

SUBJECT: E-COMMERCE

TOPIC:- E-COMMERCE MODELS, COMPONENTS AND TOOLS

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TOPIC TO BE COVERED

- Introduction of E-commerce
- Emergence of E-commerce
- Key drivers at macro level
- Key drivers at micro level
- Types of E-Commerce
- Technical components of E-Commerce
- Tools of E-Commerce
- Comparison of web based and land based business



INTRODUCTION

According to **VLADIMIR ZWASS**,

“Electronic Commerce is sharing business information, maintaining business relationships and conducting business transactions by means of telecommunication networks”



EMERGENCE OF E-COMMERCE

- The history of e-commerce started over 40 year ago. When the introduction of early technology like electronic data interchange (EDI) and teleshopping in the 1970.
- The history of e-commerce is closely related with the history of the internet. Online shopping become possible when the internet was opened to the public 1991.
- Amazon was one of the first e-commerce sites in the US to start Selling product online and thousands of business have followed since.

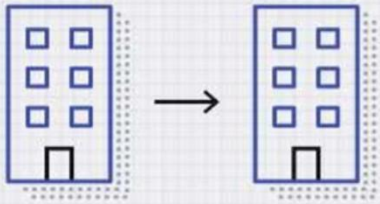


KEY DRIVERS OF E-COMMERCE

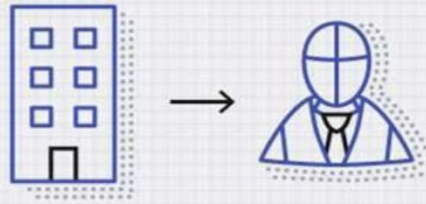
- **Technological factors** :- The degree of advancement provides access to the new technology for business and consumers
- **Political factor** :- Including the role of government in creating legislation, initiatives, and funding to support the use and development
- **Social factor** :- Incorporated the level and advancement in IT education and training which will enable both potential buyers and workforce
- **Economic factor** :- The general wealth and commercial health of nation and the elements that contribute to it.
- **Organizational culture** :- The firm must develop attitude for research and development to enhance value through e-commerce.

- **Commercial benefit** :- The development of business leads to cost savings and improve efficiency .
- **Skilled and committed workforce** :-There is a requirement of skilled and dedicated workers that understands, is willing and able to implement new technologies and processes.
- **Requirements of customers and suppliers** :- The nature and type of product and service will decide the motivation for e-commerce application.
- **Competition** :- Ensuring the organization stays ahead of or at least keeps up with competitors and industry leaders . The development of e-commers also provides competitive advantage to firms

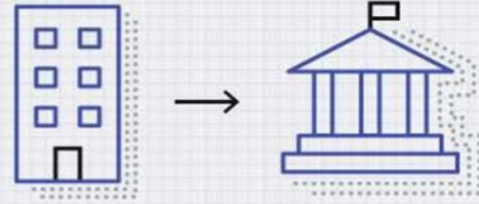
Types of E-Commerce



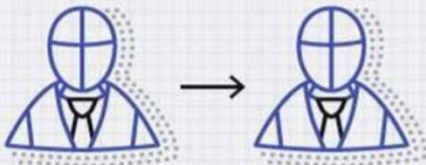
Business to business



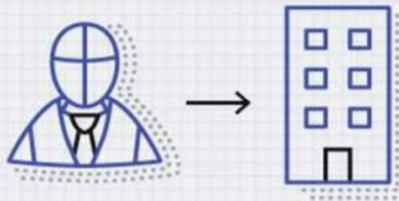
Business to consumer



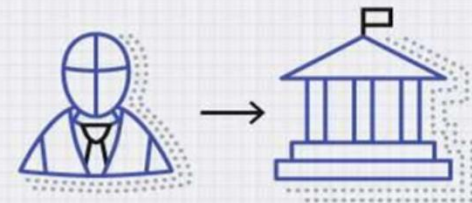
Business to Government



Consumer to consumer



Consumer to business



Consumer to Government

TYPES OF E-COMMERCE

- **B2C :-** In this the company sell the product, goods or services directly to the consumer through online.

For example :-AMAZON,FLIPKART

- **B2B :-** IT is like manufacture selling/issuing goods to the retailer or wholesaler.

For example :- INDIAMART



- **C2B** :-In this consumer post his product and services online and company can bid on it and purchase it.

For example :-FREELANCER

- **C2C** :- IT means that a consumer would contact a business in search for suitable customer.

