

Unit – 1 Introduction to Electronic Commerce:

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What is E-commerce

- Ecommerce, also known as electronic commerce or internet commerce, refers to the buying and selling of goods or services using the internet, and the transfer of money and data to execute these transactions.
- Ecommerce is often used to refer to the sale of physical products online, but it can also describe any kind of commercial transaction that is facilitated through the internet.
- Whereas e-business refers to all aspects of operating an online business, ecommerce refers specifically to the transaction of goods and services.

- The history of ecommerce begins with the first ever online sale: on the August 11, 1994 a man sold a CD by the band Sting to his friend through his website NetMarket, an American retail platform.
- This is the first example of a consumer purchasing a product from a business through the World Wide Web—or “ecommerce” as we commonly know it today.
- Since then, ecommerce has evolved to make products easier to discover and purchase through online retailers and marketplaces.

- Independent freelancers, small businesses, and large corporations have all benefited from ecommerce, which enables them to sell their goods and services at a scale that was not possible with traditional offline retail.
- Global retail ecommerce sales are projected to reach \$27 trillion by 2020.

Main activities Ecommerce

- Online shopping for retail sales direct to consumers via Web sites and mobile apps, and conversational commerce via live chat, chatbots, and voice assistants
- Providing or participating in online marketplaces, which process third-party business-to-consumer or consumer-to-consumer sales
- Business-to-business buying and selling;
- Gathering and using demographic data through web contacts and social media

- Business-to-business (B2B) electronic data interchange
- Marketing to prospective and established customers by e-mail or fax (for example, with newsletters)
- Engaging in pretail for launching new products and services
- Online financial exchanges for currency exchanges or trading purposes.

Goals of E-commerce

- **High reach ability** - The main objective and at the same time need is traction on your web store. Of course if you are selling products online what you require are customers. If you are getting good reach ability then your business will definitely grow. Therefore one of the objective is high reach ability.
- **High Conversions**- People are coming on your web store and purchasing something then it will calculate as conversions and from the number of people who are buying stuff from your web store we can calculate the conversion rate.

- Customer Satisfaction**- Customer is the main part of any E-commerce business so its very important to make your customer happy and satisfied. By providing quality and desirable products, on time delivery, 24*7 customer support, and timely sale & best deal offers you can make your customer happy. It is one of the main objectives of E-commerce.
- Social popularity** - Unless and until you are not famous and popular among people you cannot establish your brand. social presence with Digital Marketing is essential for any E-commerce business.

Technical components of Ecommerce

Consider your brand.

- Think of some of the world's most popular brands. Nike, Coca-Cola, Apple and the like all have something in common – logos, slogans and brand aesthetics that set them apart from the competition.
- As a small business owner, you should try to follow in the footsteps of those giants and establish an online brand that differentiates you from your competitors.
- How you brand your company will be the first thing people notice on your e-commerce site, so make sure your brand reflects your company's values and priorities. If you do this right, you'll attract the customers you want and turn away the ones you don't.

Make your e-commerce website engaging.

- With so many avenues for small business owners to get their online retail businesses off the ground, competitors can crop up out of nowhere. That's why it's important that your company always puts its best foot forward.
- One way to do that is to ensure that your website not only runs smoothly and is up to date but also makes the act of buying something easier for the consumer.

Come up with a marketing plan.

- e-commerce sites rely heavily on good marketing strategies. If your potential customers have no idea you exist, how are they going to visit your site and buy your products?
- "Marketing is the lifeblood of your business," Kim said. "Even if you have a great product, great customer service, great retention and great organic growth, the question you should ask yourself is, 'Do I want to reach my next revenue goal faster?'" If your answer is yes, then marketing is where you should place your attention, he said.

- One easy (and free) way to get the word out about your company is to establish a social media presence. Platforms like Facebook, Instagram and Twitter each have millions of users just waiting to learn about your brand.
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Make sure you can fulfill your orders.

- Of course, order fulfillment is closely tied to customer satisfaction.
- In today's fast-paced world, no one wants to wait weeks to receive something they purchased online. Unless your e-commerce business deals in digital products, a good fulfillment strategy is a necessity.
- It may be impossible to meet those standards at your current stage, but speedy shipping – even if it's not next-day or two-day shipping – should always be something you strive for. Keeping your customers happy will benefit your business in the long run.

