**BBA VI Semester**

**Subject: - E- Commerce**

**UNIT 01**

**E- Commerce**

E-commerce (electronic commerce) is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as business-to-business ([B2B](https://searchcio.techtarget.com/definition/B2B)), business-to-consumer ([B2C](https://searchcustomerexperience.techtarget.com/definition/B2C)), consumer-to-consumer or consumer-to-business. The terms e-commerce and e-business are often used interchangeably. The term e-tail is also sometimes used in reference to the [transactional processes](https://searchcio.techtarget.com/definition/transaction) that make up online retail shopping.

In the last decade, widespread use of e-commerce platforms such as Amazon and eBay has contributed to substantial growth in online retail. In 2007, e-commerce accounted for 5.1% of total retail sales; in 2019, e-commerce made up 16.0%.

How does e-commerce work?

E-commerce is powered by the internet, where customers can access an online store to browse through, and place orders for products or services via their own devices.

As the order is placed, the customer's web [browser](https://WhatIs.techtarget.com/definition/browser) will communicate back and forth with the [server](https://whatis.techtarget.com/definition/server) hosting the online store website. Data pertaining to the order will then be relayed to a central computer known as the [order manager](https://searcherp.techtarget.com/definition/order-management) -- then forwarded to databases that manage inventory levels, a merchant system that manages payment information (using applications such as [PayPal](https://whatis.techtarget.com/definition/PayPal)), and a bank computer -- before circling back to the order manager. This is to make sure that store inventory and customer funds are sufficient for the order to be processed. After the order is validated, the order manager will notify the store's web server, which will then display a message notifying the customer that their order has been successfully processed. The order manager will then send order data to the warehouse or fulfillment department, in order for the product or service to be successfully dispatched to the customer. At this point tangible and/or digital products may be shipped to a customer, or access to a service may be granted.

Platforms that host e-commerce transactions may include online marketplaces that sellers simply sign up for, such as Amazon.com; software as a service ([SaaS](https://searchcloudcomputing.techtarget.com/definition/Software-as-a-Service)) tools that allow customers to 'rent' online store infrastructures; or [open source](https://whatis.techtarget.com/definition/open-source) tools for companies to use in-house development to manage.

**Types of e-commerce**

**Business-to-business** (B2B) e-commerce [refers to the electronic exchange](https://searchcustomerexperience.techtarget.com/news/252491953/Salesforce-Revenue-Cloud-bolsters-B2B-e-commerce-workflows) of products, services or information between businesses rather than between businesses and consumers. Examples include online directories and product and supply exchange websites that allow businesses to search for products, services and information and to initiate transactions through e-procurement interfaces.

In 2017, Forrester Research predicted that the [B2B e-commerce](https://searchcustomerexperience.techtarget.com/news/252494063/Content-drives-new-B2B-e-commerce) market will top $1.1 trillion in the U.S. by 2021, accounting for 13% of all B2B sales in the nation.

**Business-to-consumer** (B2C) is the retail part of e-commerce on the internet. It is when businesses sell products, services or information directly to consumers. The term was popular during the [dot-com boom](https://searchcio.techtarget.com/definition/dot-com-bubble) of the late 1990s, when online retailers and sellers of goods were a novelty.

Today, there are innumerable virtual stores and malls on the internet selling all types of consumer goods. The most recognized example of these sites is Amazon, which dominates the B2C market.

**Consumer-to-consumer** (C2C) is a type of e-commerce in which consumers trade products, services and information with each other online. These transactions are generally conducted through a third party that provides an online platform on which the transactions are carried out.

Online auctions and classified advertisements are two examples of C2C platforms, with eBay and Craigslist being two of the most popular of these platforms. Because eBay is a business, this form of e-commerce could also be called C2B2C -- consumer-to-business-to-consumer.

**Consumer-to-business** (C2B) is a type of e-commerce in which consumers make their products and services available online for companies to bid on and purchase. This is the opposite of the traditional commerce model of B2C.

A popular example of a C2B platform is a market that sells royalty-free photographs, images, media and design elements, such as iStock. Another example would be a job board.

