

Unit 2: Business Models of E-Commerce

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Objectives

After studying this unit, you will be able to:

- Discuss Intra-B commerce
- Describe business-to-business e-commerce
- Describe business-to-consumer e-commerce
- Describe consumer-to-consumer e-commerce

Introduction

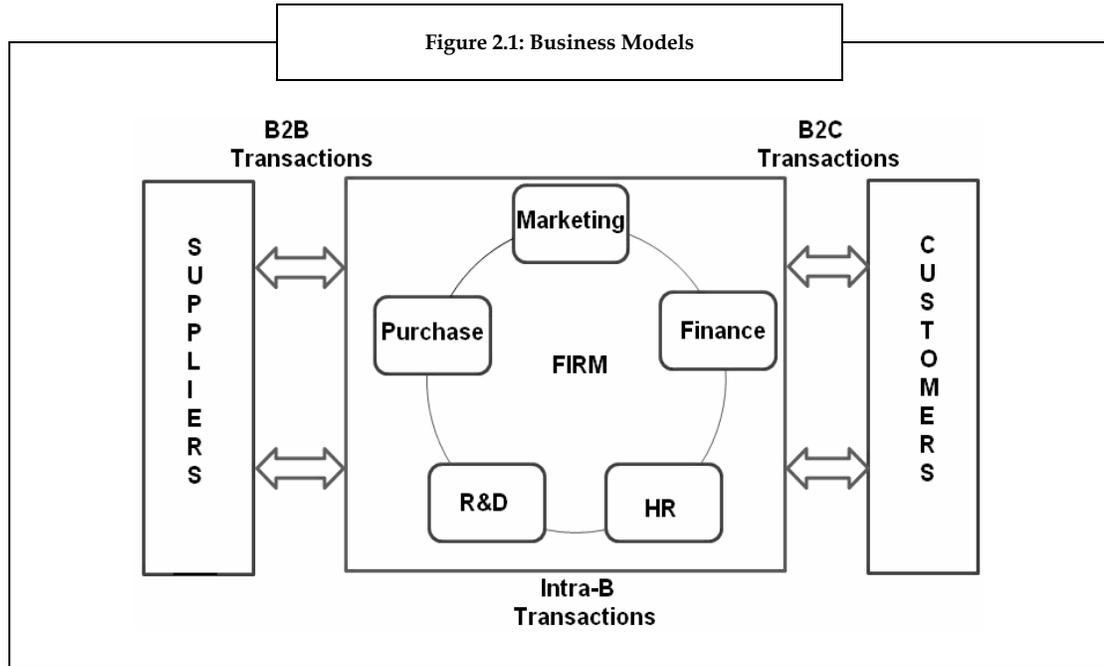
The scope of e-commerce is vast and includes all processes that a business organization conducts over a computer network. The Internet based businesses or the dot-com revolution grew rapidly and comprehensively, almost minimizing the growth and progress of other sectors. Organizations doing business through the Internet have emerged with their own ideas to succeed in the business.



Example: Companies such as, Hotmail and Netscape have made business by offering free products and services. The ideas used by such organizations have helped in building new business models for Internet based business.

The different types of e-commerce business models are Intra-B commerce, Business-to-Business e-commerce (B2B), Business-to-Consumer e-commerce (B2C), and Consumer-to-Consumer (C2C) e-commerce. An Intra-B transaction happens among different departments in a firm, B2B transactions

happens between two businesses and B2C model serves the end consumer. Figure 2.1 shows the functioning of various business models.



2.1 Intra-B Commerce

Intra-B commerce involves interaction and transactions among various departments and individuals within a firm. Use of computer networks has enabled the firms to establish an interaction between marketing department and production department and to produce the customized products as per the requirements of an individual customer. Intra-B commerce permits better coordination, helps in faster decisions and workflows. Typically, they are built by securing the network from the global Internet through a firewall that limits access to internal or authorized members only.