For example :-OLX,EBEY



- **PEER TO PEER** :-Sharing of computer related files and resources.

- **B2G** :- it is a process of business selling products or services to government agencies through internet.

For example :- PAY TAX,FILE.

- **G2C :-** This model is also part of e governance .the main objective of this model is to provide good and effective services to each citizens and facilities provides through website.



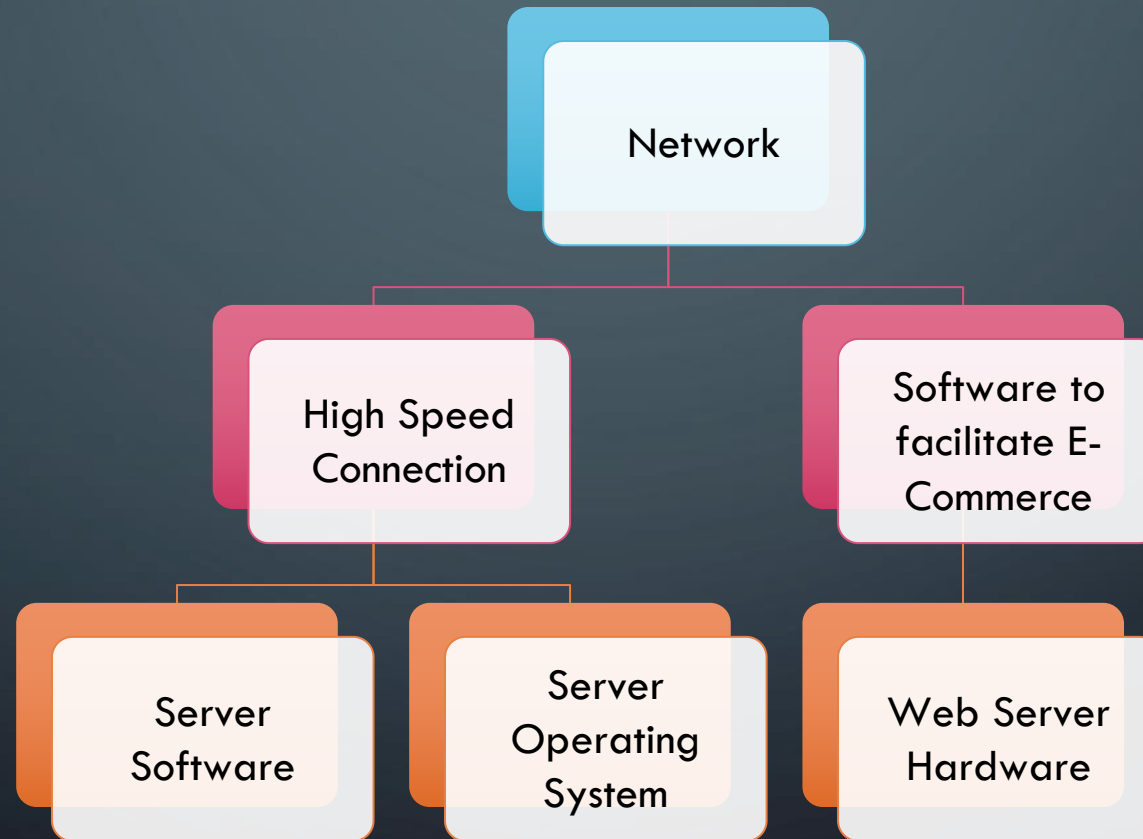
- **G2B :-** It is a relationship between government and business.
For example :- CUNTRUCTION

TECHNICAL COMPONENTS OF E-COMMERCE

E-Commerce is facilitated by a **range of digital technologies** that enable electronic communication. These technologies include Internet communications through websites and e-mail as well as other digital media.