Business-to-administration (B2A) refers to transactions conducted online between companies and public administration or government bodies. Many branches of government are dependent on e-services or products in one way or another, especially when it comes to legal documents, registers, social security, fiscals and employment. Businesses can supply these electronically. B2A services have grown considerably in recent years as investments have been made in e-government capabilities.

**Consumer-to-administration** (C2A) refers to transactions conducted online between individual consumers and public administration or government bodies. The government rarely buys products or services from citizens, but individuals frequently use electronic means in the following areas:

* Education. Disseminating information, distance learning/online lectures, etc.
* Social security. Distributing information, making payments, etc.
* Taxes. filing tax returns, making payments, etc.
* Health. Making appointments, providing information about illnesses, making health services payments, etc.

**Mobile e-commerce** ([M-commerce](https://searchmobilecomputing.techtarget.com/definition/m-commerce)) is a type of e-commerce on the rise that features online sales transactions made using mobile devices, such as smartphones and tablets. M-commerce includes mobile shopping, mobile banking and mobile payments. Mobile [chatbots](https://searchcustomerexperience.techtarget.com/definition/chatbot) also provide e-commerce opportunities to businesses, allowing consumers to complete transactions with companies via voice or text conversations.

**Advantages and disadvantages of e-commerce**

Benefits of e-commerce include its around-the-clock availability, the speed of access, the wide availability of goods and services for the consumer, easy accessibility and international reach.

* Availability. Aside from outages or scheduled maintenance, e-commerce sites are available [24x7](https://whatis.techtarget.com/definition/24x7-24-hours-a-day-7-days-a-week), allowing visitors to browse and shop at any time. Brick-and-mortar businesses tend to open for a fixed number of hours and may even close entirely on certain days.
* Speed of access. While shoppers in a physical store can be slowed by crowds, e-commerce sites run quickly, which is determined by compute and [bandwidth](https://searchnetworking.techtarget.com/definition/bandwidth) considerations on both consumer device and e-commerce site. Product pages and [shopping cart](https://searchcio.techtarget.com/definition/shopping-cart) pages load in a few seconds or less. An e-commerce transaction can comprise a few clicks and take less than five minutes.
* Wide availability. Amazon's first slogan was "Earth's Biggest Bookstore." They could make this claim because they were an e-commerce site and not a physical store that had to stock each book on its shelves. E-commerce enables brands to make a wide array of products available, which are then shipped from a warehouse after a purchase is made. Customers will likely have more success finding what they want.
* Easy accessibility. Customers shopping a physical store may have a hard time determining which aisle a particular product is in. In e-commerce, visitors can browse product category pages and use the site search feature the find the product immediately.
* International reach. Brick-and-mortar businesses sell to customers who physically visit their stores. With e-commerce, businesses can sell to any customer who can access the web. E-commerce has the potential to extend a business' [customer base](https://whatis.techtarget.com/definition/customer-base)
* Lower cost. [Pure play](https://searchcio.techtarget.com/definition/pure-play) e-commerce businesses avoid the cost associated with physical stores, such as rent, inventory and cashiers, although they may incur shipping and warehouse costs.
* Personalization and product recommendations. E-commerce sites can track visitors' browse, search and purchase history. They can use this data to present useful and personalized product recommendations, and obtain valuable insights about target markets. Examples include the sections of Amazon product pages labeled "Frequently bought together" and "Customers who viewed this item also viewed."

The perceived disadvantages of e-commerce include sometimes limited [customer service](https://searchcustomerexperience.techtarget.com/definition/customer-service-and-support), consumers not being able to see or touch a product prior to purchase and the wait time for product shipping.

