better product or service in lesser price.

- ✓ **Transparent & faster business**: Technology now enables people to do video conference which enables people to be in separate place but still discuss and see each member of the meeting live and business decisions can be made faster
- ✓ **Better Customer Service**: Buyer can read FAQ about a product or service online and can also chat online with customer service as one customer service operator can serve multiple buyer at a time which enables faster information.
- ✓ **Speed in transactions**: Payments are made electronically which is called e-payment (cards, cellphone, Electronic Fund Transfer etc.) which takes less time for a successful transaction
- ✓ **Personalization:** It collects the information about a customer and configure the store to automatically offer customers the products they are most likely to be interested in.(Wishlist or already purchased)
- ✓ **Reviews available**: Online shopping is a perfect opportunity to read product reviews written by other customers. All this information makes a great contribution to a more conscious "to buy or not to buy" decision.
- ✓ **Detailed Product Information**: Shopping online, you get a more detailed product description with macro photos, tutorials, unboxing videos and the list of many related products.
- ✓ **Retarget the Customers**: Retargeting is an advertisement technology that shows the product ads on web pages that the customer viewed at online store before. It helps to remind customers of the product they used to like and perhaps still desire, urging them to come back to store and reconsider.

DISADVANTAGES

- ✓ **Habituate**: No doubt e-shopping is getting popular day by day but still there are people who prefer store to store shopping because they are habitual of doing so.
- ✓ **Security**: E-commerce sites, payment gateways are prone to attack from hackers and thus, customer's identity is at threat
- ✓ **Lack of Personal Touch**: Some consumers value the personal touch they get from visiting a physical store and interacting with sales associates. Such personal touch is not available in online store.
- ✓ **Product quality**: Online stores provide detailed product description but customers at any way cannot see or feel the item before purchasing. As a result, they can not make sure whether the description lies or not.
- ✓ **Compulsory Registration**: Due to the increased frequency of hacker attacks, it is understandable why some customers are reluctant to submit their name, last name, address, email address and other private data to an online store.
- ✓ **Complex Taxation Guidelines**: It means you need to comply with the taxation guidelines adopted in each country where you aim to deliver.
- ✓ **Some Products are hard to Purchase Online**: Products which are difficult to select correctly or make sure they will suit you. Such products are high-heels, prom dresses, some other types of clothing, luxury items and others.
- ✓ **Waiting for a Product to be Delivered**: Sellers has to make sure that the products will be delivered correctly and on time and deal with all sorts of delays and complications.
- ✓ **Internet Bandwidth**: Ecommerce is a store which totally runs on the internet and though it needs a good connection to run the business online. If not we may face issues with placing the order, loading pages and check out issues too.

- ✓ **Lack of skilled Man power**: Skilled professionals in the field of technology related to E-commerce are very necessary to develop and maintain E-commerce system.(server side scripting, design of the interface to database and overall system etc)
- ✓ **Expensive Technology**: E-commerce is a combination of hardware, software and manpower. Both hardware and software are expensive along with manpower. Thus it is not that cheap to develop, deploy and maintain an E-commerce system.
- ✓ **Excessive Orders**: As many consumer can order products online at the same time, it can become terrible to deliver all these orders at scheduled time. Delayed delivery can make an order useless, In case of medicines.

eCommerce SWOC (Strengths)

- 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 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.

- 24x7 supports Customer can do transactions for the product or enquiry about any product/services provided by a company anytime, anywhere from any location.

- 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.

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

eCommerce SWOC (Weakness)

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

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

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

- 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.

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

- Breakdown in human interaction:-Sometimes people feel that they do not have received sufficient personal attention.

- 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.

- Difficulty in policing the internet: which means that numerous crimes can be perpetrated and often go undetected.

- Wasted Resources: As new technology dates quickly we need to dispose of all the old computers, keyboards etc.

eCommerce SWOC (Opportunities)

- To gain competitive advantages over other organization.

- Open up new distribution channel and increase sales.

- Support buy and sell product on Internet from any place to anywhere all over the world without traditional intermediaries. Example Amazon, E Bay.

- Process and transaction can be done rapidly at reasonable cost.

- Cost saving for the organization and their customer.

- E-Commerce appears to be generating a significant amount of new economic activities.

