

**E-commerce:**

Electronic Commerce is exactly analogous to a marketplace on the Internet. Electronic Commerce (also referred to as EC, e-commerce, eCommerce or ecommerce) consists primarily of the distributing, buying, selling, marketing and servicing of products or services over electronic systems such as the Internet and other computer networks. The information technology industry might see it as an electronic business application aimed at commercial transactions; in this context, it can involve electronic funds transfer, supply chain management, e-marketing, online marketing, online transaction processing, electronic data interchange (EDI), automated inventory management systems, and automated data collection systems. Electronic commerce typically uses electronic communications technology of the World Wide Web, at some point in the transaction's lifecycle, although of course electronic commerce frequently depends on computer technologies other than the World Wide Web, such as databases, and e-mail, and on other non-computer technologies, such as transportation for physical goods sold via e-commerce.

**Perspectives :--**

- ➔ **Communication** :-- From a communication perspective, EC is the delivery of goods, services, information or payments over computer networks or by any other electronic means.
- ➔ **Commercial(Trading)** :-- From a commercial perspective, EC provides the capability of buying and selling products, services and information on the internet and via other online services.
- ➔ **Business Process Perspective** :-- In a business process perspective, EC is doing business electronically by completing business process over electronic networks, there by substituting information for physical business processes.
- ➔ **Service Perspective**:-- In a service perspective, Ec is a tool that addresses the desire of governments, firms, consumers and management to cut service cost while improving the quality of customer service and increasing the speed of service delivery.

- **Classification of EC by nature of transaction:**

**(1) B2B:**

**Business-to-business electronic commerce (B2B)** typically takes the form of automated processes between trading partners and is performed in much higher volumes than business-to-consumer (B2C) applications. For example, a company that makes chicken feed would sell it to a chicken farm, another company, rather than directly to consumers. An example of a B2C transaction would be a consumer buying grain-fed chickens at a grocery store. B2B can also encompass marketing activities between businesses, and not just the final transactions that result from marketing. B2B also is used to identify sales transactions between businesses. For example a company selling photocopiers would likely be a B2B sales organization as opposed to a B2C (business to consumer) sales organization

**(2) B2C:**

**Business-to-consumer electronic commerce (B2C)** is a form of electronic commerce in which products or services are sold from a firm or company to a consumer..

***Advantages of B2C e-commerce***

B2C e-commerce has the following advantages:

- Shopping can be faster and more convenient.
- Offerings and prices can change instantaneously.
- Call centers can be integrated with the website.
- Broadband telecommunications will enhance the buying experience.

**(3) C2C:**

**Consumer-to-consumer (or C2C) electronic commerce** involves the electronically-facilitated transactions between consumers through some third party. A common example is the online auction, in which a consumer posts an item for sale and other consumers bid to purchase it; the third party generally charges a flat fee or commission. The sites are only intermediaries, just there to match consumers, they have do not check quality of product being offered.

**Advantages of C2C**

- Broader market
- Eliminates intermediary
- Constantly changing, updating
- Always there so that consumers can use it whenever they want

**Disadvantages of C2C**

- No quality control
- No payment guarantee
- Hard to pay for using cheques, ATM cards, etc. but in the future this is likely to change.

**(4) C2B:**

**C2B (consumer to business)** is a business model in which consumers (individuals) offer products and services to companies and the companies pay them. This business model is a complete reversal of traditional business model where companies offer goods and services to consumers.

This kind of economic relationship is qualified as an inverted business model. The advent of the C2B scheme is due to major changes:

- Connecting a large group of people to a bidirectional network has made this sort of commercial relationship possible. The large traditional media outlets are one direction relationship whereas the internet is bidirectional one.
- Decreased cost of technology : Individuals now have access to technologies that were once only available to large companies ( digital printing and acquisition technology, high performance computer, powerful software)

**(5) Intra Business E-Commerce:**

The intra business E-Commerce category includes all internal organizational activities that involve the exchange of goods, services or information among various units and individuals in that organization. Intra business E-commerce is usually performed on intranets or corporate portals.

**(6) Non Business E-commerce :** An increased number of non business institutions such as academic institutions, not-for-profit organizations, religious organizations, social organizations and government agencies are using EC to reduce their expenses or to improve their general operations and customer services.

**→ Benefits to Consumers :--**

- (1) **More products and services** :-- EC provides consumers with more choices, they can select from many vendors and from more products.
- (2) **Cheaper products and services** :-- EC frequently provides consumers with less expensive products and services by allowing them to shop in many places and conduct quick comparisons.
- (3) **Instant Delivery** :-- in the cases of digitized products, EC allows for quick delivery.
- (4) **Information Availability** :-- Consumers can locate relevant and detailed product information in seconds rather than days or weeks. Also multimedia support is cheaper and better.
- (5) **Participations in auctions** :-- EC makes it possible for consumers to participate in virtual auctions. These allows sellers to sell things quickly and buyers to locate collectors items and bargains.
- (6) **Electronic communities** :-- EC allows customers to interact with other customers in electronic communities and exchange ideas as well as compare experiences.

**→ No sales tax** :-- in many countries online business is exempt from sales tax.

**Benefits to society:--**

- (1) **Telecommuting** :-- more individual work at home and do less traveling for work or shopping, resulting in less traffic on the roads and reduced air pollution.
- (2) **Higher Standard of Living** :-- some merchandise can be sold at lower prices, allowing less affluent people to buy more and increase their standard of living.
- (3) **Hope for the poor** :-- people in third world countries and rural areas are now able to enjoy products and services that were unavailable in the past. These include opportunities to learn skilled professions or earn a college degree.
- (4) **Availability of public services** :-- public services such as health care, education and distribution of government social services can be done at a reduced cost and improved quality. For Ex. EC provides rural doctors and nurses access to information and technologies with which they can better treat their patients.

