

# **SARDAR PATEL COLLEGE OF ADMINISTRATION & MANAGEMENT**



## **BCA – III**

### **US03SBCA23 (E- commerce)**

#### **UNIT – 1**

##### **❖ Introduction To E-Commerce**

- Definition, communication perspective, business process perspective, service perspective
- Classification by nature of transaction : B2B, B2C, C2C, C2B, Non business EC, Intra-business EC
- Classification of EC Applications: electronic market, inter organizational system, customer services
- Benefits to organizations, consumers, and society
- Limitations of EC, framework of EC, future of EC

## ➤ **Introduction to E – commerce**

**Electronic commerce:** - commerce is a process of buying, selling, transferring, or exchanging products, services, and information over electronic systems such as the Internet and other computer networks and also intranet.

**OR**

**Ecommerce** means the use of internet and web to transact business digitally. it enabled commercial transaction between and among the organization.

### **Perspectives of Electronic commerce**

- Communicative Perspectives:
- Business Perspectives:
- Service Perspectives:
- Online Perspectives:

#### **Communicative Perspectives:**

EC is the delivering of information, product, service or payment over telephone lines, computer networks or any other electronic means .from communication perspective, EC is the delivery of goods, services, information, or payment over computer networks or by any other electronic means.

#### **Business Perspective**

EC is the application of technology towards the automation of business transaction and workflow. From the business process perspectives, EC is doing business electronically by completing business processes over electronic network. Thereby, substituting information for physical business process.

#### **Service Perspective**

From the 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

consumer services and increasing the speed of service delivery.

### **Online Perspective**

EC provide the capability of buying and selling products and information on the internet and online services.

## **Classification by nature of transaction:**

### **B2B (Business-to-Business):**

This is the most common type of e-commerce today. It includes electronic market transactions between organizations i.e. it include IOS transaction.

E.g. the supplier sold food and other good to the Beijing Olympics. Dell sells its product to companies. All the participation in B2B ecommerce is business organization. Today's over 85% of EC volume is B2b.

### **B2C (Business-to-Consumer):**

These are retailing transactions of product and services from business to individual shopper. The typical shopper at Wal-Mart online or Amazon.com is customer or consumer.

### **C2B (Consumer-to-Business) :**

This category includes individuals who sell products or services to organizations, as well as individuals who seek sellers, interact with them, and conclude a transaction.

This category includes individuals who use the internet to sell product or services to organization. Priceline.com is well-known organizers of C2B.

### **C2C (Consumer-to-Consumer) :**

In this category, consumers sell directly to Consumers. Examples are individuals selling residential property, cars, and so on. .advertising of personal services over the internet and selling of knowledge and expertise online are example of C2C.many auction site s allow individuals to place items up for auction.

### **Intra-business (organizational) e-commerce:**

In this category fall all internal organizational activities, usually performed on Intranets and company portals. The actives involve exchange of goods, services, or information among various unit and individuals in t h a t organization. Activities can range from selling corporate product to own employees, to online training.

**Non-business E-commerce:**

This includes non business institutions such as academic Institutions, not-for profit organizations, religious organizations, and government agencies using various types of e-commerce to reduce their expenses or to improve their operations and customer service.

**Classification of EC Applications:****1) Electronic market-:**

An **electronic market** is an information system that allows the Participating buyers and sellers to exchange information about prices and product offerings and supports at least one of the three market transaction phases (information gathering, trading, and settlement).

A market is network of interaction and relationships where information, product services and payments are exchanged. When the market is electronic, the business center is not physical building but rather the network based location where the business interaction occurs. The e\_market is place where shopper and seller meet. The market handles all necessary transaction including the transfer of money between banks.

In electronic market the principle participants, transaction handlers, buyers, brokers, sellers are not only at different location but seldom even know one another. The mean of interaction varies among the parties and can change from event to events.

**2) Inter organizational system-:**

An IOS unified system central business partners. A typical IOS will include company and its suppliers and/or customers. Through IOS, buyers and sellers arrange routine business transactions. Information exchanged over communication networks using prearrange formats. So there is no need for telephone calls, paper documents, or business correspondence. In the past the IOS were delivered on proprietary communication skills.

