

SOLUTIONS MANUAL

Electronic Commerce

A Managerial Perspective

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Chapter 2

E-Marketplaces: Structure, Mechanisms, Economics, and Impacts

Learning Objectives

Upon completion of this chapter, you will be able to:

1. Define e-marketplaces and list their components.
2. List the major types of e-marketplaces and describe their features.
3. Describe the various types of EC intermediaries and their roles.
4. Describe electronic catalogs, shopping carts, and search engines.
5. Describe the various types of auctions and list their characteristics.
6. Discuss the benefits, limitations, and impacts of auctions.
7. Describe bartering and negotiating online.
8. Define m-commerce and explain its role as a market mechanism.
9. Discuss liquidity, quality, and success factors in e-marketplaces.
10. Describe the economic impact of EC.
11. Discuss competition in the digital economy.
12. Describe the impact of e-marketplaces on organizations.

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Appendix 2A Build-to-Order Production

Answers to Pause/Break Section Review Questions

Section 2.1 Review Questions

1. *What is the difference between a physical marketplace and an e-marketplace (marketspace)?*

A marketspace is an electronic marketplace. While traditional marketplaces are constrained by their physical locations, marketspaces use technology to eliminate this constraint (by being online).

2. *List the components of a marketspace.*

A marketspace consists of the following components: customers, sellers, goods, infrastructure, a front end, a back end, intermediaries/business partners and support services.

3. *Define a digital product and provide five examples.*

Digital products are goods that can be transformed to digital formats and delivered over the Internet. Examples of digital products would include e-books, software, graphics, video clips and electronic documentation.

Section 2.2 Review Questions

1. *Describe electronic storefronts and e-malls.*

An electronic storefront is a single company's Web site where products and services are sold. An electronic mall is an online shopping center where many stores are located.

2. *List the various types of stores and e-malls.*

There are several different types of stores and malls including: general stores/malls, specialized stores/malls, regional or global stores and pure online stores or click-and-mortar stores.

3. *Differentiate between private and public e-marketplaces.*

Private marketspaces are generally owned by a single firm, whereas public marketspaces are generally owned and managed by independent third parties. Public marketspaces are also known as exchanges.

4. *What are information portals? List the six types.*

Information portals are single, personalized online points of access to business information inside an organization. They include: commercial, corporate, publishing, personal, mobile and voice portals.

Section 2.3 Review Questions

1. *List the roles of intermediaries in e-markets.*

Intermediaries can perform the following functions: reduce search costs, increase or create privacy, provide more complete information, reduce contract risk, and reduce pricing inefficiencies.

2. *Describe e-distributors.*

An online e-distributor is an intermediary that connects suppliers with buyers by aggregating multiple suppliers' product catalogs in a single location.

3. *What are disintermediation and reintermediation?*

Disintermediation is the elimination of intermediaries between sellers and buyers. Reintermediation is the establishment of new intermediary roles for traditional intermediaries that were disintermediated.

Section 2.4 Review Questions

1. *List the dimensions by which electronic catalogs can be classified.*

Electronic catalogs can be classified by the dynamics of the information presented, the degree of customization and their integration with business processes.

2. *List the benefits of electronic catalogs.*

Online catalogs have several advantages as seen in Exhibit 2.7. Some of these advantages include: the ease of updating product information, improved search and comparison capabilities, ease of customization, and several other benefits.

3. *Explain how customized catalogs are created and used.*

Customized catalogs take information from existing print catalogs and product information and digitize it. This digitized information is then stored in a database. Once the information is in a database it is very easy to select products and groups of products to display to a potential customer. These products and groups of products are selected and presented to the customer through a custom printed catalog or through a personalized Web site.

4. *Compare search engines with software agents.*

Search engines are used to query databases for specific information and provide results. Software agents perform routine tasks requiring more intelligence.

5. *Describe an electronic shopping cart.*

An electronic shopping cart is an order-processing technology that allows customers to accumulate items they wish to buy while they continue to shop.

Section 2.5 Review Questions

1. *Define auctions and describe how they work.*

An auction is a market mechanism by which a seller places an offer to sell a product and buyers make bids sequentially and competitively until a final price is reached.