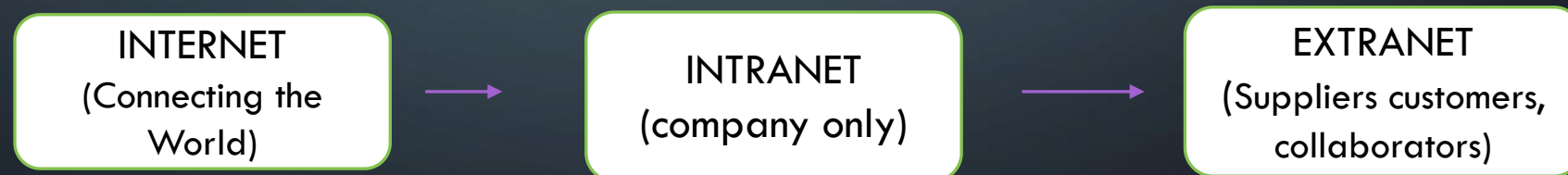
❖ COMPONENTS OF E-COMMERCE

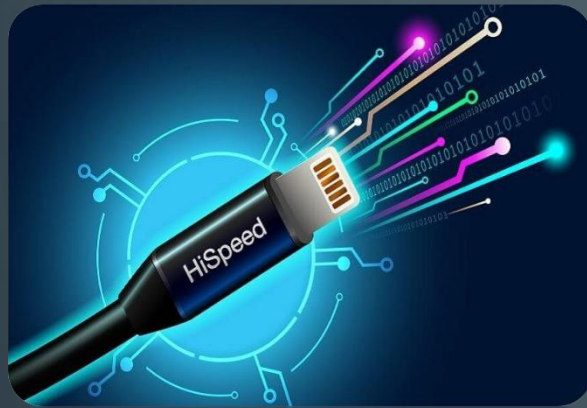


• 1. NETWORKS

It is a **collection of computers, servers, mainframes, network devices, peripherals, or other devices** connected to one another to allow the sharing of data . the different types of networks are:-

- (a) Internet
- (b) Intranets and Extranets
- (c) Value Added Network
- (d) Virtual Private Network





• 2. HIGH SPEED CONNECTION

It is required these days **to get real-time connectivity**. To determine which type of network connection is good it is important to understand the distinction b/w each connection. Some of widely used connections are:-

- (a) Dial-up
- (b) ISDN
- (c) DSL
- (d) Cable
- (e) Satellite
- (f) Wireless
- (g) Mobile
- (h) Hotspot
- (i) Fibre Optic Cable

3. E-COMMERCE SOFTWARE

It is the engine behind the scenes of an online store, making it possible to easily **manage inventory, add or remove products, calculate taxes**, and everything else required to manage a website and fulfil orders.



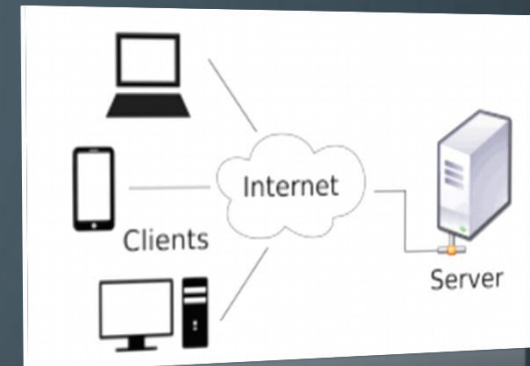
• 4. SERVER SOFTWARE

A Server is a computer program or device that provides a service to another computer program and its user. Server Software is primarily **built to interact with a server's hardware infrastructure.**

(a) Web Server Software (b) Application Server Software

(c) Database Server Software (d) Cloud Computing Server Software

(e) File Server Software



5. SERVER OPERATING SYSTEM

It is an operating system specifically designed to **run on servers**, which are specialized computers that operate within a client/server architecture to serve the requests of client computers on the network. It helps in coordinating different activities and providing security.





6. WEB SERVER HARDWARE

It includes the requirements of RAM, processor and space to run the software's and applications. It is **based on the analysis of number of clients of the company**, number of users at the same time, files or applications to be shared etc. the companies choose INTEL based web server hardware's with expandable RAM to cater maximum users.

TOOLS OF E-COMMERCE



E-Commerce tools provide additional functionalities to enhance e-commerce business websites. These functionalities are varied and can include areas such as **Enterprise Resource Planning System integration, accounting automation**, customer data collection abandoned shopping cart recovery.

TOOLS OF E-COMMERCE

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graph TD; Root[TOOLS OF E-COMMERCE] --> WH[Web Hosting Tools]; Root --> SC[Shopping Carts]; Root --> WDD[Website Design and Development Tools]; Root --> AAT[Advanced Analysis and Tracking Tools]; Root --> DPT[Digital payment Processing Tools]; Root --> ECP[E-Commerce marketing Platforms and Services Tools]; Root --> SSI[Shipping Service Integrations]; Root --> CRM[Customer Relationship Management Tools]; Root --> SMT[Social Media Management Tools];
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Web Hosting Tools

Shopping Carts

Website Design and
Development Tools

Advanced Analysis and
Tracking Tools

Digital payment
Processing Tools

E-Commerce marketing
Platforms and Services
Tools

Shipping Service
Integrations

Customer Relationship
Management Tools

Social Media
Management
Tools

1. WEBSITE DESIGN AND DEVELOPMENT TOOLS

Web Development refers to **building, creating and maintaining websites**. It includes aspects such as web design, web programming, and database management. The small organizations choose a solution like WordPress that provides a basic website template and simplified editing tools.