**➤ Types of inter-organization system-:**

- Electronic data interchange (EDI which provide secured B2B transaction over VAN (value added network))
  - Extranet which provide secured B2B transaction over the internet.
  - Electronic fund transfer.
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- Electronic forms.

- Integrated messages -: Delivery of e-mail and fax document through a single electronic transmission system that can combine EDI, e\_mail and electronic forms
- Shared Databases-: Information stored in the database is shared between trading partners and is accessible to all. Such databases are used to reduce time in communication information between parties as well as arranging cooperative activities. Then sharing is mainly done over extranet.
- Supply Chain management-: cooperation between a company and its supplier and / or customers regarding demand, forecasting, inventory management, and order fulfillment can be reduce inventories, speed shipments and enable just \_in \_time manufacturing.

### **VAN- :**

It is an establishment of data communication network that owns or takes on lease communication facilities such as microwave antennas and communication satellites. The owner of VAN rent their network simultaneously too many subscribes who link their own equipment to give facilities. Using VAN save the organization time and cost of designing and maintaining their own networks. The document can kept preserve in an “Electronic mail box” & are deliver whenever the recipient becomes ready to accept the document.

Some example of VAN service provider is AT&T, British Telecom (BT), Sprint, infornet etc.

The disadvantage of VAN is that they are slow & high priced.

### **3) Customer Services:**

The customer oriented E-com application may be classified into following:

#### **i) Personal Finance & Home banking:**

Personal finance services include services such as direct deposit of payroll, on line bill payment.

Home banking service includes account statement reporting, automated teller machines (ATM0, fund transfer, status of payment or stop payment requests, tax return preparation, currency trading debit or credit card management.

#### **ii) Home Shopping:**

It is already in wide use and has generated substantial revenues for many

companies running e-malls or e-stores. These stores / mall enable computer to enter on line stores, look at products, try computerized clothes and purchase with

overnight delivery against credit card billing. The electronic catalog or brochures are multimedia replacement of the paper based catalogs. They consist of images, graphics, animation, sound, text data and motion picture video.

**iii) Home entertainment:**

It may include movies on demand, interactive games, multiplayer games, cartoons etc. It also provide TV guide that inform the user about program schedules.

**iv) Education and training:** Online interactive lectures and distance learning are becoming very popular on Internet. These are useful especially to corporate who want their employees to learn and adopt the new technology.

**➤ Information:**

To serve the information needs of consumers, services providers have created a new industry that aims at selling any kind of digital information may be on market trends, historical data, information about future planning and many other areas. To gather and provide such a large amount of information, the service providers are used data warehouse and data mining tools.

It also provides facility of data bases, directories.

**➤ Benefit of EC to Organization:-**

- 1) EC extends the market place to the national and international market with minimum capital outlay, a company can easily and quickly located more customers, the best suppliers and business partner.
- 2) EC decrease the cost of creating, processing, distributing, storing and retrieving paper based information.
- 3) Ability for creating highly specialized business.
- 4) EC reduced the time between the outlay of capital and the receipt product and services.
- 5) EC initiates business procedure reengineering project. By changing the process, productivity of salespeople, knowledge worker, and administrator can increase by 100 % more.
- 6) EC may reduce the telecommunication cost the internet is much cheaper then VAN.
- 7) It solved the complex problems.
- 8) It improved the functionality if supply chain management.
- 9) It provides up to date company material.
- 10) Businesses always open 24/7/365; and also there is no overtime cost.
- 11) EC improve customer services and relationship, it provide better CRM.
- 12) EC may need fewer permit & be able to avoid sale tax.

- 13) Other benefits are found new business partner , simplify process,
- 14) Compress business cycle and delivery time, increase productivity, eliminating paper base document, reduce transportation cost.

➤ **Benefit of EC to Consumer-:**

- 1) EC enable customers to shop or do other transaction 24 hours a day, all year round, from almost any location.
- 2) EC provide customer with more choices, they can select from many vendors and from almost products.
- 3) Customers can receive relevant and detail information in seconds, rather than weeks.
- 4) EC allow customers to interact with other customers in electronic community and exchange ideas as well as compare experiences.
- 5) EC provide instant delivery of product. Digitalized product can be downloaded easily upon payment.
- 6) It enables telecommunicating means one can work or study at home.
- 7) Easy finding what you need, with details, & also find unique items.
- 8) EC facilities competition, which result in substantial discount.