- "If operationally you're having a hard time meeting these expectations, you end up eroding your customers' goodwill and reducing the chance of repeat purchases, which means you have to pay those customer acquisition costs all over again," .

Manage and streamline shipping.

- Regardless of how fast you ship your items, shipping costs are unavoidable. Most of the time, brands lose money on shipping, especially new businesses.
- With that in mind, it's important to consider how much you charge for shipping.
- If your shipping costs are too high and your customers are left to shoulder that burden, you'll lose sales to your competitors. To that end, Kim suggests offering free shipping to some of your customers as part of a marketing campaign. For example, customers who spend above a certain amount get free shipping.

- "Shipping actually helps you close a sale and becomes a part of the marketing budget rather than a cost center for a subset of customers,"
- The most important thing to remember, however, is that all four of these components need to work together.

Functions of E-commerce

- **As ecommerce owners**, we frequently look for something new to help our businesses grow.
- This could be a magical analytical tool that deciphers why conversion rates are lower this year than last. Or, it could be a new, exclusive product that becomes a worldwide best seller.
- Certainly new discoveries are important. But, we should also execute the basic day-to-day functions that it takes to be successful. Here are five key examples.

1. Search Engine Optimization

- Generate unique relevant content. Google loves unique content that is related to what your site is all about.
- Ensure you are using good keywords that you want to focus on. Ensure H1 tag is added around the focus of the page. For example,
 - product name, category name, or static content title should be
 - wrapped inside the H1 tag.
- Avoid any duplicate content appearing on multiple URLs by using the canonical tag. The canonical tag tells the search engine to group multiple URLs together since they share the same content.

2) Selecting New Products

- Sell what the customer wants to buy, not what you want to sell!
- This is a common mistake, especially when merchandisers are given a great price to sell a particular product. If nobody wants to buy that product, it doesn't matter what price you set it at.
- Find out what customers want. What is your value proposition on products you sell? Capitalize on your niche! (Market)

3. Merchandising New Productions

- Pictures, pictures, pictures! It is very important to have high-quality images of the products.
- Hero photos: if you have a big seller, feature it on a category page with a hero image of the product.
- Promote the latest releases in your newsletters and feature them in categories or on your homepage.
- Market to customers who have purchased related items in the past.

4) Customer Service

- Be proactive, and engage customers on the site constantly. If a customer stays on a page for some time, chances are they need help. Prompt the customers, and see if he/she would like to chat with one of the representatives. Business and technical teams should look into what the “friction” is, and address accordingly.
- Provide delivery estimation. If customers subscribe to the notification, ensure that you push any shipment updates information to customers via different channels (e.g., email / SMS / IoT devices — Amazon Alexa / Google Mini).
- Customers should not need to login and research the status of their orders.

- Deliver orders on time.
- Reship promptly if a package failed to be delivered to the customer, if it was damaged, or if it had missing parts. If an order was not delivered to customers within the estimated timeframe due to package loss, the system should determine if an order should be re-shipped.

At the same time, a notification should be sent to customers and let them know of the delay or that the order has been re-shipped.

- In order to retain customers' loyalty, we need to make sure customers feel comfortable with the purchase experience. We must earn their trust. With trust, customers will come back again.

5) Monitoring your KPIs / Analytics

- Monitor your analytics reports. View what items are selling and bubble them to the top of product listings so customers can find them more easily.
- A great tool for this, if you are on [HCL Commerce](#) (formerly IBM WebSphere Commerce), is our [Smart Merchandiser](#) product. With it, you can see analytic overlays on each product, in each category, to help you make smart merchandising decisions. Remarket those products to the customers if you have their email addresses. Incentivize them to complete their checkout within X days.

Advantages & disadvantages 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. An organization can easily locate more customers, best suppliers, and suitable business partners across the globe.
- 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 helps to simplify the business processes and makes them faster and efficient.
- E-commerce reduces the paper work.
- E-commerce increases the productivity of organizations. 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.