2. *Describe the benefits of electronic auctions over traditional (off-line) auctions.*

Electronic auctions are superior to traditional auctions because they do not suffer the same limitations. Traditional auctions are limited by the short duration of the auction itself and the physical location of the auction. Electronic auctions can occur over greater time periods and are not limited by location since they take place in electronic marketplaces.

3. *List the four types of auctions.*

They include: one buyer-one seller, many buyers-one seller, one buyer-many sellers and many buyers-many sellers.

4. *Distinguish between forward and reverse auctions.*

A forward auction occurs when sellers entertain bids from buyers. A reverse auction occurs when buyers indicate the good they wish to purchase, and sellers provide quotes for that good.

5. *Describe the "name-your-own-price" auction model.*

In this model, a would-be buyer specifies the price they are willing to pay to any seller that is willing to accept the terms.

6. *List the major benefits of auctions to buyers, sellers, and auctioneers.*

Auctions provide a wide variety of benefits to buyers, sellers and auctioneers. Auctions provide several advantages to buyers because they allow them to purchase goods from a wide variety of sellers without the constraint of time or place. The wide variety of different auctions styles meets the needs of a wide variety of different purchasers. Auctions benefit sellers by allowing them to sell to a huge potential marketplace not constrained by time or place. Additionally, it allows them to sell goods that may only have a very small target market. Sellers are also able to sell their goods at the prevailing global market price. Auctioneers benefit from auctions because

it provides a business model that allows their firms to stay in business. They are able to benefit from usage by both buyers and sellers.

7. *What are the major limitations of auctions?*

Limitations include lack of security, possibility of fraud and limited participation.

8. *List the major impacts of auctions on markets.*

Auctions can have an impact by acting as a coordinating mechanism, acting as a social mechanism to determine a price, acting as a visible distribution mechanism and acting as a portion of the EC system.

Section 2.6 Review Questions

1. *Define bartering and describe the advantages of e-bartering.*

Bartering is an exchange of goods and services. E-bartering has the advantage over traditional bartering because it transcends its limitations of location and variety.

2. *Explain the role of online negotiation in EC.*

Online negotiation helps improve the bundling and customization of products and services.

Section 2.7 Review Questions

1. *Define mobility computing and m-commerce.*

Mobility computing is defined by having fully portable, real-time access to information applications and tools that in the past were only accessible from a desktop computer. Mobile commerce (m-commerce) is electronic commerce that is conducted using wireless devices.

2. *How does m-commerce differ from EC?*

Mobile commerce transcends some of the limitations of traditional electronic commerce, specifically the limitations of location.

3. *What major services are provided by i-mode?*

I-Mode provides several services including: shopping guides, maps/transportation, ticketing, news/reports, personalized movie services, entertainment, dining/reservations and other additional services.

Section 2.8 Review Questions

1. *Why is competition so intense online?*

Competition is intense online because of the following factors: low buyer search costs, speedy comparisons, differentiation, lower prices and customer service issues.

2. *Describe Porter's competitive forces model as it applies to the Internet and EC.*

The Porter model evaluates the competitive nature of an industry by examining five factors. These factors are: the threat of substitute products or services, the bargaining power of buyers, the barriers to entry, the bargaining power of suppliers, and the existing rivalry among competitors.

Section 2.9 Review Questions

1. *List the major parts of Bloch et al.'s model.*

This model suggests several impacts of electronic markets on B2C direct marketing. These include: product promotion, new sales channels, direct savings, reduced cycle times, enhanced customer service, ease in branding, customization, direct advertising, improved ordering systems and changes in market operations.

2. *Describe how EC improves direct marketing.*

EC improves direct marketing because it allows for the creation of new potential markets, in addition to improving the overall process of direct marketing through the use of technology.

3. *Describe how EC transforms organizations.*

EC transforms organizations because it allows them to move more quickly with greater access to information. It provides employees with greater flexibility.

4. *Describe how EC redefines organizations.*

EC redefines organizations because it provides them with options that were not available in the past. These new options include changes in their product offerings, changes in their business models, improvements in their supply chains, improvements and changes in their overall manufacturing processes, the use of specialized finance and accounting systems, and better and more efficient processes in HR.