→ Benefits to Organizations :--

- (1) **Global Reach** :-- EC expands the marketplace to national and international markets. With minimum capital outlay, a company can easily and quickly locate the best suppliers, and the most suitable business partners worldwide.
- (2) **Cost Reduction** :-- EC decreases the cost of crating, processing, distributing, storing and retrieving paper based information. High printing and mailing costs are lowered or eliminated.
- (3) **Supply chain Improvements**:-- supply chain inefficiencies such as excessive inventories and delivery delays can be minimized with EC. For ex. By building autos to order instead of for dealers showrooms, the automotive industry is expecting to save tens of billions of dollars annually just from inventory reduction.
- (4) **Extended Hours**:-- The business is always open on the web, with no over time or other extra costs.
- (5) **Customization**:-- pull type production(build to order) allows for inexpensive customization of products and services and provides a competitive advantage for companies who implement this strategy.
- (6) **New business models**:-- EC allows for many innovative business models that provide strategic advantages and/or increase profits.
- (7) **Rapid time to market** :-- EC reduces the time between the inception of an idea and its commercialization.
- (8) **Lower communication costs**:-- EC lowers telecommunication costs- the internet is much cheaper than VAN.
- (9) **Efficient Procurement** :-- EC enables efficient e-procurement that can reduce administrative cost by 80 percent or more, reducing purchasing prices by 5 to 15 percent, and reducing cycle time by more than 50 percent.
- (10) **Improved Customer Relations**:-- EC enables companies to interact more closely with customers, even if through intermediaries. This allows personalization of communication , products, and services which promotes better customer relationship management and increased customer loyalty.
- (11) **Up to Date Company Material** :-- any material on the web, such as prices in catalog can be correct up to the minute. All company information can always be current.

- (12) **No city business permits and fees** :-- online companies do not need any licenses to operate nor do they pay license fees.
- (13) **Other benefits** :-- other benefits include improved corporate image, improved customer service, new business partners, simplified processes, increased productivity, reduced paper work, increased access to information, reduced transportation costs and increased trading flexibility.

❖ **Limitations of E-Commerce** :--

➔ **Technological limitations** :--

- (1) There is a lack of universally accepted standards for quality, security, and reliability.
- (2) Software development tools are still evolving.
- (3) The telecommunication bandwidth is insufficient, especially for m-commerce.
- (4) There are difficulties in integrating the internet and EC software with some existing applications and databases.
- (5) Special web servers are needed in addition to the network servers.
- (6) Internet accessibility is still expensive and inconvenient.
- (7) Order fulfillment of large scale B2C requires special automated warehouses.

-> **Non Technological Limitations** :--

- (1) Lack of trust in EC and in unknown sellers hinders buying.
- (2) Many legal and public policy issues, including taxation, are as yet unresolved.
- (3) National and International government regulations sometimes get in the way.
- (4) it is difficult to measure some benefits of EC such as advertising. There is a lack of mature measurement methodology.
- (5) People do not yet sufficient trust paperless, faceless transactions.
- (6) In most cases there is an insufficient number of sellers and buyers which are needed for profitable EC operations.

- (7) There is an increasing amount of fraud on the internet.
- (8) It is difficult to obtain venture capital due to the dot-com disaster.

- **Future of E-Commerce** :--

The future of E-commerce is based on the following trends and observation:

**(1) Internet Usage** :-- The number of internet users increasing exponentially. With the integration of computers and television, cheaper PCs, increased availability of access kiosks, and increased Publicity, there will be more and more Net surfers, as young people grow, the usage will grow even further. By 1999 the number of world wide internet users was estimated to be over 250 million and the number of e-mail addresses over 400 million since many people have multiple addresses.

**(1) Opportunities for Buying** :-- The number of products and services available on the Net is increasing rapidly with improved trading mechanisms, intermediary services, presentation in multiple languages and sellers willingness to give it a try, it is logical to expect significantly more purchasing opportunities. Several web sites are reporting 15 percent to 25 percent monthly increase in sales.

**(2) Purchasing Incentives** :--The buyers advantages are likely to increase. Prices will go down further, and the purchasing process will be streamlined. Many innovative opportunities will be available, and electronic shopping may even be social trend.

**(3) Increased Security and Trust** :-- one of the major inhibitors of B2C growth is the perception about poor security and privacy, and lack of trust. As time passes we expect significant improvements in all these areas.

**(4) Efficient Information handling** :-- Much information will become accessible from any where in real time. Using warehouses and intelligent agents, companies can constantly learn about their customers, steering marketing and service activities accordingly. The notion of real time marketing might not be so far away. This will facilitate the use of EC.

**(5) Innovative Organizations** :-- Organizations are being restructured and reengineered with the help of IT. Using different types of empowered teams, some of which are virtual, organizations become innovative, flexible and responsive. The trend for process reengineering is increasing and so is the organizational creativity. Innovative organizations will probably be more inclined to use EC.

**(6) Virtual Communities** :-- Virtual Communities all kinds are spreading rapidly with some already reaching several million members. As seen in the opening case, virtual communities can enhance commercial activities online. Also some communities are organized around professional areas of interest and can facilitate B2B commerce.

- (7) **Payment Systems:**-- The ability to use E-cash cards and make micro payments is getting close to reality, when implemented on a large scale, many EC activities will flourish. As international standards become the norm, electronic payment will extend globally, facilitating global EC.
- (8) **Business to Business:**-- in some cases industry type extranets are almost forcing everyone to participate. Business to business will continue dominate the EC field for the intermediate future. There will be more sellers, more buyers, more services. The rapid growth will continue. The success of B2B will depend upon the success of integrating EC technology with business processes and with conventional information systems.