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 application 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 provides options of virtual auctions.
- It provides readily available information. A customer can see the relevant detailed information within seconds, rather than waiting for days or weeks.
- 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

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.
- Special types of web servers or other software might be required by the vendor, setting the e-commerce environment apart from network servers.

Technical disadvantages

- Sometimes, it becomes difficult to integrate an e-commerce software or website with existing applications or databases.
- 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.

Non-Technical Disadvantages

- Lack of touch or feel of products during online shopping is a drawback.
- E-commerce applications are still evolving and changing rapidly.
- Internet access is still not cheaper and is inconvenient to use for many potential customers, for example, those living in remote villages.

Scope of E-commerce

- E-commerce, which emerged in the early 90s, stands for purchasing, selling, and exchanging goods or services using internet-enabled electronic devices.
- E-Commerce enabled websites and the Internet have become part of today's business.
- The ever-expanding community of 3G/4G users is changing the scenario in India as the Indian smart-phone market which playing a significant role to fast growing E-Commerce market in India already grew 10% annually in 2018.

Scope of E-commerce

- By using various on-line facilities, E-Commerce has led to innovations on delivery time, ease of transactions and features like drone delivery or artificial intelligence.
- Amazon, Flipkart, Myntra, Snapdeal, Jabong stand testimony to the enormous success of E-Commerce in India, one of the fastest growing markets in the Asia Pacific region.

•**Key factors:**

- Manageable quantities, personalized services, innovative schemes
- Reduction in the cost of broadband internet facilities
- More domain registrations at cheaper maintenance rates
- Internet facilities and health services extended to the rural sector

Electronic commerce applications

- E-Commerce development and its applications are an unavoidable sector in the present day to day life.
- E-Commerce improves its sales performance. Given below are the most common eCommerce applications.

Retail & wholesale

- There are numerous applications for retail as well as wholesale in the case of e-commerce. Here comes e-retailing or may be called as online retailing.
- This refers to the selling of goods and other services through electronic stores from business to consumers. These are designed and equipped using a shopping cart model and electronic catalog.

Marketing

- Using web and e-commerce, data collection about the preferences, behavior, needs, buying patterns are possible.
- The marketing activities like price fixing, product feature, and its enhancement, negotiation, and the relationship with the customer can be made using these.

Finance

- E-Commerce is being used by the financial companies to a large extent. By the name finance, we know that there will be customers and transactions.
- The customers can check the balance in their savings account, as well as their loan account.
- There are features like transferring of money from and to their own accounts, paying off bills online and also e-banking.
- Online stock trading is also another feature of e-commerce.

Manufacturing

- E-Commerce is included and used in the chain operations (supply) of a company. There are companies that form the electronic exchange.
- This is by providing buying and selling items together, trading market information and the information of runback office like inventory control.
- This is a way that speeds up the flow of finished goods and the raw materials among the business community members.

Auctions

- ❑ eCommerce customer to customer is direct selling of goods among customers. It includes electronic auctions that involve bidding system.
- ❑ Bidding allows prospective buyers to bid an item.
- ❑ In Airline Company they give bidding opportunity for customers to quote the price for a seat on a specific route, date and time.

Education

- Yes! e-commerce sector have the keen future in the field of educations and learning.
- In educational training also e-commerce has a major role in interactive education, video conferencing, online class and for connecting different educational training centers.
- Due to the success growth in the e-commerce business sector, many educational institution have decided to create a new learning with new trends and challenges.

Electronic commerce and electronic business

- Some people use the terms "e-business" and "e-commerce" interchangeably, but they aren't synonymous.
- To put it simply, e-commerce refers to buying and selling online, while e-business encompasses all business conducted online.
- E-commerce can be viewed as a subset of e-business.
- If you plan on starting or working closely with an internet-based company, you should strive to understand all the ways these two concepts are unique.

E-Business Basics

- In a tech-driven world, it might be tough to tell which businesses are truly e-businesses. Perhaps the best way to understand Businesses is with the help of examples:
- Email marketing to existing and/or prospective customers is an e-business activity. It electronically conducts a business process—in this case, marketing.
- A company that builds and sells an online system that tracks inventory and triggers alerts at specific levels is an e-business. Inventory management is a business process, and when facilitated electronically, it becomes part of e-business.