5. *Describe the concept of build-to-order (customization).*

Based on the specific requirements (specifications) of a customer, a product (or service) is created that meets their exact needs.

6. *Describe the concept of the virtual close.*

This is a system that allows companies to close their accounting systems in a single day. This decreases delays and costs, while providing management data quickly.

NOTE: page 73 – Section review titled 2.12, should be 2.10

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Section 2.10 Review Questions

1. *List the myths that, in your opinion, will become realities first.*

Student responses will vary based on their perceptions of the myths.

Answers to EC Application Case Questions

EC Application Case 2.1: WebMD

Questions

1. *Visit webmd.com to learn more about the types of intermediation it provides. Write a report based on your findings.?*

Student reports will vary.

2. *What kind of reintermediation do you foresee for the company?*

Student answers will vary. It is possible that customers may develop their own internal systems or the complexities of HIPAA may continue to benefit WebMD.

3. *WebMD Health does not bring in much revenue, should the company close it?*

The division is probably meant to generate goodwill for the other sections of the firm and should be retained.

4. *What impact can WebMD have on the health-care industry? (Use the chapter's framework in your answer.)*

Student reports will vary. Themes may include better, more consistent information flow, changes in formats due to disintermediation and pricing changes (positive and negative) through the use of outsourced services.

EC Application Case 2.2: Diamonds Forever—Online

Questions

1. Describe *Thaigem's* business model, including its revenue model. How are logistics and payments organized? (Visit thaigem.com to find more details.)

The model is B2B (selling to distributors). The revenue model is made as an intermediary, increasing the prices he paid manufacturers before selling to buyers. Logistics appear to be handled internally from Asia. Payments appear to be made on account or through a merchant system.

2. During the 2000-2002 shakeout of dot-coms *Thaigem.com* prospered. Why do you think it was not affected by the dot-com downturn?

Thaigem's business model was as a distributor, and it did not rely on some of the less stable business models used by dot-coms.

4. Of the \$45 billion annual sales in the gem industry, only about 3 percent are done online. Do you think that selling gems online will grow to more than 3 percent? Why or why not?

Student answers will vary. Students will debate between the benefits of EC for businesses and the desire to examine gems before purchase.

5. Go to bluenile.com and diamonds.com. Compare them with thaigem.com. How do they differ?

Student responses will vary. Generally the other sites are more comical and end-user focused.

EC Application Case 2.3: Electronic Catalogs at Boise Cascade

Questions

1. What are the advantages of the electronic catalog to Boise Cascade? To its customers?

For Boise Cascade the benefits of the electronic catalog include: decreased costs to produce catalogs, quicker turnaround time in production, ease in creation of differentiated pricing and lower sales processing costs. The company's customers also benefit. They receive their catalogs more quickly with a customized selection of products.

2. What are the advantages of customized catalogs?

Customized catalogs can be used to appeal to the specific desires of customers and customer groups.

EC Application Case 2.4: Innovative Auctions

Questions

1. *Explain the logic of using an auction mechanism for an IPO.*

It allows for a more equitable distribution of shares and increases the amount of capital raised.

2. *Why was Buffett so successful with the auctions?*

It is a valuable commodity, and it provides greater access (larger potential customer pool).

3. *You can place your item for sale on EBay without a trading assistant and save on the commission. Why do people use Dan's services?*

He provides information and expertise that customers feel is worth the price.

EC Application Case 2.5: Wireless Pepsi Increases Productivity

Questions

1. *What were the capabilities of the handheld devices used by the PBG technicians?*

It tracks parts on each truck as well as inventories.

2. *How do the handhelds relate to databases and dispatching?*

The handheld coordinates with the mobile database to provide near-real-time updates on the contents of the truck.

3. *This case deals with vending machine maintenance. In what ways, if any, could wireless technologies help with stocking the machines?*

Student answers will vary. Perhaps the machine itself could inform Pepsi when it needs restocking or repairs.

