E-BUSINESS & ACCOUNTING
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UNIT 1
E-BUSINESS

Meaning of E-Business
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.

E- Commerce:
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
1 1960-1982 - Paving the way for electric commerce was the development of the Electronic Data Interchange (EDI). EDI replaced traditional mailing and faxing of documents.
2 Michael Aldrich, an English inventor, innovator and entrepreneur is credited with developing the predecessor to online shopping.
3 In 1982, France launched the precursor to the Internet called, Minitel.
4 In 1990 Tim Berners Lee, along with his friend Robert Cailliau, published a proposal to build a “Hypertext project” called, “Worldwide Web.”
5 In September 1995, the NSF began charging a fee for registering domain names.
6 The Secure Socket Layers (SSL) – encryption certificate by Netscape in 1994 provided a safe means to transmit data over the Internet.
7 The largest online retailer in the world Amazon, launched in 1995 as an online bookstore.
8 eBay, an online auction site that debuted in 1995.
9 Also in 1995, was the inception of Yahoo followed by Google in 1998, two leading search engines in the US.
10 Global ecommerce company, PayPal, began its services in 1998 and currently operates in 190 markets.
11 As more and more people began doing business online, a need for secure communication and transactions became apparent. In 2004, the Payment Card Industry Security Standards Council (PCI) was formed.

Features of E-Commerce Technology
1. Improved sales: E-Commerce is fast, cost efficient, time saving and easy to use were it can result in better transaction, wide market coverage by offering the benefits of speed, convince, being cost effective, impact and control over the market.
2. Improved responsiveness: It helps by improving responsiveness to market conditions and customer preferences. Improve responsiveness by revising price change and marketing programs as and when required.
3. Efficient Inventory Management: Using E-Commerce, inventory management of products becomes automated. Product management inventory becomes very efficient and easy to maintain. It enables reduced inventories and overheads by enabling “pull” – type supply chain management by collecting the customer order and then delivering through JIT (Just In Time).

4. Effectiveness and Efficiency: Electronic commerce can increase the efficiency and effectiveness of public relation programs, broadcast press releases, financial updates and other corporate communications.

5. Planning and Execution of meetings: The mechanism of electronic operations in business facilitates planning and execution of meetings. Executive management meetings, seminars, workshops take a great deal of time and effort to manage.

6. Ubiquity: It is available just about everywhere and at all times. Consumer can connect it to the Internet at any time, including at their homes, their offices, on their video game systems with an Internet connection and mobile phone devices.

7. Global reach: The potential market size is roughly equal to the size of the online population of the world. E-Commerce Technology seamlessly stretches across traditional cultural and national boundaries and enables worldwide access to the client.

8. Personalization/Customization: E-commerce technologies enable merchants to target their marketing messages to a person’s name, interests and past purchases. They allow a merchant to change the product or service to suit the purchasing behaviour and preferences of a consumer.

9. Information Density: The total amount and quality of information available to all market participants is vastly increased and is cheaper to deliver. Most business owners use the shopping cart and do the order of product and purchasing online.

10. Interactivity and support: Consumer/user can interact with the content. Engaging consumer/user is a powerful feature.

**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.

**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 required 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.

E-Commerce Business models

E-Commerce or Electronics Commerce business models can generally categorized in following categories. Business to Business (B2B)
Business to Consumer (B2C)
Consumer to Consumer (C2C)
Consumer to Business (C2B)
Business to Government (B2G)
Government to Business (G2B)
Government to Citizen (G2C)
Business to Business (B2B)

Business-to-business (B2B) refers to a situation where one business makes a commercial transaction with 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. Impact of B2B markets on the economy:

Reduces search costs: Buyers need not go through multiple intermediaries to search for information about suppliers, products and prices as in a traditional supply chain.
Reduction in the costs of processing transactions.
Suppliers are able to interact and transact directly with buyers, thereby eliminating intermediaries and distributors.
Large number of buyers and sellers in one single market increases the price transparency. **Advantages of B2B**

- Replacing a purchasing bureaucracy with online links means savings (maintain uniformity)
- Improved efficiency in ordering material
- Lower the search cost.
- Just-in-time environment that minimizes inventory sitting in the warehouse
- Increase opportunities for collaboration. (one or more people)
- Reduces marketing and sales cost.
- Creates new sales opportunities.
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
- Shrinks the Competition Gap
- Unlimited Market Place
- A 24 Hour Store Reduced Sale Cycle
- Lower Cost of Doing Business
- Eliminate Middlemen
- Easier Business Administration
- Frees Your Staff (no need of any physical stores)
- Customers will love it
- More Efficient Business Relationships
- Workflow Automation (verification, creation of account)
- Secure Payment Systems

Disadvantages of B2C
- Catalogue Inflexibility (list of services needs to generate every time)
- High Marketing / Advertising Expenses
- Limited Market Place (consumers are limited in area)
- High Sales Cycle
- Required Higher Cost of Doing Business (inventory, order processing)
- Require a middleman (take part indirectly through third party)
- Inefficient Business Administration
- Need to employ number of staff (sales and services)

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.