- A content management system that manages the workflow between a content developer, editor, manager, and publisher is another example of an e-business.
- Sometimes the difference between a standard business and an e-business is just a matter of how business is conducted.
- For example, if you are an advisory firm helping people choose the right furniture, then you are a business, but if you run a website where people can compare furniture options, then you are an e-business.

E-Commerce Basics

- Compared to e-business, the definition of e-commerce is clearer.
- In its basic form, it involves placing orders and making payments online.
- E-commerce comes in multiple forms. In business-to-consumer (B2C) e-commerce, a business sells goods and services to consumers through its website.
- E-commerce sales can include every element of a sale: ordering a product, paying for a product, and having it delivered. It might also involve only part of the process.

- For example, a customer might order a product online to be picked up at the store. Payment might be conducted online or at the store when the item is picked up. Either way, the transaction still involved an element of e-commerce.
- Many businesses also sell through virtual marketplaces in addition to their own websites. For example, a popular brand like Nike will sell shoes from its website, as well as through an online retailer like Amazon. Whether you buy it from Nike's website or Amazon's, the transaction is still an example of e-commerce.

C2C

- C2C represents a market environment where one customer purchases goods from another customer using a third-party business or platform to facilitate the transaction. C2C companies are a type of business model that emerged with e-commerce technology and the sharing economy.
- Customers benefit from the competition for products and often find items that are difficult to locate elsewhere. Also, margins can be higher than traditional pricing methods for sellers because there are minimal costs due to the absence of retailers or wholesalers

G2G

- Government to government (G2G) is the electronic sharing of data and/or information systems between government agencies, departments or organizations.
- The goal of G2G is to support e-government initiatives by improving communication, data access and data sharing.
- G2G initiatives are also being driven by budgets and funding.
- By sharing information and systems, governments are able to reduce IT costs government offices can be more efficient and streamline procedures, allowing citizens to access information over the Internet.

B2G

- An example of a business-to-government service would be a small business' providing IT consulting to a local government agency.
- The B2G category covers contracts of all sorts – for goods, services and information – between businesses of all sizes and government at all levels (state, local and federal).
- Business-to-government (B2G) is a business model that refers to businesses selling products, services or information to governments or government agencies.
- B2G networks or models provide a way for businesses to bid on government projects or products that governments might purchase or need for their organizations.

B2P

- B2P or Business to People marketing is a set of strategies for achieving ideal response between the end user and business.
- It recognizes that it is not businesses that make the purchase decisions, but the people are responsible for making such decisions.
- Create a high-quality website which has relevant information, regularly updated, and SEO-optimized to quickly reach the audience.
- Always personalize the messages you send to your customers.
- Stay active in all the social networking platforms.
- Respect customer's privacy while using their data.

B2A

- B2A E-Commerce model is meant for electronic transactions between businesses and public administration.
- The business provides services, software and their maintenance to the administrative department.
- Businesses can also provide raw material and human resources for construction.
- It helps the government maintain records of citizens including their identity, credibility, health records, legal documents, and everything else.

P2P

- A peer-to-peer service is a platform that directly connects parties to a transaction without the third-party intermediary.
- Peer-to-peer services leverage technology to overcome the transactions costs of trust, enforcement, and information asymmetries that have traditionally addressed by using trust third-parties.
- Peer-to-peer platforms offer services such as payment processing, information about buyers and sellers, and quality assurance to their users.

B2A

- Business-to-administration or (B2A) takes place between companies, public administration, or government agencies.
- In this e-commerce business model, there are dealings between companies and public administration using the internet.
- Government agencies (administration) use central websites to trade and exchange information with various business organizations.
- B2A includes different services, and some of them are social security, legal documents, and other government-related

C2A

- The Consumer-to-Administration or C2A e-commerce business model encompasses electronic transactions online between the individuals and the public administration.
- The C2A e-commerce model helps the consumers to post their queries and request information regarding public sectors directly from their local governments/authorities.
- It provides an easy way to establish communication between the consumers and the government.
- Some of the examples of C2A are disseminating information, distance learning, distribution of information through social security, electronic tax filing, payment of health services, etc.

B2B

- For example, there are two businesses:
 - Business Organization or Manufacturer
 - Wholesaler

A wholesaler goes to the Business Organization's website or any other online resource and order products in bulk.