Answers to Discussion Questions

1. *Compare marketplaces with marketspaces. What are the advantages and limitations of each?*

Marketplaces are defined by their physical location. Marketspaces are located online, and have no physical location. In some cases, the physical location of the marketplace may be to its advantage. In most cases, the requirements of the physical location are to the disadvantage of a marketplace. In contrast, a marketspace does not have this limitation and can serve a much

wider audience. Because a marketplace is located online, its potential audience is limited to those who are comfortable with online services.

2. *Compare and contrast competition in traditional markets with that in digital markets.*

Competition in digital markets is generally more intense than that of traditional markets. In traditional markets, customers have more limited access to information about goods available. In digital markets, customers have lower search costs and the ability to quickly compare different goods. Additionally, in digital markets customers have the option of personalizing their goods with lower prices and enhanced customer service. While both markets sell goods to consumers, digital markets create more competition because of the ease of access to information and the ability to provide superior goods and services.

3. *Why are sell-side and buy-side markets in the same company usually separated, whereas in exchange they are combined?*

These two markets are separated into a private company because there is the potential that sales from one market may potentially cannibalize the sales of the other market. In a public exchange, there are no concerns over cannibalization since the exchange itself has no stake over where or what types of products are sold.

4. *Discuss the need for portals in EC.*

Because of the diverse types of information, services and products available, portals are needed to provide a unified and summarized view.

5. *Discuss the advantages of dynamic pricing over fixed pricing. What are the potential disadvantages of dynamic pricing?*

Dynamic pricing has the advantage of being constantly updated and moving towards the true market price. The disadvantages of dynamic pricing are its constant variability and the possibility that the market price is below the seller's expected price.

6. *The "name-your-own-price" model is considered a reverse auction. However, this model does not include RFQs or consecutive bidding. Why is it called a reverse auction?*

It is considered a reverse auction because it changes the normal roles of a traditional auction. In this auction, buyers indicate the goods and prices that they are interested in purchasing. Sellers then evaluate this information and decide to either provide the good at a specified price or to forego the bid.

7. *Discuss the advantages of m-commerce over e-commerce.*

M-commerce holds an advantage over e-commerce because of its mobility. E-commerce has traditionally been limited to areas where customers can access a computer. M-commerce does not share this limitation.

8. Discuss the relationship of DDM with build-to-order.

Both systems rely on information about customer desires to drive production just in time. DDM produces a standard product, while BTO produces a customized product.

Internet Exercises

(Note: URLs may change over time; please check the Internet Exercises on the Turban Web site for possible updates: www.prenhall.com/turban.)

1. Visit *bluenile.com* and *thaigem.com*. Compare the sites. Comment on the similarities and the differences.

Both sites appear to sell gems and jewelry. Bluenile.com appears to be a more marketing/customer driven presence, while thaigem.com appears to compete on price.

2. Go to *cisco.com*, *google.com*, and *cio.com* and locate information about the status of the "virtual close." Write a report based on your findings.

Student responses will vary based on the firm they concentrate on. The "virtual close" is a financial practice that allows companies to utilize technologies to quickly and easily gather financial information at the close of a fiscal term or at any point during the term.

3. Visit *ticketmaster.com*, *ticketonline.com*, and other sites that sell event tickets online. Assess the competition in online ticket sales. What services do the different sites provide?

Online ticket selling appears to be a very competitive industry. Because firms are selling the same good at a generally consistent price, firms must differentiate themselves based on services. These firms provide a wide variety of services to customers. This includes detailed listings of events, information concerning events, reminder services about upcoming events and site personalization.

4. Examine how bartering is conducted online at *tradeaway.com*, *buyersbag.com*, *u-exchange.com* and *intagio.com*. Compare the functionalities and ease of use of these sites.

All of the sites provide users with the ability to exchange existing goods for goods owned by others. Tradeaway.com lists the benefits of bartering for goods as a greater value for your goods, a larger potential market for your goods and the potential to eliminate tax liability.

5. Enter *eBay.com/anywhere* and investigate the use of "anywhere wireless." Review the wireless devices and find out how they work.

eBay's anywhere wireless system allows individuals to participate in eBay auctions using a variety of wireless devices including cell phones, pagers and PDAs. The system allows users to check the status of in-place bids and auctions through their wireless devices.

