

E-Commerce



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Table of Contents

E-Commerce	1
Technologies in E-commerce	1
Applications of e-commerce-	2
E-Commerce business models.....	3
Types of e-commerce models	3
Advantages of e-commerce	5
Disadvantages of e-commerce.....	7
Anatomy of E-Commerce Websites	8
Consumer oriented application:	10
Mercantile Process Model:	11
Online Advertisements	12
Push and Pull Marketing	13
Online Advertising	15
Electronic Payment Systems	17
E-CRM	18
Business Benefits of E-CRM:	20
Working of E-CRM:	22

E-Commerce

It is the environment in which business activities such as selling, buying, packing, transportation, banking, insurance etc. are carried out electronically.

It increases productivity, reduce cost, provide better consumer services and creates new opportunities for entrepreneurs.

It is buying and selling goods and services over the internet.

Technologies in E-commerce

1. Electronic data interchange: It is used to terminate documents such as orders, bills, notices, advices and other business mails between two trading partners. For example- The customer may request for a price quotation or for details. The seller sends quotation electronically. The buyer places the purchase order. The seller acknowledge the order.

2. Electronic fund transfer: It is the transmission of financial information and payments in electronic form. Secure transactions are carried out in the electronic fund transfer methods.

3. Electronic mail: Business activities mainly depend upon the mail system. The orders, payments etc. usually depend upon quick mail system. It is the way by which the messages are transferred and transmitted without paper mode.

Applications of e-commerce-

1. For advertisements of products.
2. Tracking of orders and payments.
3. Pre-sale and post-sale services.
4. Email and messaging.
5. Supply chain management.
6. Online publications.
7. Facilitating contact between traders.

E-Commerce business models

E-commerce models are an extension or revision of traditional business models, such as advertising model or a new type of business model such as merchant model.

Types of e-commerce models

1. B2B (Business to business model)
2. B2C (Business to consumer model)
3. C2C (Consumer to consumer model)
4. C2B (Consumer to Business model)
5. G2B (Government to Business)
6. G2C (Government to Citizens)
7. B2G (Business to Government)

1. Business to Business (B2B) – This is Business to Business transactions. Here the companies are doing business with each other. The final consumer is not involved. So the online transactions only involve the manufacturers, wholesalers, retailers etc.

2. B2C (Business to consumer model) - Business to Consumer. Here the company will sell their goods and/or services directly to the consumer. The consumer can browse their websites and look at products, pictures, read reviews. Then they place their order and the company ships the goods directly to them. Popular examples are Amazon, Flipkart, Jabong etc.

3. C2C (Consumer to consumer model) - Consumer to consumer, where the consumers are in direct contact with each other. No company is involved. It helps people sell their personal goods and

assets directly to an interested party. Usually, goods traded are cars, bikes, electronics etc. OLX, Quikr etc. follow this model.

4. C2B (Consumer to Business model) - This is the reverse of B2C, it is a consumer to business. So the consumer provides a good or some service to the company. Say for example an IT freelancer who demos and sells his software to a company. This would be a C2B transaction.

5. G2B (Government to Business) – Government use this model to approach business organizations. Such websites supports auctions, tenders and application submission facilities.

6. G2C (Government to Citizens) – Government use this model to approach citizen in general. Such websites provide services like birth registration, marriage or death certificates, auction of vehicle, machinery or any other materials.

7. B2G (Business to Government) – It is a variant of B2B model. Such websites are used by government to trade and exchange information with various business organization. Website provides a medium to business to submit application for government.

Advantages of e-commerce

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

- Advantages to Organizations
- Advantages to Consumers
- Advantages to Society

Advantages to Organizations

- Using e-commerce, organizations can expand their market to national and international markets with minimum capital investment.
- E-commerce helps organizations 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 reduces the paper work.

Advantages to Customers

- It provides 24x7 support. Customers can enquire about a product or service and place orders anytime, anywhere from any location.
- E-commerce provides users with more options and quicker delivery of products.
- E-commerce application provides users with more options to compare and select the cheaper and better options.
- 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 purchase.