* Limited customer service. If a customer has a question or issue in a physical store, he or she can see a clerk, cashier or store manager for help. In an e-commerce store, customer service may be limited: The site may only provide support during certain hours of the day, or a call to a customer service phone number may keep the customer on hold.
* Not being able to touch or see. While images on a webpage can provide a good sense about a product, it's different from experiencing it "directly," such as playing music on speakers, assessing the picture quality of a television or trying on a shirt or dress. E-commerce can lead consumers to receive products that differ from their expectations, which leads to returns. In some scenarios, the customer bears the burden for the cost of shipping the returned item to the retailer.
* Wait time. If a customer sees an item that he or she likes in a store, the customer pays for it and then goes home with it. With e-commerce, there is a wait time for the product to be shipped to the customer's address. Although shipping windows are decreasing as next day delivery is now quite common, it's not instantaneous.
* Security. Skilled [hackers](https://searchsecurity.techtarget.com/definition/hacker) can create authentic-looking websites that claim to sell well-known products. Instead, the site sends customers forfeit or imitation versions of those products -- or, simply collects customers' credit card information. Legitimate e-commerce sites also carry risk, especially when customers store their credit card information with the retailer to make future purchases easier. If the retailer's site is hacked, hackers may come into the possession of customers' credit card information.

**E-commerce applications**

E-commerce is conducted using a variety of applications, such as [email](https://whatis.techtarget.com/definition/e-mail-electronic-mail-or-email), online catalogs and shopping carts, Electronic Data Interchange ([EDI](https://searchdatacenter.techtarget.com/definition/EDI)), the [File Transfer Protocol](https://searchnetworking.techtarget.com/definition/File-Transfer-Protocol-FTP), web services and mobile devices. This includes B2B activities and outreach, such as using email for unsolicited ads, usually viewed as spam, to consumers and other business prospects, as well as sending out e-newsletters to subscribers and [SMS](https://searchmobilecomputing.techtarget.com/definition/Short-Message-Service) texts to mobile devices. More companies now try to entice consumers directly online, using tools such as digital coupons, [social media marketing](https://whatis.techtarget.com/definition/social-media-marketing-SMM) and targeted advertisements.

The rise of e-commerce has forced IT personnel to move beyond infrastructure design and maintenance to consider numerous customer-facing aspects, such as consumer [data privacy](https://searchcio.techtarget.com/definition/data-privacy-information-privacy) and security. When developing IT systems and applications to accommodate e-commerce activities, [data governance](https://searchdatamanagement.techtarget.com/definition/data-governance)-related regulatory compliance mandates, personally identifiable information privacy rules and information protection protocols must be considered.

**E-commerce platforms and vendors**

An e-commerce platform is a tool that is used to manage an e-commerce business. E-commerce platform options exist for clients ranging in size from small businesses to large enterprises. These e-commerce platforms include online marketplaces such as Amazon and eBay, that simply require signing up for user accounts, and little to no IT implementation. Another e-commerce platform model is SaaS, where store owners can subscribe to "rent" space in a [cloud](https://searchcloudcomputing.techtarget.com/definition/cloud-computing)-hosted service that does not require in-house development or on-premises infrastructure. Other e-commerce platforms may come in the form of open source platforms that require a hosting environment (cloud or on premises), complete manual implementation and maintenance.

A few examples of e-commerce marketplace platforms include:

* Amazon
* eBay
* Walmart Marketplace
* Chewy
* Wayfair
* Newegg
* Alibaba
* Etsy
* Overstock
* Rakuten

Vendors offering e-commerce platform services for clients hosting their own online store sites include:

* Shopify
* WooCommerce
* Magento
* Squarespace
* BigCommerce
* Ecwid
* Salesforce Commerce Cloud (B2B and B2C options)
* Oracle Suite Commerce

**Differences between Electronic Commerce and Traditional Commerce**

The major difference is the way information is exchanged and processed:

**Traditional commerce:**

Traditional commerce includes face-to-face, telephone lines, or mail systems.

It includes manual processing of traditional business transactions

In traditional commerce individual involved in all stages of business transactions

**E-Commerce:**

It uses Internet or other network communication technologies.

E-commerce uses automated processing of business transactions.

It pulls together all activities of business transactions, marketing and advertising as well as service and customer support.

**Benefits of Internet Commerce**

E-commerce allows people to carry out businesses without the barriers of time or distance. One can log on to the Internet at any point of time, be it day or night and purchase or sell anything one desires at a single click of the mouse.