6. Enter **mfgquote.com** and review the process by which buyers can send RFQs to merchants of their choice. Evaluate all of the online services provided by the company. Write a report based on your findings.

With this service, individuals fill out forms to indicate the products or services that they are interested in purchasing. These RFQs are then viewed and responded to by merchants. Customers can then choose the merchant that they would like to do business with. This firm provides services in a variety of areas including marketing, staffing and travel.

7. Enter **bloomsburgcarpet.com**. Explain how the site solves the problem of sending carpet sample books to representatives all over the country. What are the special features of the electronic catalogs here? (Hint: It might be useful to read Kapp, 2001.)

The site appears to offer an in-depth catalog with large color pictures.

8. Enter **respond.com** and send a request for a product or a service. Once you receive replies, select the best deal. You have no obligation to buy. Write a short report on your experience.

The system is intended to allow customers to indicate particular types of items that they are interested in and allow sellers that are members of the network to reply with suggested prices and specifications that meet the buyer's initial query. Sellers have the opportunity to interact with a wide range of buyers, while buyers have the ability to work with a number of sellers, each of which is trying to earn their business.

9. Enter **onstar.com** and review its services. Comment on the usability of each.

This firm provides two services for customers. The first is the integration of a hands-free cell phone inside a vehicle. This appears to be a very workable service that should be easy for the customer to use. The second service provided is the virtual adviser, which is the system that provides a connection to other information that can be digitally provided to the user. This includes things such as sports scores, e-mail and stock prices. While this could certainly be a very useful service for the customer, it may be potentially difficult to use voice commands while driving.

10. Compare the search engine at **invisibleweb.com** and at **northernlight.com**. Report on the unique capabilities of each.

Invisibleweb.com (now ProFusion.com) appears to be a search engine that accesses and searches other search engines. Northernlight.com now appears to be a commercial site selling search engine technology.

Student answers may vary.

Team Assignments and Role Playing

1. Have several teams each review Porter's (2001b) and Bakos's (1998) articles. Each team member will research one of the issues raised in the papers (such as competition, disintermediation, and Internet impacts) in light of recent developments in the economy and the e-commerce field.

Student reports will vary based on the issue picked and the opinions of the student.

2. Reread the opening case and discuss the following.
- a. Discuss the key success factors for Blue Nile.

Success factors include low price, quality information and an excellent return policy.

- b. Amazon.com make only a 15 percent margin on the products it sells. This enables Amazon.com to sell diamond earrings for \$1,000 (traditional jewelers charge \$1,700 for the same). Do you think that Amazon.com will succeed in selling this type jewelry as Blue Nile did in selling expensive engagement rings?

Student responses will vary.

- c. Competition between Blue Nile and Amazon.com will continue to increase. In your opinion, which one will win (visit their Web sites and see how they sell jewelry)?

Student responses will vary.

- d. Why is "commoditization" so important to the diamond business?

It allows for the sale of diamonds based on quantitative measures for easy comparison of prices.

- e. Compare the following three sites: diamond.com, ice.com, and bluenile.com.

Student responses will vary. All sites appear to offer robust B2C diamond and jewelry sales.

- f. Follow the performance of Blue Nile's IPO (symbol: Nile).

Student responses will vary.

Answers to End-of-Chapter Real-World Case Questions: Wal-Mart Leads RFID Adoption

Questions

1. *Assuming the cost of RFID is low (less than \$0.05 per item), what advantages can you see for tagging individual items in each store? Is it necessary to do so?*

It will provide an even more accurate measure of inventory levels. The necessity of doing so is a question of the cost savings of the more accurate inventory count.

2. *Find some information regarding the advantages of RFID over bar codes.*

Student answers will vary. Example at: <http://www.icma.com/info/rfid1203.htm>.

3. *Is this an e-business application? Why or why not? If it is, what business model is being used?*

Yes, it is a use of technology in (and to improve) commerce. This is an example of a supply chain improver.

4. *What are some of the business pressures driving the use of RFID in retailing?*

Increased levels of competition are driving prices down. This can be supported by streamlining internal processes. Inventory control is one of these processes.