2. WEB HOSTING TOOLS

Web hosting is an online service that **enables a business to publish the website or web application on the internet**. When a business signs up for the web hosting service, it basically rents some space on a physical server where it can store all the files and data necessary for the website to work properly.

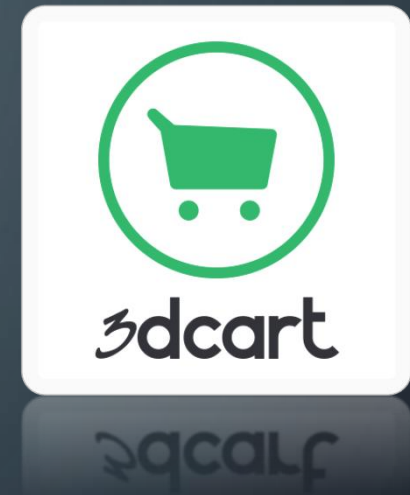


3. SHOPPING CARTS

A shopping cart on an online retailer's site is a piece of software that facilitates the purchase of a product or services. It **bridge the gap between shopping and buying**.

There are three types of Carts:

- (a) Open Source Software
- (b) Hosted Shopping Carts
- (c) Licensed Shopping Carts



4. E-COMMERCE MARKETING PLATFORMS AND SERVICES TOOLS

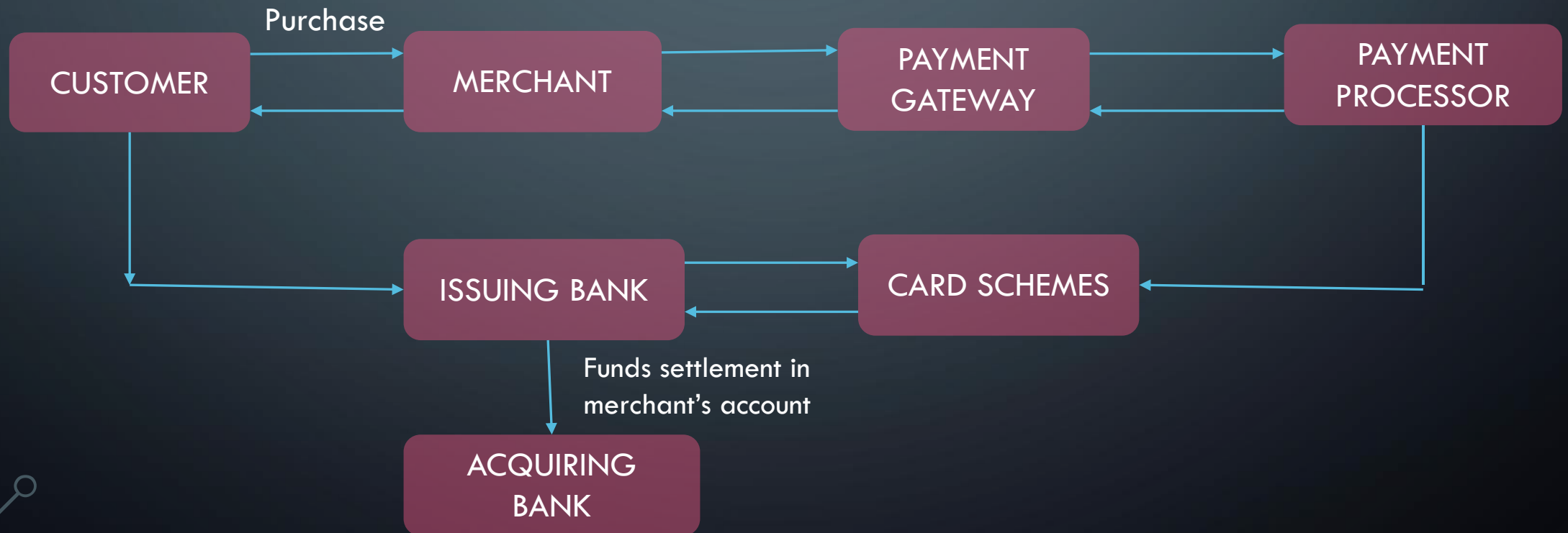
The E-commerce firms have to adopt marketing strategies for existing customers **to know about the product**. The company's website is a vital e-marketing tool for an organization.