Some Important Features or Functionalities of C2C Web Application
- The buyer can purchase products from multiple sellers.
- The same customer can act as both buyer as well as seller.
- The online market place will allow buyer to browse products by using different criteria such as best seller, most popular product, from your city and many more
- The social media linking functionalities include, community or forum discussion and blog and other social media website link interface.
- Blogging phenomenon (there is regular updating of the website).
The back end interface includes features for administration to manage buyer and seller accounts.

**Advantages of C2C E-Commerce**

- It is always available so that consumers can have access to whenever they feel like shopping.
- There is regular updating of the website.
- Consumers selling products to other consumers benefit from the higher profitability that result from selling directly to one another.
- There is a low transaction cost; sellers can post their goods over the internet at a cheaper rate far better than higher price of renting a space in a store.
- Customers can directly contact sellers and do business without intermediary.

**Disadvantages of C2C E-Commerce**

- Payment made has no guarantee
- There could be theft as scammers might try to create their website with names of some famous C2C websites such as eBay to attract customers.
- There is lack of controlling quality of the products.

**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.

**Business - to - Government (B2G)**

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

**Government - to - Business (G2B)**

Government uses 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:**

- It is easy to install.
- All the resources and contents are shared by all the peers, unlike server-client architecture.
- P2P is more reliable as central dependency is eliminated.
- There is no need for full-time System Administrator.
- The over-all cost of building and maintaining this type of network is comparatively very less.

**Disadvantages**
In this network, the whole system is decentralized thus it is difficult to administer. That is one person cannot determine the whole accessibility setting of whole network.

Security in this system is very less viruses, spywares, Trojans, etc malwares can easily transmit.

Data recovery or backup is very difficult.

Each computer should have its own back-up system

**E-Commerce - Advantages**

I. Advantages to Organizations

- Using E-Commerce, organization can expand their market to national and international markets with minimum capital investment.
- An organization can easily locate more customers, best suppliers and suitable business partners across the globe.
- E-Commerce helps organization to reduce the cost to create process, distribute, retrieve and manage the paper based information by digitizing the information.
- E-commerce improves the brand image of the company.
- E-Commerce helps organization to provide better customer services.
- E-Commerce helps to simplify the business processes and make them faster and efficient.
- E-Commerce reduces paper work a lot.
- E-Commerce increased the productivity of the organization. It supports "pull" type supply management. In "pull" type supply management, a business process starts when a request comes from a customer and it uses just-in-time manufacturing way.

II. Advantages to Customers

- 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.
- E-Commerce provides option of virtual auctions.
- Readily available information. A customer can see the relevant detailed information within seconds rather than waiting for days or weeks.
- E-Commerce increases competition among the organizations and as result organizations provides substantial discounts to customers.

III. Advantages to Society

- Customers need not to travel to shop a product thus less traffic on road and low air pollution.
- E-Commerce helps reducing cost of products so less affluent people can also afford the products.
- E-Commerce has enabled access to services and products to rural areas as well which are otherwise not available to them.
- E-Commerce helps government to deliver public services like health care, education, social services at reduced cost and in improved way.

**E-Commerce Disadvantages**

I. Disadvantages to business

- 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.
- Sometimes, it becomes difficult to integrate E-Commerce software or website with the existing application or databases (older and newer).
- The cost of creating/building E-Commerce application in-house may be very high. There could be delay in launching the E-Commerce application due to mistakes, lack of experience.

II. Disadvantages to Customers

- 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.

III. Disadvantages to Society

- 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.

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, are 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:**

- No physical cues: without facial expressions and gestures or the ability to retract immediately there’s a big risk of misunderstanding.
- Directionless: participants used to having a teacher or instructor telling them what to do can find it a leaderless environment.
- 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.
- Review of correctness.
- Difficult in choice.
- Identify Theft.

**Web Auctions:**

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, 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 fees. 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: Google 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.