➤ **Benefit of EC to Society-:**

- EC enable more individuals work at home and to do less traveling for shopping, resume in less traffic on the roads and lower air & noise pollution.
- EC allows people in their word countries and rural areas to enjoy the products and services. That otherwise is not available to them. This includes the opportunities to learn professions and earn college degree.
- EC facilitate the delivery of public services such as health care education, and distribution of government social services.
- Improve the home land security, facilitate domestic security,.
- Increase the standard of living. One can by more cheaper and good services.
- Allow people involving countries and rural areas to accept more services and purchase what they really like. And hence the rural people connect to digital word.

**Limitations of Electronic commerce**

• **Technological Limitations**

- 1) Lack of universal standards for quality, security, and reliability.
- 2) The telecommunications bandwidth is insufficient, especially for m-commerce (electronic commerce via mobile phones),. videos, graphics.



- 3) Difficulty in integrating e-commerce infrastructure with current organizational IT systems - Many companies use IT systems, which are old (i.e. legacy systems).
  - 4) The vendors may need special web servers and other infrastructures in addition to network servers.
  - 5) Internet accessibility is still expensive and inconvenient.
  - 6) Some EC software might not fit with some hardware or may be inconvenient with some operating system.
  - 7) Order fulfillment of the large scale B2C required special automated warehouse.
- **Non-Technological Limitations**
    - 1) Security and privacy concerns deter customers from buying.
    - 2) Lack of trust in EC and in unknown sellers hinders buying.
    - 3) Many legal and public policy issues, including taxation, have not yet been resolved.
    - 4) Online fraud is increasing.

Some customers like to feel and touch products. Also, customers are resistant to the change from shopping at a brick-and-mortar store to a Virtual store.

In 1996, Forrester Research (forrester.com), a major EC-industry analyst, predicted that B2C

- 5) Electronic commerce could results in the breakdown of human relationships.
- 6) People do not yet sufficient trust paperless, faceless transaction.
- 7) National and international government regulations sometime get in the way.
- 8) It is difficult to obtain venture capital due to the failure of many do coms.

## **THE FUTURE OF EC**

In 1996, Forrester Research (forrester.com), a major EC-industry analyst, predicted would be a \$6.6 billion business by 2000, up from \$518 million in 1996 (Tewksbury 1998). In that B2C 1998, B2C sales in the United States were already about \$43 billion, or 1 percent of total retail sales (Greenberg 2004). Today's predictions about the future size of EC, provided by respected analysts such as AMR Research, Jupiter

Media, Emarketer.com, and Forrester, vary. For example, 2006 global online shopping and B2B transactions are estimated to be about \$7 trillion (Tian and Stewart 2006). According to Jupiter Media (2006), online retail spending will increase from \$81 billion in 2005 to \$95 billion in 2006, growing to \$144 billion in 2010. By 2010,



71 percent of online users will use the Internet to shop, compared to 65 percent in 2005, and the Internet will influence nearly half of total retail sales, compared to just 27 percent in 2005. According to Forrester Research (2006), online sales reached \$176 billion in 2005 and were expected to grow to \$211 billion in 2006.

Excluding travel, online sales account for nearly 5 percent of the U.S. retail market (vs. less than 2 percent in 2000). The number of Internet users worldwide was estimated at 700 million in mid-2006 (Mann 2006). Experts predict that as many as 50 percent of all Internet users will shop online by that time. EC growth will come not only from B2C but also from B2B and from newer applications such as e-government, e-learning, B2E, and c-commerce. Overall, the growth of the field will continue to be strong into the foreseeable future. Despite the failures of individual companies and initiatives, the total volume of EC is growing by 15 to 25 percent every year; as Lashinsky (2006) and Savitz (2005) said: “The Boom is Back.”

Abramson (2005) thinks that the next phase of the new economy will be shaped by public policy decisions to create the necessary technology infrastructure and by entrepreneurs responding to that environment. The key variable is intellectual property rights.

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