2.1.1 Importance of Intra-B Commerce

Large corporations consist of independent business units that sell or buy materials, products, and services from each other. These transactions can easily be accomplished over the intranet. Using the advertisements that organizations have on the intranet, employees can buy or sell products and services from each other.

The following are the advantages of Intra-B commerce:

1. Efficient use of inventory and cash management
2. Greater utilization of plant and machinery
3. Effective handling of human resources
4. Effective handling of customers



Example: Employees can use electronic catalogs, order forms, and access inventory information for better interaction with the customers.

2.2 Business-to-Business (B2B) E-Commerce

Business-to-Business (B2B) refers to the transactions between businesses such as, two firms or between a manufacturer and a wholesaler. B2B e-commerce accounts for more than 94% of all e-commerce transactions conducted over networks. It is restricted to business partners and uses secure procedures based on firewall, encryption, and authorization level with payment by predetermined credit terms.

2.2.1 B2B Market Places

Internet based B2B e-commerce is done by large companies through industry sponsored marketplaces and private exchanges. In some cases, organizations sell their products to business consumers through their own Web sites.

According to a survey conducted on 25 Industry Sponsored Marketplaces (ISMs) that was published in the industry, ISMs had only a small percentage of business-to-business transactions. A reason for this is, they had problems in convincing buyers and sellers to use the marketplace. As companies did not prefer customized designs through marketplaces, they made use of such marketplaces to buy products and to manage the supply chains only.

The B2B market has two primary components. They are e-infrastructure and e-markets. E-infrastructure is the architecture of B2B and primarily consists of the following:

1. Logistics such as, transportation, storage, and distribution.



Example: Procter and Gamble provide Logistics as part of their infrastructure management.

2. Application service providers who help in deployment, hosting, and management of packaged software from a central facility.



Example: Oracle and Linkshare organizations provide main application service.

3. Outsourcing of functions in the process of e-commerce such as, Web hosting, security, and customer care solutions.



Example: EShare, NetSales, iXL Enterprises, and Universal Access are some of the organizations that provide outsourcing services.

4. Auction solutions software for the operation and maintenance of real time auctions in the Internet.



Example: Organizations such as, Moai Technologies and OpenSite Technologies provide auction solutions software.

5. Content management software for the facilitation of Web site content management and delivery.



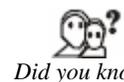
Example: Interwoven and ProcureNet are some of the organizations that provide content management software.

6. Web-based commerce enablers, which provide solution framework and manage dynamic services.



Example: Commerce One is browser-based, XML-enabled purchasing automation software.

E-markets are Web sites where buyers and sellers interact with each other and conduct transactions. The more common B2B examples and best practice models are IBM, Hewlett Packard (HP), Cisco, and Dell.



Did you know?

Cisco receives over 90% of its product orders over the Internet.

2.2.2 B2B Exchanges

B2B exchange is an online platform where buyers and sellers communicate, collaborate, and make business transactions. Unlike B2B marketplace, B2B exchange is used by the people at large. The main intention of a B2B exchange is to create a site, filled with features that allow members to efficiently conduct business processes through the Internet.

Features and Benefits of B2B Exchanges

B2B exchange is increasingly becoming one of the fastest growing marketing methods that are used by companies looking to increase their client base beyond their local markets. Any good B2B exchange offers direct contact with thousands of potential buyers in a single location.

B2B exchanges help companies in buying, selling, and streamlining their business processes. The following are the benefits of participating in a B2B exchange:

1. **Efficient Inventory Management:** Integration of products and services with the electronic catalog of the exchange will help in effective management of inventory.
2. **Better Customer Relationship Management:** Ability to have constant interaction through the exchange allows companies to serve their customers better. The whole ordering process from payment to delivery can be tracked which helps in building a greater efficiency in customer service.
3. **New Sales Channel:** By becoming a member of an exchange, a low cost, highly functional, and easy-to-use sales channel can be opened for the company. The sales channel will expose the company to new audience.
4. **Reduced Paper Works:** Automated supply chain management reduces paper work drastically.
5. **Eliminating Unauthorized Spending:** Consolidated and automated procurement and approval method prevents unauthorized purchasing in a company.