**Marketing benefits: -**

-Improved market analysis, product analysis and customer analysis.

- Low-cost advertising

- Easy to create and maintain customer or client database

**Customer benefits: -**

-Wide-scale information dissemination.

- Wide selection of good products and goods at the low price.

- Less time is spent in resolving invoice and order discrepancies.

- Wider access to assistance and to advice from experts and peers.

- Save shopping time and money.

- Fast services and delivery.

- Reduction in buyer’s sorting out time.

**Strategic Benefits:**

The strategic benefit of making a business ‘ecommerce enabled’, is that it helps in reduce the delivery time, Labour cost and the cost incurred in the following areas

- Document preparation

- Error detection and correction

- Reconciliation

- Mail preparation

- Telephone calling

- Credit card machines

- Data entry

- Overtime

- Supervision expenses

**The impact of E-commerce on business**

The internet has changed many aspects of our lives, including the way we communicate with each other, how we keep our finances. It has made a profound impact on society. Now we shop online from our houses. This forces retailers to open online division. It can also force smaller businesses to shut their doors, or change to being completely online. It also has changed people way of spending money. Undoubtedly, it will continue to influence how companies sell and market their products, as well as how people choose to make purchases for many years to come. The following are the impact of e-commerce on the global economy.

**Impact on direct marketing**

Product promotion:-E-commerce enhances promotion of products and services through direct, attractive and interactive contact with customers.

New sales channel:-E-commerce creates a new distribution channel for existing products. It facilitates direct reach of customers and the bi-directional nature of communication.

Direct savings:-The cost of delivering information to customers over the Internet results in substantial savings to senders when compared with non-electronic delivery. Major savings are also realized in delivering digitized products versus physical delivery.

Reduced cycle time: - The delivery of digitized products and services can be reduced to seconds. Also, the administrative work related to physical delivery, especially across international borders, can be reduced significantly, cutting the cycle time by more than 90 percent.

Customer service:-Customer service can be greatly enhanced by enabling customers to find detailed information online. Also, intelligent agents can answer standard e-mail questions in seconds and human experts' services can be expedited using help-desk software.

Corporate image: - On the Web, newcomers can establish corporate images very quickly. Corporate image means trust, which is necessary for direct sales. Traditional companies such as Intel, Disney, Dell, and Cisco use their Web activities to affirm their corporate identity and brand image.

**Impacts on organizations :-**

Technology and Organizational Learning:- Rapid progress in E-Commerce will force companies to adapt quickly to the new technology and offer them an opportunity to experiment with new products, services, and processes. New technologies require new organizational approaches. For instance, the structure of the organizational unit dealing with E-Commerce might have to be different from the conventional sales and marketing departments. To be more flexible and responsive to the market, new processes must be put in place. This type of corporate change must be planned and managed.

Changing Nature of Work:- The nature of work and employment will be transformed in the Digital Age; it is already happening before our eyes. Driven by increased competition in the global marketplace, firms are reducing the number of employees down to a core of essential staff and outsourcing whatever work they can to countries where wages are significantly less expensive. The upheaval brought on by these changes is creating new opportunities and new risks and forcing us into new ways of thinking about jobs, careers, and salaries. The Digital Age workers will have to become very flexible. Few of them will have truly secure jobs in the traditional sense, and all of them will have to be willing and able to constantly learn, adapt, make decisions, and stand by them.

New product capabilities: - E-commerce allows for new products to be created and existing products to be customized in innovative ways . Such changes may redefine organizations' missions and the manner in which they operate. E-Commerce also allows suppliers to gather personalized data on customers. Building customer profiles as well as collecting data on certain groups of customers, can be used as a source of information for improving products designing new ones. Mass customization, as described earlier, enables manufacturers to create specific products for each customer, based on his or her exact needs. For example, Motorola gathers customer needs for a pager or a cellular phone, transmits them electronically to the manufacturing plant where they are manufactured, along with the customer's specifications and then sends the product to the customer within a day.