- Customer are able to choose and discriminate among alternative product and services.

- Full implementation online (24 hours a day, 7 days a week) Increase efficiencies in order taking.

- Reduced customer service calls.

- Lower distribution cost of software upgrades.

eCommerce SWOC (Challenges)

- Accessibility to the Internet is still expensive.

- Global infrastructure of the web is unevenly developed.

- E-Commerce project are viable to the developed country which majority of resident have high income or salary.

- Skill Shortage and lack of trained personal.

- Reduce the consumer confidence: Consumers are distrustful about the safety of information.

- Network Infrastructure and application systems must be continuously upgraded, fine tuned and maintained regularly. (Reliability)

- Customer are reluctant to buy online, reluctant to disclose the confidential data such as home address, identification number and credit card number. (Privacy)

- Lack of Trust: Customer trust is important such as friends recommendation, previous experience, or through transparent legislative infrastructure.

- Customization process is expensive: Ability of customization the interface for individual and group needs.

E BUSINESS REVENUE MODELS

- ✓ **Advertising Revenue Model**: Innovators put up a digital platform where advertisers could post their ads for a commission based on traffic density and other factors. With this model in place, the customers will come to a website to shop, see ads, and access the advertiser's website. Examples of companies using this model are Google Adwords, Adsense, Facebook, New York Times. To attract users, these platforms typically offer internal advertising tools.
- ✓ **Subscription Model:** Companies like Netflix and Spotify usually come to mind when we think of a thriving subscription service. In this model, users are charged a recurrent fee (monthly or annual) for using their services. Typically, the services allow access to all kinds of digital content, including music, video, TV, and magazines.
- ✓ **Transaction Fee Revenue Model:** This one drives revenue by charging a fee for a transaction made via their payment portal. The operator puts up a platform that enables or executes payment transactions to be completed. A good example here is E-Trade that charges a fee once it executes a stock transaction to a customer. Another example is PayPal that charges a fee to sellers. It can be a fixed amount as well as a percentage from a transaction.
- ✓ **Sales Revenue Model:** which is probably the most commonly used model. In this model, the profit comes from selling products or providing services where sellers try to reach a broader audience via the Internet as opposed to offline stores. An example can be any company that sells products online using a single platform like Amazon, Buy.com, Etsy. Such an approach creates a unique way of doing business based on web catalogs.
- ✓ **Affiliate Revenue Model:** An affiliate marketing is a well-known way of inviting as well as driving quality leads into their business. The process basically works as a link that is hyperlinked to the affiliate and is archived on a host platform that gets regular traffic. Any user who clicks to the affiliate link is redirected to their website where the product or service is cataloged. The affiliate or the merchant thus pays an agreed commission to the host operator who's carrying the link for every traffic driven. Amazon and affilinet are well-known examples that let you affiliate your product links and drive traffic.

VIRTUAL COMMUNITIES

Virtual Community is a community of people sharing common interest, ideas, and feelings over the internet or other collaborative networks.

Types:

1) Internet Message Boards: An online message board is a forum where people can discuss thoughts or ideas on various topics or simply express an idea. A user will start a discussion by making a post. Other users who choose to respond can follow the discussion by adding their own posts to that thread at any time.

2) Online Chat rooms: online chat rooms allowed people to talk to whoever was online at the same time they were. This way, messages were sent and online users could immediately respond. Chat room users communicate through text-based messaging. Most chat room providers are similar and include an input box, a message window, and a participant list.

3) Virtual Worlds: are the most interactive of all virtual community forms. In this type of virtual community, people are connected by living as an avatar in a computer-based world. A virtual world simply gives users the opportunity to build and operate a fantasy life in the virtual realm.

4) Social network Services: is the most prominent type of virtual community. They are either a website or software platform that focuses on creating and maintaining relationships. Facebook, Twitter, and MySpace are all virtual communities.

Advantages:

1) Worldwide Expose: It is a common place where people can get easy access to these communities anywhere they may be in the world.

2) Knowledge from other online members: Interact with other people who are members in online community and put their principles, whenever it is appropriate.

3) Formidable Partnership: The online community is where you build your credibility as an entrepreneur, before you approach complementing businesses.