The Business Organization processes the order and supplies the products to the wholesaler.

When the wholesaler receives the products, then the wholesaler can sell those same products at a high price to there customers, and it can be referred to as a business-to-business or B2B model.

An excellent example of it is Alibaba.

B2C

- Business-to-consumer or B2C e-commerce consists of the sale of goods and services to the general public.
- In this type, customers or consumers can visit the website and purchase goods online using credit cards.
- Let's say we have a company, and we want to sell our goods or services online through our website or any other online resource, then it can be referred to as the B2C model.
- An excellent example of it is Amazon or eBay. We can call their business, Business To Consumer model.

E-commerce business models:

Introduction

- E-commerce business models can generally be categorized into the 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)

Eight key ingredients of a business mode.

•1. The executive summary

- This is placed as number one on our list of **components of a business plan**, but it can easily be the final stage.
- That's because sometimes it's easiest to write your summary after you've covered all the other details.
- A great summary is one of the key features of a business plan. It serves as an overview of your entire business and the elements surrounding it.
- Be sure to outline succinctly the 5 "W"s (Who, What, Why, When, Where) as well as the **mission statement**.

- Think about why you started the business along with where you would like it to be in the future, how will you get there? Your mission statement is the start of creating a culture that people in your organisation will live and work by.

•2. A description of the business

- This section should contain details of things such as your goals and the customers you will service.
- What are the products and services you will offer to your customers? You'll need to provide an overview of them and how they will address customers' needs and wants?

3. The market(s) the business will operate in

- You've come up with this great business idea, but how will it do in the market? Or, more importantly, what is the market for it? How well do you know the market? What does a typical buyer look like, what is their income level? Does the business have the hallmarks of disruptive innovation?
- This is the time to research and determine who your target market is and ask specific questions that relate to your product or service. Put your idea to the test. What have others done before you and what can you do differently and better? Analyse what information you've uncovered and outline its potential impact in your plan.

4. A SWOT analysis

- Create a detailed list of your strengths, weaknesses, opportunities and threats. This needs to be done with an open and honest approach, keep emotions out of it, focus on being objective when analysing your business and those of your competitors.
- Any strengths you uncover will represent internal, positive factors in your business that are within your control. Weaknesses are also internal, but are negative factors that need to be improved.

- Both opportunities and threats are external factors. While opportunities will potentially positively impact on your business, threats represent negative factors beyond your control.
- For example, are there high barriers to entering the market? Does a competitor have the market cornered due to brand loyal customers? These could harm your enterprise, so you need to strategise for it in your plan.

5. The management team and personnel

-Who will run the business, who are the directors in the business?

What are the skills of the **management team** and how do their different responsibilities make maximum use of their abilities. What is the chain of command in terms of decision making?

- Also use this section to identify how the management team, and taking on employees will help maximise strengths, while addressing identified weaknesses to help improve the business.

6. The products or services offered

- In this section you need to detail what will be produced and how it will be sold. You should explain how your product or service will meet a particular need in the marketplace, and how you'll get customers returning to make repeat purchases. Repeat custom is after all the lifeblood of many a good business.
- Who will you rely on, in terms of suppliers, to help you assemble your products? What intellectual property, patents or copyright do you own, or might you be at risk of potentially infringing?

7. Marketing

- What is the branding to your business? What are the key messages you want to communicate with your target market and how will you go about reaching them? How will you achieve market share and at what cost in terms of your budget?

8. Let's talk money: A financial plan

- Ideas are great, but how will you make them a reality and sustain a viable business. Creating a financial plan will give you the opportunity to address your financial concerns and talk money, think about start-up costs, financial projections, funding and investor pitches - You'll need to list how much your start-up will cost, everything from stationary to leases should be outlined and balanced against your financial projections.

Don't fear change, your business plan isn't written in stone

- It's important to remember that your business plan isn't written in stone. This is a document that you and your staff can improve and update as the business grows and changes. Your plan should be reviewed regularly.
- Consider implementing a monthly review to track progress or make adjustments to your strategy. Accountability and motivation are key in making sure your goals are met, think about the people involved and what can you do to keep them inspired.

Thankyou