The other tools include:

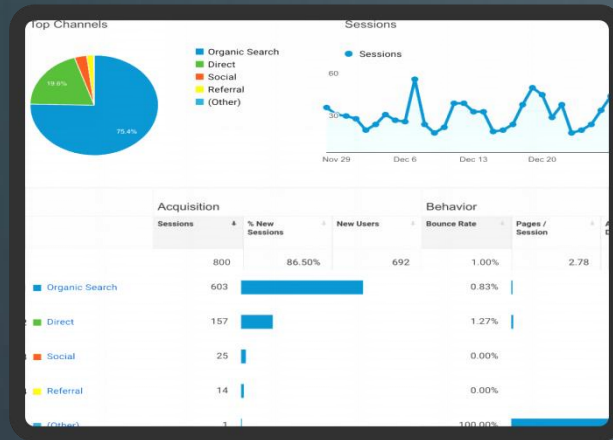
- (a) Search Engine Optimization
- (b) Search Engine Marketing
- (c) Pay-Per-click (PPC) Advertising
- (d) E-Mail Marketing

5. DIGITAL PAYMENT PROCESSING TOOLS

Any e-commerce organization can convert more business by making its **products or services purchasable on the website**, it involves transactions of money. There are several third-party payment providers who help in making online transactions. Ex: PayPal, stripe etc.



6. ADVANCED ANALYTICS AND TRACKING TOOLS



E-Commerce analytics is the process of gathering data from all areas that have an impact on the online store to understand the shift in the consumer's behavior. E-commerce analytics includes **full customer journey from discovery, to acquisition, to conversion, finally to retention and advocacy**. Ex. Google Analytics, Matomo, Kissmetrics etc.

7. SHIPPING SERVICE INTEGRATIONS

E-commerce shipping encompasses all services required to **transport products purchased online** from a retailer to the customer's delivery destination. This helps in providing real-time tracking and delivery notifications.

Ex. FedEx, Blue Dart etc



8. SOCIAL MEDIA MANAGEMENT TOOLS

Every successful company needs to maintain its social media presence. Facebook, Twitter etc are used these days by business firms to target and influence customers. With the **integration of social media management tools**, e-commerce firms can keep customers engaged and give them real time exposure.

Ex: Germin8



9. CUSTOMER RELATIONSHIP MANAGEMENT TOOLS

CRM is a tool that allows retailers to **interact with their customer's by collecting huge volumes of data** about them and therefore to personalize messages. The companies engaged in CRM are Salesforce, Zoho etc.

✓ COMPARISON B/W WEB BASED AND LAND BASED BUSINESS

Feature	Web-Based Business	Land-Based Business
Location	Operates online, no physical storefront	Requires a physical location or storefront
Accessibility	Global reach, accessible 24/7	Local reach, dependent on business hours
Overheads	Generally lower overhead costs (no physical premises)	Higher overhead costs (rent, utilities, etc.)
Customer Interaction	Primarily online interactions	Face-to-face interactions with customers
Market Expansion	Easier to expand globally and reach diverse markets	Limited to local or regional markets

Startup Costs	Often lower initial investment	Higher startup costs for physical infrastructure
Flexibility	Greater flexibility in adjusting business models	Limited flexibility due to physical constraints
Competition	Intense online competition	Localized competition
Technology Dependency	Heavily reliant on technology	Less dependent on advanced technology
Customer Trust	Building trust may require online reputation management	Local presence may enhance trust in the community
Regulatory Compliance	Need to comply with online regulations and cybersecurity	Must adhere to local zoning and business regulations

CONCLUSION

- In contrast, most successful e-commerce Websites take a relational view of e-commerce. This perspective views an e-commerce transactions as one step among many in building a lasting relationship with the buyer. Since consumers can easily switch to a competing website, customer loyalty is the most precious asset for an e-commerce.

The image features a dark blue background with white, stylized circuit board traces in the corners. These traces consist of lines and small circles, resembling electronic components or connections. The traces are located in the top-left, top-right, bottom-left, and bottom-right corners, framing the central text.

THANK YOU...