E-Business Revenue Models:

Advertising revenue model:
Is a very popular revenue model for e-commerce businesses. In this method, companies or organizations buy advertising space on your site, provide a designed ad or written message, and then pay you for promoting their messages. Media sites, such as magazines, newspapers, and television channels typically use online advertising. Two common types of online advertising include pay-per-click and pay-per-view.

Subscription model:
In the subscription model, the business provides a product or service to a customer who in return pays a pre-determined fee at contracted periods of time to the business. The customer will be required to pay the fee until the contract with the business is terminated or expires, even if he is not utilising the product or service but is still adhering to the contract.

Transaction fees:
Are the charges a company pays for using their service. Ex: eBay, you know there's a set price for posting a product for sale. Each time a transaction happens, you pay a small fee to eBay for marketing your product.

Sale revenue model:
In this model company derives profit by direct selling products or providing services. Companies such as Flipkart, Amazon etc.,

Affiliate revenue model:
The site using this model refers to affiliated website. They generate revenue by referring user to the affiliated website.
Ex.
HDFC bank offers a 5 reward point for every 100 rupees spent on the card.
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 a 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 – it's 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.
Indexing & Searching Utility programs it helps the search engine to search the specific
website (Search for Information)
Data Analysis Program – 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.,
Line checking utility program – 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.
Remote Server Administration Program – this software allows the web administrator to manage
and monitor a website from any Internet connected computer.

**Web Hosting**
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)

**TYPES OF WEB HOSTING**
- Choice of web hosting
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, mySQL and Java servlet engine. Financial Infrastructure -
1) Dependable telecommunication network
2) Use of integrated banking software for back office and front office data processing
3) Use of WAN and internet for banking operations
4) 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.

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.

7. Content Management Software – it helps companies control the large amount of text, graphics, drawings, photographs and media files that have become important in doing e-commerce 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.
Unit-3
Tally

Tally is versatile and massive software package. It is used by various types of trade and industry. Tally Software business was set up in 1986 by late S.S. Goenka, who was the founder of the company Peutronics Private Limited., Bangalore. He mentors his son Bharat Goenka in creating software that would handle the financial accounts for his business. Bharat Goenka spends a lot of months to develop path breaking technology. Tally is user friendly software used to solve all the complicated accounting structure. The milestone statement of the Tally division is “Continuously doing the right thing”.

It is a Bangalore based software company that currently sells into more than 100 countries beyond its native India, including the United Kingdom, Bangladesh and the Middle East.

DIFFERENT TALLY VERSIONS
TALLY 4.5 DOS based Accounts with Inventory TALLY 5.4 Windows based Accounts with Inventory. (Graphic Interface Version) TALLY 6.3 Supported printing and VAT implemented TALLY 7.0 Import and Export features TALLY7.2 New Statutory compliance features(with VAT, TDS & Service Tax) TALLY 8.1 With FBT and Excise Duty (payroll was added) TALLY 9 Advanced features like Excise, Payroll FBT, TDS. Multi-language feature. TALLY ERP 9 Range of Reports and advanced features for Auditors. With remote access facility, Multibudgets, etc.

ADVANTAGES OF TALLY
• Increase in audit efficiency because of ease in access to the client’s data and reports remotely.
• Powerful remote capabilities that boost collaboration.
• Easy to find qualified personnel.
• Easy to customize.
• Low cost of ownership via quick implementation, Tally integrator and support center.

GATEWAY OF TALLY MENU
If we select Display > Accounts Books the menu shows the full patch picture. The menu displays primary choices. Menu options are dependent on activation of options. In some cases, you may find some options appearing as grayed indicating that option is not active. The menu is a drill-down, on selecting an option, if a sub-menu exists for the selected option, it would be displayed. If next level sub-menu exists, it would appear below it – showing the entire path at top of the menu. By selecting Quit – last option in each menu (by pressing Esc key in keyboard) you can return to the upper level menu.