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

Advantages to Society

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

Disadvantages of e-commerce

The disadvantages of e-commerce can be broadly classified into two major categories –

- Technical disadvantages
- Non-Technical disadvantages

Technical Disadvantages

- There can be lack of system security, reliability or standards owing to poor implementation of e-commerce.
- The software development industry is still evolving and keeps changing rapidly.
- In many countries, network bandwidth might cause an issue.
- There could be software/hardware compatibility issues, as some e-commerce software may be incompatible with some operating system or any other component.

Non-Technical Disadvantages

- **Initial cost** – The cost of creating/building an e-commerce application in-house may be very high. There could be delays in launching an e-Commerce application due to mistakes, and lack of experience.
- **User resistance** – Users may not trust the site being an unknown faceless seller. Such mistrust makes it difficult to convince traditional users to switch from physical stores to online/virtual stores.
- **Security/ Privacy** – It is difficult to ensure the security or privacy on online transactions.
- Lack of touch or feel of products during online shopping is a drawback.

Anatomy of E-Commerce Websites

- Multimedia Content for E-Commerce Applications
- Multimedia Storage Servers & E-Commerce Applications
- Information Delivery/Transport & E-Commerce Applications
- Consumer Access Devices

Multimedia Content for E-Commerce Applications

- Multimedia content can be considered both fuel and traffic for electronic commerce applications.
- The technical definition of multimedia is the use of digital data in more than one format, such as the combination of text, audio, video, images, graphics, and animations in a computer file/document.

Multimedia Storage Servers & E-Commerce Applications

- E-Commerce requires robust servers to store and distribute large amounts of digital content to consumers.
- These Multimedia storage servers can store large information that are capable of handling various content, ranging from books, newspapers, advertisement, movies, games etc.

Information Delivery/Transport & E-Commerce Applications

- Transport providers are principally telecommunications, cable, & wireless industries.

Providers	Range
Distance telephone lines	Long
Cable TV companies	Local
Computer based online servers	Internet services

Consumer access devices

Computer with audio and video computing capabilities, Mobile computing, Personal digital assistant (PDA), Voice recognition devices.

Consumer oriented application:

There are four categories of consumer oriented applications:

1. Personal finance management
2. Home shopping
3. Home entertainment
4. Micro-transaction of information

1. Personal finance management: It includes paying bills, whether by computer or telephone etc.

To manage the increasing complexity of household finances home banking services are used.

Home banking services are categorized as basic, intermediate and advanced.

1. Basic services: Basic services of home banking in ATM, banks introduced. ATM's in 1970's to automate two functions deposit and cash withdraw.

2. Intermediate services: The problem associated with home banking is expensive services, it requires PC, a modem and special software, these problems are solved by intermediate service using QDPMM (Quick and dirty personal money management) which allows you to pay the bills by moving money between investment accounts.

3. Advance services: Range of services that will be offered by banks in future, these services range from online services to real time financial information from anywhere in the world.

Mercantile Process Model:

It define interaction models between consumers and merchants for online commerce. This is necessity because to buy and sell goods, a buyer and other parties must interact in some way.

This model from a consumer perspective consist of 7 activities that can be grouped into three phases:

1. Pre-Purchase determination
2. Purchase
3. Post-Purchase interaction

1. Pre-purchase: It includes search and discovery for a set of products in the larger information capable if meeting customer requirements. It also includes product selection from the set of products based on product comparison.

2. Purchase phase: It includes protocols that specify the flow of information and documents such as price, availability and delivery dates, and e-pay mechanisms.

3. Post-Purchase phase: It includes customer services and support to address customer complaints, product returns and products defects.

Online Advertisements

Advertisements that appears while consumers are surfing the web, including display ads, search-related ads, online classifieds, and other forms. As consumers spend more and more time on the internet, so many companies shifting from traditional marketing to digital marketing.

