

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 electronic markets and describe their features.
3. Describe the types of intermediaries in EC 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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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?*

Information portals are single, personalized points of access online to business information inside an organization.

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.

4. *Explain how syndication works in e-commerce.*

Syndication is the sale of the same good to many customers, who then integrate it with other offerings and resell it or give it away for free.

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 trading 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. *What is early liquidity? Why is it important?*

Early liquidity occurs when a business is quickly able to begin turning a profit and create positive cash flow. It is important because it places the business in a stronger state of competitive advantage because of greater access to capital (through profits) and a decreased need for outside capital.

2. *How can quality be assured in EC?*

There are several tactics that can be used to insure EC quality. These tactics include: providing free samples, liberal return policies and insurance/escrow services.

3. *Describe some success factors for e-markets.*

Success factors can be broken down into four areas. These areas are: product characteristics, industry characteristics, seller characteristics and customer characteristics. There are specific characteristics inside each of these areas that may indicate that a good is particularly suited to electronic commerce.

Section 2.9 Review Questions

1. *Describe how traditional economic relationships have changed in the digital era.*

EC allows for a cost curve similar to those of information and telecommunication products. A firm's production, transportation and agency costs decrease.

2. *Describe the contribution of EC to the reach/richness relationship.*

EC allows a large reach without a large increase in cost, allowing for more richness in the interaction provided.

Section 2.10 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.*

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 2.11 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.

Section 2.12 Review Questions

1. *In your opinion, based on your observations and experience, what are the biggest impacts EC is making on individuals? On business? On society?*

Student responses will vary. Students will note the changes EC is having on the way businesses and individuals interact in transactions. Students will see positive and negative effects in these interactions and in society.

2. *Go to Rosenbloom's list of myths and realities at the book's Web site. List the five myths with which you most agree (those you think are most definitely myths).*

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

Answers to EC Application Case Questions

EC Application Case 2.1: NTE Evens the Load

Questions

1. *What type of transaction is done at NTE? What type of business model does NTE use?*

This firm is acting as a business-to-business broker. The revenue from their business model comes through transaction fees paid.

2. *What are the benefits of NTE's services to truckers? To shippers?*

Both truckers and shippers benefit from this system. Truckers benefit because they have the ability to sell their once vacant space on return trips. This allows them to create additional revenue that they may not have had in the past. Shippers benefit because they are able to purchase freight space at a lower cost on a return trip than the alternative of purchasing it on its own.

EC Application Case 2.2: Diamonds Forever–Online

Questions

1. Describe *Thaigem's* business model, including the 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. Compare this entrepreneurial business to click-and-mortar gem businesses, such as *Tiffany's* online business (***tiffany.com***). Visit the two sites and comment on the differences.

Student responses will vary. *Thaigem* appears to be more focused on selling to distributors, while *Tiffany* targets individual buyers.

3. During the 2000-2002 shakeout of dot-coms ***Thaigem.com*** was prospering. 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 \$40 billion annual sales in the gem industry, only about 2 percent are done online. Do you think that selling gems online will grow to more than 2 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 *gemcentral.com* and compare it with ***thaigem.com***.

Please note, *gemcentral.com* is not a working URL at this time.

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. *How are the customized catalogs created by Boise Cascade?*

Existing catalog and product information are digitized and stored in a database. Specific products and groups of products are selected for the customer and added to that customer's customized catalog. This catalog can then be delivered through print or through the Web.

EC Application Case 2.4: Reverse Mortgage Auctions in Singapore

Questions

1. *How is the group purchasing organized at **dollardex.com**? What services are offered?*

Group purchasing is organized around a reverse auction process. This process allows homeowners to negotiate favorable rates on home mortgages in addition to waiving legal fees.

2. *Why does a reverse auction take place?*

A reverse auction takes place because the traditional auction roles have been reversed. In this auction, the banks are bidding for the customers' business.

3. *Can this model exist without an intermediary?*

It would be very difficult for this model to exist without an intermediary. The intermediary in this model creates groups of purchasers, solicits banks and assists negotiation.

EC Application Case 2.5: Wireless Pepsi Increases Productivity

Questions

1. *What were the capabilities of the handheld devices used by the Pepsi Bottling Group technicians?*

It tracks parts on each truck as well as inventories.

2. *Relate the handheld to the mobile database.*

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

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

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 marketplaces. What are the advantages and limitations of each?

Marketplaces are defined by their physical location. Marketplaces 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 marketplace 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. What are the major benefits of syndication to the various participants?

Syndication benefits its purchasers because it allows them to provide a good to their customers. Syndication provides a benefit to its creators because it allows them to sell the same good to several different purchasers.

3. 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.

4. Explain how NTE provides real-time procurement services (EC Application Case 2.1).

This firm acts as an intermediary to create a spot market for transportation space in the hauling industry. By displaying the availability of cargo space at any given time, they provide the ability of four purchasers to select hauling options in real time.

5. Which type of e-marketplace is NTE (EC Application Case 2.1)? Why?

This firm is acting as a business-to-business broker. The revenue from their business model comes through transaction fees paid.

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 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 sellers expected price.

8. 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.

9. 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.

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. Enter **arena.com.hk** and examine the products and services provided. Which are similar to that of NTE? Examine the Global Cargo exchange and other initiatives. Classify the services according to the models presented in Chapter 1.*

The global cargo exchange service does not appear to be currently available at the site.

*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**, **ticketsonline.com**, and other sites that sell event tickets online. Assess the competition in online ticket selling. 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**, **bigvine.com**, **abarter.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 **imandi.com** and review the process by which buyers can send RFQs to merchants of their choice. Also, evaluate the services provided in the areas of marketing, staffing and travel. 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 buyers initial query. Sellers have the opportunity to interact with a wide range of buyers, while buyers had 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.

11. Enter **i3mobile.com**, and examine the demo. What are the benefits of such a service?

This site is not available at this time.

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Team Assignments and Role Playing

1. Several competing exchanges operate in the steel industry (e.g., **newview.com** and **isteelasia.com**). Assign one group to each exchange. Look at its market structure, and the services it offers, and so on. The group then will make a presentation to convince buyers and sellers to join its exchange.

Student reports will vary considerably as they examine the different benefits of the competing exchanges. Students should list the features provided by each exchange and the business case (benefit) that each provides.

2. 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.

Answers to End-of-Chapter Real-World Case Questions: Rosenbluth International–A New Way to Compete

Questions

1. *Describe the strategy the company uses to counter disintermediation.*

The company is providing additional value to customers by focusing on one market, and then deploying EC applications to assist them.

2. *Explain how EC facilitated the strategy.*

The company has embraced EC and uses a variety of IT/EC applications to assist clients.

3. *Analyze the competitive solution using Porter's five forces model.*

Student responses will vary.

Substitutes – marginal threat, customers need to travel (note use of IP conferencing as a threat)

Suppliers – large threat, significant power of the airlines to set price and commissions

Barriers to entry – large threat, Internet-based travel services can be easily deployed (note Rosenbluth's use of proprietary systems to counter this)

Buyers – large threat, can bypass the channel

Rivalry – large threat, as many companies compete for smaller profits

4. *Check **carlson.com** to find its EC initiatives. Compare these to Rosenbluth's.*

Both firms provide corporate travel management services. This outsourcing is what was done internally in some companies. Both companies focus on corporations, and provide a wide variety of EC enabled services.