Find out different companies that provide B2B exchanges. Also, determine the features that need to be incorporated to conduct business transactions effectively.

2.2.3 Benefits and Barriers of B2B E-Commerce

The following are the benefits of B2B:

1. Outsourcing the unprofitable parts of business
2. Speeding up of product development activities which reduces the time to market
3. Improves business and market intelligence
4. Improves the speed of communication
5. Provides the ability to experiment and learn
6. Facilitates communication between customers and suppliers
7. Reduces wastage through additional sales channels
8. Higher customer retention rates
9. Lower customer acquisition cost

The following are the barriers of B2B:

1. **Costs and Financing of Implementing E-Commerce:** Costs of implementing e-commerce can be a serious barrier for Small and Medium sized Enterprises (SMEs). Costs include planning, procuring hardware and software, maintenance, and telecommunication charges.

2. **Personal Contact:** Personal contact is important within various industry sectors. Each buyer has a different situation and all special requirements are difficult to include in an e-marketplace.
3. **Security and Regulations:** Security aspects such as, impact of hacker attacks, thefts of business information and funds, as well as dishonest transactions and conflicts cause uncertainty in organizations willing to use e-marketplaces.
4. **Technology:** New technologies often emerge and companies that choose to build a certain e-commerce platform will lose out if new standards are adopted.
5. **Supplier Issues:** Suppliers often avoid e-marketplaces due to the price transparency. Some suppliers are not convinced on sharing inventory and capacity information because they believe that it will affect their sales.

2.3 Business-to-Consumer (B2C) E-Commerce

Business-to-Consumer (B2C) model describes activities of those businesses that serve end consumers with products and services. It includes electronic retailing or e-tailing.

Electronic retailing includes retail sales and makes it easier for the manufacturer to sell directly to a consumer without the help of intermediaries. An electronic store or Web storefront means the Web site of an organization where the products and services are sold. Consumers have the option of browsing the catalogs and electronic storefronts online.



Example: An example of Web storefront is Amazon.com. In this Web site, consumers can browse catalogs and place orders for the products. Once the order is placed, it is delivered directly to the specified address.

According to Turban (2002), the following things are commonly browsed and sold over the Internet:

1. **Computer Hardware and Software:** Most of the software products are bought online.



Example: The prominent online retailers of software and hardware are Gateway and Dell.

2. **Consumer Electronics:** Consumer electronic products are the most sold online products.



Example: Some of the commonly purchased electronics items online are digital cameras, scanners, printers, and wireless devices like mobile phones, pen drives, and other such electronic goods.

3. **Sporting Goods:** Some of the sports accessories that are sold online are cricket bats, tennis bats, golf balls, and golf accessories.



Example: Web site like Summitonline.com provides sports accessories online.

4. **Office Supplies:** The consumer sales of the office supplies have increased all over the world.



Example: The sales of office supplies through the Officedepot.com Web site crossed \$2.3 billion in the year 2002.

5. Other items like, music related products, CDs, toys, beauty and health products, vehicles and apparels are the general things that are sold over the Internet.

According to Bidgoli (2002), the performance of business in consumer e-commerce involves five main activities:

1. **Information Sharing:** In order to share details with customers, a business-to-consumer e-commerce model can make use of a company Web site, online catalog, online advertisements, e-mail, and message board system and discussion groups.

2. **Ordering:** To order a service or product, a consumer can make use of electronic forms that are similar to paper forms or an e-mail.
3. **Payment:** Payment for the product can be made by credit cards or bank checks. Consumers can also make cash payments.
4. **Fulfillment:** This means delivering the service or product from the retailer to the consumer. This process can be complicated depending upon the products that need to be delivered. The products can be books, videos, CDs, music systems, software, and electronic equipment.
5. **Service and Support:** This aspect is important in e-commerce as there is no human interaction. The service and support activities are e-mail confirmation, online surveys, periodic news flash, help desks, and online auctions. To make a B2C e-Business successful, the functions of all the five activities have to be tested.