These companies are developing exciting rich media ads, which includes animation, videos, sounds and interactivity.

Finally online marketers use viral marketing, the internet version of word of mouth. It involves creating a website, video, e-mail message or other marketing event that customers will pass to their friends.

Online social networks: These days almost everyone is engaged on social websites like facebook, youtube, myspace etc. So, marketers can engage in online communities by participating in communities or either creating their own.

Challenges of online marketing: Online marketing will become a successful business model for some companies such as- Amazon, ebay, snapdeal, flipkart etc.

Despite the many promises the online marketing also face some challenges like security threats- phishing, inline frauds, hacking etc.

Push and Pull Marketing

Within digital marketing and marketing as a whole, strategies can be categorized as either Push or Pull marketing techniques. The basic difference between two strategies is that how the consumer is approached by the firm.

Push Marketing

It is defined as a promotional strategy in which businesses attempt to take their products to customers-consumers are not actively seeking a product or service. In fact they are introduced to new products through active promotions such as bill boards, T.V. advertisements etc.

The term “Push” means that the marketers are attempting to push their products at consumers. Examples of Push marketing strategies are:

1. Traditional approach

1. Face to Face sales, for example in a showroom
2. Trade show promotion
3. Attractive packages

2. Digital marketing

1. Display advertisements
2. Cold E-mails

Pull Marketing

In this approach consumers will actively seek out a brand for its products or services because they are already aware of its reputation.

In terms of marketing, the aim is to establish a brand that linked with customer satisfaction. In digital marketing the consumers will be attract by effective SEO(Search Engine Optimization), blogs, content marketing, social media campaigns etc.

Examples:

1. SEO (Search Engine Optimization): Companies will attempt to promote their websites as high as possible.
2. PPC (Pay per Click): Company will pay the publisher for each click their company's website receives.
3. Social Media: It involves promoting your product to potential consumers via websites such as facebook or twitter.

Multi-Channel Marketing

A start-up company cannot rely/depend on pull marketing to bring in customers as product awareness will not be so high. Initially push marketing must be implemented in order to set the company brand.

Online Advertising

Online advertising is a type of business promotion which uses internet to deliver marketing messages to attract customers.

Publishing an online Advertise

It is a sequential process. The following points show the basic steps an Ad publisher takes to create and post the Ad online:

▪ **Ad planning**

This includes various domains:

- Marketing analysis
- Product targeting analysis
- Audience analysis
- Customer targeting analysis

Based on this analysis the advertiser decides on:

- Selecting a publisher
- Ad presentation approach
- Approach of posting the Ad
- Ad posting schedules

▪ **Creating Ad space Catalog**

It is to record Ad space availability status, location, presentation, frequency etc.

▪ **Trading Ad space**

Advertisers and Publishers interact to determine online Ad space.

There are three type of Ad space trading:

- **Buy and sell:** Publishers sell the Ad space schedule to advertisers on First Come First Serve basis
- **Space Auction:** It is conducted to settle the trade.

- **Space exchange:** Multiple publishers interact with each other to sell the space schedules available with them, which have not been sold.

- **Scheduling the Ad space**
This help the advertisers for booking, purchasing and confirming various schedules for online advertisements.

- **Ad closure**
The advertisers pay the publishers by pre-decided terms of payment for publishing online Ad.

Electronic Payment Systems

E-Commerce sites use electronic payment that is paperless monetary transactions. It revolutionized the business processing by reducing the paper work, transaction cost and labour cost.

Listed below are some of the modes of e-payments

!. Digital token based electronic payment systems: Electronic tokens are of three types

1. Cash or real time: Transactions are settled with exchange of electronic currency. Example: Online currency exchange is electronic cash(E-Cash).
2. Debit or Pre-Paid: Users pay in advance for the privilege of getting information. Example: Prepaid payments mechanism are stored in smart cards and electronic purses that store electronic money.
3. Credit or Post-Paid: The server authenticates the customers and verifies with the bank that funds are adequate before purchase. For Example: Post Paid mechanisms are credit/debit cards and electronic cheques.