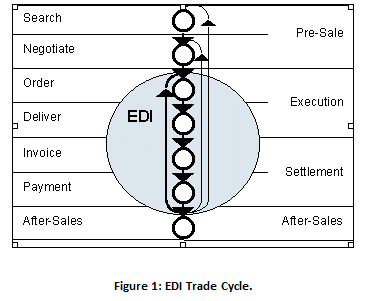
**Impacts on Manufacturing**

E-Commerce is changing manufacturing systems from mass production to demand-driven and possibly customized, just-in-time manufacturing. Furthermore, the production systems are integrated with finance, marketing, and other functional systems, as well as with business partners and customers. Using Web-based ERP systems, orders that are taken from customers can be directed to designers and to the production floor, within seconds. Production cycle time is cut by 50 percent or more in many cases, especially when production is done in a different country from where the designers and engineers are located. Companies like IBM, General Motors, are assembling products for which the components are manufactured in many locations. Sub-assemblers gather materials and parts from their vendors, and they may use one or more tiers of manufacturers. Communication, collaboration, and coordination become critical in such multitier systems. Using electronic bidding, assemblers get sub-assemblies 15 percent to 20 percent cheaper than before and 80 percent faster.

**Impacts on Finance**

E-commerce requires special finance and accounting systems. Traditional payment systems are ineffective or inefficient for electronic trade. The use of the new payment systems such as electronic cash is complicated because it involves legal issues and agreements on international standards. Nevertheless, electronic cash is certain to come soon and it will change the manner in which payments are being made. In many ways, electronic cash, which can be backed by currency or other assets, represents the biggest revolution in currency since gold replaced cowry shells. Its diversity and pluralism is perfectly suited to the Internet. It could change consumers' financial lives and shake the foundations of financial systems and even governments.

**Electronic Commerce and the Trade Cycle.**



**E-Commerce Trade Cycle**

E-Commerce can be applied to all, or different phases of the trade cycle.The trade cycle varies depending on:-

Ø The nature of the organization (or individuals) involved.

Ø The nature and type of goods or services being exchanged.

Ø The frequency of trade between the partners to the exchange process.

The trade cycle has to support:-

* Finding goods or services appropriate to the requirement and agreeing the terms of trade often referred to as search and negotiation.
* Placing the order, taking delivery and making payment i.e., execution & settlement of transaction.
* After sales activity such as warrantee, service etc. There are numerous categories of trade cycles depending on the factors outlined above and, for many transactions, further complicated by the complexities of international trade.

Three generic trade cycles can be identified:-

1. Regular, repeat transactions between commercial trading partners (Repeat Trade Cycle).

2. Irregular Transactions between commercial trading partners where execution and settlement are separated (Credit Transactions)

3. Irregular transactions in once-off trading relationships where execution and settlement are typically combined (Cash Transactions)

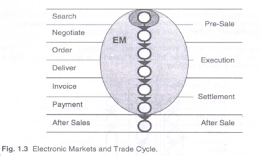
**Electronic Markets:-**

v It increases the efficiency of the market.

v It reduces the search cost for the buyer and makes it more likely that buyer will continue the search until the best buy is found.

v It exists in financial markets & they are also used in airline booking system.

v It is irregular transaction trade.



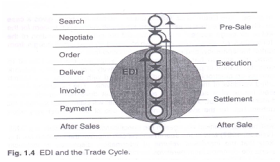
**Electronic Data Interchange:-**

\* It is used for regular repeat transactions.

\* It takes quite a lot of work to set up systems.

\* Mature use of EDI allows for a change in the nature of the product or service.

e.g. Applications are sending test results from the pathology laboratory to the hospital or dispatching exam results from exam boards to school.



**Internet Commerce:-**

The first stage

• Advertising appropriate goods and services.

• Internet sites offer only information & any further steps down the trade cycle are conducted on the telephone.

The Second stage

• An increasing no. of sites offer facilities to execute & settle the transaction.

• Delivery may be electronic or by home delivery depending on the goods and services.

The final stage

• After-sales service.

• On-line support & On-Line services.

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