2.3.1 B2C Models

B2C models aim to use and combine the unique qualities of Internet and Web. The different B2C models are portal model, storefront model, content providers, transaction brokers, service providers, market providers, and community providers.

Portal Model

Portal is a major starting site for users when they are connected to the Web. Portals offer powerful search tools plus an integrated package of content and services. There are general portals as well as specialized portals.



Example: Some major general portals include Yahoo, Netscape, CNET, and AOL.com and specialized portals include Garden.com (for gardeners), SearchNetworking.com (for network administrators), and many more.

Storefront Model

The customers and sellers interact directly in this model. Orders are taken directly through the Web site and payments are made in a secured environment. The marketers in this model gain revenue through product sales.



Example: Web sites such as Amazon.com and Dell.com gain revenue through product sales.

Content Providers

Content providers provide digital content on the Web. Digital content includes news, music, video, and artwork. Revenue in this model is generated through subscription fees or advertising.



Example: Web sites such as Rhapsody.com, Espnstar.com and CNN.com provide digital content.



Did you know?

Content providers were the second largest source of B2C e-commerce revenue in 2002.

Transaction Brokers

Transaction brokers provide sites that process transaction for consumers. The main advantage of this model is that they help in saving time and money for the consumers. Revenue in this model is generated through transaction fee. This model is used in financial services, job placement and travel services industries.



Example: Web site such as Naukri.com provides job placement services and makemytrip.com provides travel services.

Service Providers

Service providers are companies that make revenue by selling a service instead of a product. These services are available at a lower cost and is time saving.



Example: Web sites such as, Lawinfo.com and myCFO.com make revenue by selling services to the customers.

Market Creators

Market creators create Web sites and make use of the latest Internet technologies to create markets that bring buyers and sellers together for auctions.



Example: Web sites such as Priceline.com and eBay.com create markets for buyers and sellers.

Community Providers

Community providers provide sites where individuals with common interests and common experiences can transact and exchange notes.



Example: Web sites such as About.com and Friendster.com create communities for people with common interest.

2.3.2 Advantages and Disadvantages of B2C Models

The advantages and disadvantages of B2C e-commerce can be considered from the viewpoint of either the consumer or the business.

From the consumer's viewpoint, advantages include:

1. Consumers can shop at any time of the day, from the privacy of their homes or other remote locations.
2. Consumers can have access to a greater variety of goods and services on offer.

From the business viewpoint, advantages include:

1. Business can reach worldwide market with access to more potential customers.
2. B2C can lower transaction costs associated with sales.
3. B2C can display information, pictures and prices of products or services without having to spend much on the advertisement.

The disadvantages from the consumer's viewpoint include:

1. Security issue such as credit card information is very sensitive, and there are chances of scams and frauds.
2. Customer service is compromised as consumers are not always satisfied with their purchases and they often do not get timely answers to their queries.

The disadvantages from the business viewpoint include:

1. The competition is more on the Web and the customer can go to other sites to purchase the same product.
2. There can be technological problems due to which sales might come down.

2.3.3 Differences between B2B and B2C

Business-to-Business e-commerce differs from Business-to-Consumer e-commerce in many ways. Business-to-Consumer merchants sell the products on a first-come, first-served basis and Business-to-Business transactions are performed through negotiated contracts that enable the seller to think and

plan for the quantity the buyer is likely to purchase. Business-to-Business is a matter of making connections with business partners.



Case Study

Web Portal for a Travel and Tourism Organization

A travel and tourism organization decided to introduce a Web portal in addition to the existing set of services. The organization stated the following reasons for taking this decision:

1. The organization wants to stay in the forefront in the technology domain.
2. The organization has to get into Internet servicing if it has to compete with others in the market place.
3. The organization would like to offer all conveniences to its customers.

The organization commissioned an outside agency to design and develop a comprehensive portal.