4) Maximize Presence: If any marketer is marketing his business in online community he should be sure that his profile and course of business information is updated.

5) Wise Choice: be selective with the online community you will join to avoid mixing in with the wrong type of people/business.

6) Build Relationship: The most important benefit of online community is that it gives you a chance to build a relationship.

Disadvantages:

1) No physical cues: without facial expressions and gestures or the ability to retract immediately there's a big risk of misunderstanding.

2)Directionless: participants used to having a teacher or instructor telling them what to do can find it a leaderless environment.

3)Time lag: even if you log on daily, 24 hours can seem like a long time if you're waiting for a reply; and then the discussion could have moved on and left you behind.

4(Review of correctness.

5)Difficult in choice.

6)Identify Theft.

SUNITHA N

SIMS

Web Auctions:

A web auction /online auction auction is an auction which is held over the internet. Online auctions remove the physical limitations of traditional auctions such as geography presence, time, and space and target much wider audience.

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
Example: eBay, Bidz.com, Ubid.com.

Types of Web Auctions:

English auction: Is where bids are announced by either an auctioneer or by the bidders and winners pay what they bid to receive the object. English auctions are claimed to be the most common form of third-party on-line auction format used and is deemed to appear the most simplistic of all the forms.

Dutch auction: is the reverse of English auctions whereby the price begins high and is systematically lowered until a buyer accepts the price.
First-price sealed- bid: auctions are when a single bid is made by all bidding parties and the single highest bidder wins, and pays what they bid but these bids are not openly viewable or announced to the general public.

Vickery auction: It is also known as a second-price sealed-bid auction, uses very much the same principle as a first-price sealed bid. However, the highest bidder and winner will only pay what the second highest bidder had bid.

Reverse auction: Is where the roles of buyer and seller are reversed. Multiple sellers compete to obtain the buyer's business and prices typically decrease over time as new offers are made.

Shill bidding: Placing fake bids that benefits the seller of the item is known as shill bidding. This is seen as an unlawful act as it unfairly raises the final price of the auction, so that the winning bidder pays more than they should have.

Fraud in Web Auctions:

Once a buyer wins an auction and pays for it, the fraudulent seller will either not pursue with the delivery.
Deliver a less valuable version of the purchased item (replicated, used, refurbished, etc.).
Online auction websites are used by thieves or fences to sell stolen goods to unsuspecting buyers.
Shill bidding is also a fraud in web auctions.

Benefits of Web Auctions:

- ✓ **No noisy crowds**. Some people do not like having to sit among a crowd of people in order to bid on items.
- ✓ **No rude bidders**. Some bidders can become very aggressive in their attempt to win an item. Such bidders are avoided in online auction.
- ✓ **No schedule constraints**. Online auctions are open twenty-four seven until the designated end date. This is convenient for people who have jobs/school.
- ✓ **Limited or no auction house fee**s. Online auctions eliminate the auctioneer expense and sometimes even the auction house percentage.
- ✓ **Ability to bid on items on a global level.**

Limitations of web auctions:
Cannot view the items in person
- Risky payments
- No human interaction
- Frauds
- Poor listings

Web Portals.
      A Web portal is specially designed web page at a web site that brings information together from diverse sources in a uniform way.
Examples: AOL, Excite, Netvibes, iGoogle, MSN, Naver, Lycos, Indiatimes, Rediff, and Yahoo!.

Types of Web Portals.

Vertical Portals: 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.

Horizontal portals: 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. Examples of horizontal portals are yahoo.com, msn.com etc.

Enterprise Portals: These are portals developed and maintained for use by members of the intranet or the enterprise network. The most common implementation of enterprise portals focus on providing employees with this information on a regularly updated manner.

Knowledge Portals: Knowledge portals increase the effectiveness of knowledge workers by providing easy access to information that is necessary or helpful to them in one or more specific roles.

Corporate Portals: A corporate portal provides personalized access to an appropriate range of information about a particular company.

Market space Portals: Market space portals exist to support the business-to-business and business-to-customer e-commerce, software support for e-commerce transactions and ability to find and access rich information about the products on sale also, ability to participate in discussion groups with other vendors and/or buyers.

Search portals: search portals aggregate results from several search engines into one page.