E-CRM

Meaning of E-CRM:

Customer Relationship Management (CRM) is a way to identify, acquire, and retain customers – a business' greatest asset. By providing the means to manage and coordinate customer interactions, CRM helps companies maximise the value of every customer interaction and in turn improve corporate performance.

E-CRM, or Electronic Customer Relationship Management, is an integrated online sales, marketing and service strategy that is used to identify, attract and retain an organisation's customers. It describes improved and increased communication between an organisation and its clients by creating and enhancing customer interaction through innovative technology. E-CRM software provides profiles and histories of each interaction the organisation has with its customers, making it an important tool for all small and medium businesses.

E-CRM software systems may contain a selection of the following features:

i. Customer management:

Provides access to all customer information including enquiry status and Correspondence

ii. Knowledge management:

A centralised knowledge base that handles and shares customer Information

iii. Account management:

Access to customer information and history, allowing sales teams and customer service teams to function efficiently

iii. Case management:

Captures enquiries, escalates priority cases and notifies management of unresolved issues

iv. Back-end integration:

Blends with other systems such as billing, inventory and logistics through relevant customer contact points such as websites and call centres

v. Reporting and analysis:

Report generation on customer behaviour and business criteria

Business Benefits of E-CRM:

Implementation of an E-CRM system enables an organisation to streamline processes and provide sales, marketing and service personnel with better, more complete customer information. The result is that E-CRM allows organisations to build more profitable customer relationships and decrease operating costs.

Direct benefits of an E-CRM system include:

i. Service level improvements:

Using an integrated database to deliver consistent and improved customer responses

ii. Revenue growth:

Decreasing costs by focusing on retaining customers and using interactive service tools to sell additional products

iii. Productivity:

Consistent sales and service procedures to create efficient work processes

iv. Customer satisfaction:

Automatic customer tracking and detection will ensure enquiries are met and issues are managed. This will improve the customer's overall experience in dealing with the organisation.

v. Automation:

E-CRM software helps automate campaigns including:

- (i) Telemarketing
- (ii) Telesales
- (iii) Direct mail
- (iv) Lead tracking and response
- (v) Opportunity management
- (vi) Quotes and order configuration

Working of E-CRM:

In today's world, customers interact with an organisation via multiple communication channels—the World Wide Web, call centres, field salespeople, dealers and partner networks. Many organisations also have multiple lines of business that interact with the same customers.

E-CRM systems enable customers to do business with the organisation the way the customer wants – any time, via any channel, in any language or currency—and to make customers feel that they are dealing with a single, unified organisation that recognises them every step of the way.

The E-CRM system does this by creating a central repository for customer records and providing a portal on each employee's computer system allowing access to customer information by any member of the organisation at any time. Through this system, E-CRM gives you the ability to know more about customers, products and performance results using real time information across your business.

Implementation of an E-CRM System:

When approaching the development and implementation of E-CRM there are important considerations to keep in mind:

i. Define customer relationships:

Generate a list of key aspects of your customer relationships and the importance of these relationships to your business.

ii. Develop a plan:

Create a broad Relationship Management program that can be customized to smaller customer segments. A suitable software solution will help deliver this goal.

iii. Focus on customers:

The focus should be on the customer, not the technology. Any technology should have specific benefits in making customers' lives easier by improving support, lowering their administrative costs, or giving them reasons to shift more business to your company.

iv. Save money:

Focus on aspects of your business that can contribute to the bottom line. Whether it is through cutting costs or increasing revenue, every capability you implement should have a direct measurable impact on the bottom line.

v. Service and support:

By tracking and measuring the dimensions of the relationship, organisations can identify their strengths and weaknesses in the relationship management program and continually fine tune it based on ongoing feedback from customers.

**THANK
YOU**