Objectives of the Program

The organization decided to have an awareness program. The program had the following objectives:

1. Highlight the potential and the challenges of B2C portal
2. Outline the critical tasks that may govern the success of the portal
3. Build in-house momentum for the portal

The awareness program was a huge success. It achieved the following milestones:

1. Formulated the vision for the B2C enterprise which included mission, prospective, and plan
2. Highlighted the need of setting up an independent entity
3. Outlined the key tasks required to be performed
4. Formulated number of options for achieving the end objectives

Conclusion

The various departments have been assigned the additional task of supporting the awareness program. The advertising team has been tasked to integrate portal business with the existing lines of business. The sales team also participates by compiling additional details of the existing and new customers.

Question:

1. What are the objectives of the awareness program?

2.4 Consumer-to-Consumer (C2C) E-Commerce

Consumer-to-consumer (C2C) is also called Peer-to-Peer (P2P) exchanges. It includes all the transactions that happen among consumers. This involves third party sites that can help the market place such as eBay.com. This also includes classified advertisements, music, and file sharing. In consumer-to-consumer networks, consumers sell the services and products to other consumers.

2.4.1 Importance of C2C E-Commerce

C2C e-commerce has created a new dimension in the online shopping business. It provides the small business owners a way to sell their products. Effective consumer-to-consumer businesses include items like handmade gifts, personal artwork and collectables, and apparel design. Among the various business models, C2C e-commerce perhaps has the greatest potential for developing new markets.

This type of e-commerce comes in at least three forms:

1. *Auctions Facilitated at a Portal*



Example: eBay is an online portal, which allows online real-time bidding on items being sold in the Web. Intermediaries are very important in e-bay because there are millions of consumers to sell and to buy products. Finding each other can be beneficial to both consumers and retailers. The intermediaries act as mediators between the consumers who need to purchase and sell. eBay charges some amount from the sellers' profit as a fee to bring their customers to one marketplace.

2. *Peer-to-Peer Systems*



Example: Napster model, which is a protocol for sharing files between users, is used in chat forums.

3. *Classified Ads at Portal Sites*



Example: Excite Classifieds and eWanted are interactive online marketplace, where buyers and sellers negotiate.



Trust and Safety Team of eBay

Caselet

eBay has a Trust and Safety team that is responsible for keeping the marketplace safe for people trading with each other. eBay looks after the safety of its members by enforcing certain rules and policies that also helps in prevention of fraud. In case of any fraud, eBay works with law enforcement and government agencies to enforce its policies.

To ensure the safety of trade and to help build trust, eBay has developed the following programs and resources:

eBay Feedback

Each member of the eBay Web site has a feedback score that is displayed in the seller information box of the item-listing page. The feedback program helps to build trust among the people trading and acts as an incentive to do the right thing.

Spoof Web site Protection

The eBay toolbar enables its members to protect their accounts by warning them when they are on a potentially fraudulent or spoof Web site. eBay provides tutorials to its members on combating fraud and it educates its members on how to report issues to spoofof@ebay.com.

eBay Security Center

The eBay security center provides guidance to its members on buying, selling, and paying safely. It is a valuable resource for all the users.

Source: <http://www.eBay.com>

2.5 Summary

- The different business models for e-commerce are Intra-B commerce, Business-to-Business e-commerce (B2B), Business-to-Consumer e-commerce (B2C), and Consumer-to-Consumer e-commerce (C2C).
- Intra-B commerce involves interaction and dealings among various departments and persons within an organization.
- B2B involves the transactions between businesses. The transactions may be between two companies or between a manufacturer and a wholesaler.
- The B2B market has two primary components: e-infrastructure and e-markets.
- E-Infrastructure consists of logistics, application service providers, Web-based commerce enablers, and content management software providers. E-markets are Web sites where buyers and sellers interact with each other and conduct transactions.
- B2B exchange is an online platform where buyers and sellers communicate to make business transactions.
- B2C e-commerce involves customers gathering information, purchasing physical goods, and receiving products over an electronic network.
- The different B2C models are portal model, storefront model, content providers, transaction brokers, service providers, market providers, and community providers.
- C2C e-commerce includes all the transactions that happen between consumers. In consumer-to-consumer networks, consumers sell the services and products to other consumers.