FEATURES OF TALLY
Accounting without codes
• Comprehensive coverage
• Outstanding
• Interest Calculations
• Cost / Profit center
• Number of companies
• Currency • Budgeting
• Security Control
• Printing of various documents
• Import / Export of data
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payroll</td>
<td>Lets you automate the management of your employee records including visa and employment contract management. This feature also offers automatic calculation of salaries and pay slip generation.</td>
</tr>
<tr>
<td>POS Invoicing</td>
<td>Allows faster data entry and printing on 40 column continuous stationery. It also provides barcode support.</td>
</tr>
<tr>
<td>Unlimited Companies</td>
<td>Allows you to create and maintain up to 99,999 companies, concurrently.</td>
</tr>
<tr>
<td>Consolidation of Companies</td>
<td>Enables grouping of companies and provides consolidated reports. Changes done in any constituent or branch company are automatically updated in the grouped information.</td>
</tr>
<tr>
<td>Generate Quotations, Orders, Invoice, Voucher and Cheque Printing</td>
<td>Ensures real-time linking of accounts and inventory besides enabling instantaneous generation of documents, which can either be printed or mailed directly to the recipient.</td>
</tr>
<tr>
<td>Advanced MIS</td>
<td>Helps you compare information in order to understand and analyse performance levels for various periods or divisions. It helps you study and understand the buying patterns of customers, so that you can channel your resources to specific segments, periods or customers. It also helps you analyse cash flow situations.</td>
</tr>
<tr>
<td>Job Costing</td>
<td>Enables you to generate profitability statements for each project executed, including financial and material resource apportionments, wherever applicable.</td>
</tr>
<tr>
<td>Flexible Financial Periods</td>
<td>Allows you to break away from inflexible accounting years and perform all accounting functions in Tally for time-periods that suit your convenience.</td>
</tr>
<tr>
<td>Data Synchronisation</td>
<td>Helps you synchronise and update data across multiple locations. This enables fast and easy exchange of business information, between offices and branches, across various geographies.</td>
</tr>
<tr>
<td>Unlimited levels of classification</td>
<td>Facilitates ledger classification and reclassifications as required. It also enables easy viewing and analysis of information; thus helping you make informed decisions.</td>
</tr>
</tbody>
</table>
How to Create Company in Tally ERP9

You can open Tally.ERP9 software by double clicking on Tally.ERP9 icon. The first step is how to create a company, and without creating a company you will not move further to create masters and recording of business transactions etc.

You can easily create a company in Tally.ERP9 by using the below path.

Path: Gateway of Tally --> ALT+F3 --> Click on Create Company

You have to go through the above path and fill the information related to your company like, address of company, contact details and other in formation.

Click on create company, once you click on create company then the below screen will appear.
Name: Enter company name in this field like, ABC Company

Address: Enter company address

Country: Select country

State: Enter State like, Telangana or Karnataka

Pin Code: Enter pin code

Telephone: Enter telephone number

Mobile No: Enter mobile number

Fax No: Enter Fax number

Email: Enter your company official communication mail id

Website: Enter your company website address

Financial year begins from: Enter financial year begins from like, 01.04.2017

Books beginning from: Most of the cases financial year begins date from and books beginning date from are same but when you have created a company in Tally.ERP9 on 01.07.2017 in this case financial year begins from 01.04.2017 and books beginning date from 01.07.2017.

Security Control

This is very useful option in Tally by activating this option you can avoid unauthorized access of company data.

Use security control: Yes
You have to remember username and password.

Use Tally Audit features: This feature is for Chartered Accountants to audit the company books of accounts directly.

Disallow opening in Education mode: You cannot open your company in Tally if this feature is enabled in educational mode. Everyone knows about Tally, it is free for educational purpose and in this you can able to enter or post any entry first and last date of every month.

Base Currency symbol: ₹  Currency symbol of the country

Formal Name: INR is formal name of the currency

Is Symbol Suffix to purpose of this option is ₹ 650

Amounts: If required you can enable this option, the whether currency symbol is required prior to amount like, ₹ 650

Add space between amount and symbol: Yes, this is like space between amount and currency symbol ₹ 650

Show Amount in Millions: If you enable this option then it will display amount in reports like, balance sheet and other reports in Millions example, Rs.1000000 is equal to 1 Million.

Number of decimal place: Generally will use 2 decimals for paisa purpose in India like, Rs.58.65.

Word representing amount after decimal: It is by default set as paisa in Tally and not require any changes.

No. of decimal places for amount in words: This is for decimal places for amount in words.
Observe the above screen shot contains on the left side current period, current date, name of the company and date of last entry.

If you select any company to record the transactions in Tally, the selected company name will appear under name of company.

**Alter Company Info**

You can modify company info by using shortcut key ALT+F3 from the below screen shot.

**Click on alter**

Companies will alter or edit their information when they have changed company address or contact number or email and other any information.
In the above screen shot you can edit any information as you required like, company address or email or PIN code.

**Date**

Tally will allow us to post transaction in different dates, you can change the date by clicking on F2 during the voucher screen.
Period

by using ALT+F2 you can change the Financial Accounting period, for which period transactions you want to record.