2.6 Keywords

Electronic Catalogs: Internet-based presentation of a set of items available for purchase, including description, price, and ordering information.

Firewall: A system designed to prevent unauthorized access to or from a private network.

Price Transparency: Price transparency is a term, which describes a situation where both buyer and seller know the pricing.

Small and Medium Sized Enterprises (SMEs): SMEs are companies whose headcount or turnover falls below certain limits.

2.7 Self Assessment

1. State whether the following statements are true or false:
 - (a) C2C commerce involves interaction and dealings among various departments and persons within the firm.
 - (b) B2B explains the transactions between a manufacturer and a wholesaler.
 - (c) E-markets are Web sites where buyers and sellers interact with each other and conduct transactions.
 - (d) Service providers provide sites that process transaction for consumers.
 - (e) B2C merchants sell the products on a first-come, first-served basis.
2. Fill in the blanks:
 - (a) _____ is an online platform where buyers and sellers come to communicate, collaborate, and make business transactions.
 - (b) _____ describes activities of those businesses that serve end consumers with products and services.

- (c) The customers and sellers interact directly in _____ model.
 - (d) _____ provide sites where individuals with common interests and common experiences can transact and exchange notes.
 - (e) C2C is also called _____.
 - (f) _____ enables a manufacturer to manage the complex network of relationships between a manufacturer and its suppliers.
 - (g) _____ includes advanced scheduling, demand forecasting, manufacturing planning, and transportation planning.
3. Select a suitable choice for every question:
- (a) Which of the following e-commerce model is the largest in terms of revenue?
 - (i) Business-to-business (B2B)
 - (ii) Intra-B
 - (iii) Business-to-consumer (B2C)
 - (iv) Consumer-to-consumer (C2C)
 - (b) Which of the following company provides content management software?
 - (i) ProcureNet
 - (ii) eShare
 - (iii) Linkshare
 - (iv) Procter and Gamble
 - (c) Which of the following provides a major starting site for users when they get connected to the Web?
 - (i) Storefront model
 - (ii) Transaction brokers
 - (iii) Portal model
 - (iv) Content providers
 - (d) Which of the following e-commerce business model includes electronic retailing or e-tailing?
 - (i) Business-to-business (B2B)
 - (ii) Intra-B
 - (iii) Business-to-consumer (B2C)
 - (iv) Consumer-to-consumer (C2C)

2.8 Review Questions

1. "Intra-B commerce helps in faster decisions and speedier workflows." Comment.
2. "Business to business e-commerce differs from Business-to-Consumer e-commerce." Analyze.
3. "Electronic retailing includes retail sales and makes it easier for the manufacturer to sell directly to a consumer." Explain.
4. "Portal is a major starting site for users when they get connected to Web." Discuss.
5. "C2C e-commerce has the potential for developing new markets." Analyze.
6. "B2C e-commerce is found to be attractive as it saves firms from factoring in the additional cost of a physical distribution network." Discuss.

Answers: Self Assessment

1. (a) F (b) T (c) T (d) F (e) T
2. (a) B2B exchange (b) B2C model (c) Storefront (d) Community providers
(e) Peer2Peer (P2P) exchanges (f) Supply Chain Management (SCM)
(g) Supply Chain Planning (SCP)
3. (a) Business-to-business (B2B) (b) ProcureNet (c) Portal model
(d) Business-to-consumer (B2C)

2.9 Further Readings



Books

Chan, H., Lee, R., Dillon, T., and Chang, E. E-Commerce: Fundamentals And Applications, Student ed. New Delhi: Willey India (P.) Ltd.

Bajaj, K. K., and Nag, D. E-Commerce: The Cutting Edge of Business, 2nd ed. New Delhi: Tata McGraw-Hill.



Online link

<http://www.apdip.net/publications/iespprimers/eprimer-ecom.pdf>

<http://www.eclac.org/publicaciones/xml/8/12758/lcl1918i.pdf>

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