

# SOLUTIONS MANUAL

## Electronic Commerce

*A Managerial Perspective*

2010



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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. Describe the major electronic commerce (EC) activities and processes and the mechanisms that support them.
2. Define e-marketplaces and list their components.
3. List the major types of e-marketplaces and describe their features.
4. Describe electronic catalogs, search engines, and shopping carts.
5. Describe the major types of auctions and list their characteristics.
6. Discuss the benefits, limitations, and impacts of auctions.
7. Describe bartering and negotiating online.
8. List the major Web 2.0 tools and their use in EC.
9. Understand virtual worlds and their use in EC.
10. Discuss competition in the digital economy.
11. Describe the impact of e-marketplaces on organizations, intermediation, and industries.

### **Content**

Opening Case: Web 2.0 Tools at Eastern Mountain Sports

- 2.1 Electronic Commerce Mechanisms: An Overview
- 2.2 E-Marketplaces
- 2.3 Customer Interaction Mechanisms: Storefronts, Malls, and Portals
- 2.4 Electronic Catalogs, Search Engines, and Shopping Carts
- 2.5 Auctions, Bartering, and Negotiating Online
- 2.6 Web 2.0 Tools and Services: From Blogs to Wikis
- 2.7 Virtual Worlds as an Electronic Commerce Mechanism
- 2.8 Competition in the Digital Economy and Its Impact on Industries
- 2.9 Impacts of Electronic Commerce on Business Processes and Organizations

Managerial Issues

Closing Case: Second Life

Appendix 2A: Build-to-Order Production

## **Answers to Pause/Break Section Review Questions**

### **Section 2.1 Review Questions**

1. *List the major EC activities.*

These activities are detailed in Exhibit 2.1.

2. *List the major EC mechanisms.*

These mechanisms are detailed in Exhibit 2.1.

3. *Describe the selling–buying process among a selling company, its suppliers, and customers (consult Exhibit 2.2).*

The company purchases goods from its suppliers (B2B), then prepares them for external sales (Intrabusiness transactions), then sells them to end customers (B2C).

4. *Describe the major steps in the buying process (consult Exhibit 2.3).*

These activities are detailed in Exhibit 2.3.

### **Section 2.2 Review Questions**

1. *Define e-marketplace and describe its attributes.*

An online market, usually B2B, in which buyers and sellers exchange goods or services; the three types of e-marketplaces are private, public, and consortia.

2. *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).

3. *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.

4. *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.

5. *Describe private versus public e-markets.*

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

### **Section 2.3 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. *What are information portals? List the major 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.

4. *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.

5. *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.

### **Section 2.4 Review Questions**

1. *List and briefly describe 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 auction 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.

9. *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.

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

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

## **Section 2.6 Review Questions**

*1. Define blogs and bloggers.*

A blog is a weblog, a published personal or corporate website. A blogger is the author or editor of the blog.

*2. Discuss the critical features that distinguish a blog from a user-produced regular Web page.*

A blog is differentiated by its personal nature, unique content and frequency of updates.

*3. Describe the potential advantages and risks of blogs.*

Blogs are able to focus on niche areas and react quickly. The major risk is in this quick reaction, where posts may not be as well-thought-out or vetted as desired.

*4. Discuss the commercial uses of blogs and wikis.*

Corporate uses of blogs mirror some of the characteristics of personal blogs and can be used for informational or PR purposes. They can be updated regularly and may put a human face on a firm.

*5. Define tags, folksonomy, and social bookmarking.*

Tag – a nonhierarchical keyword or term assigned to a piece of information (such as an Internet bookmark, digital image, video clip, or any computer document)

Folksonomy – the practice and method of collaboratively creating, classifying, and managing tags to annotate and categorize content

Social Bookmarking –Web service for sharing Internet bookmarks; the sites are a popular way to store, classify, share, and search links through the practice of folksonomy techniques on the Internet and intranets

*6. Define wikis.*

A wiki is a communal blog that can be updated at any time by members of the community.

## **Section 2.7 Review Questions**

**1. Define virtual worlds.**

A user-defined world in which people can interact, play, and do business. The most publicized virtual world is Second Life.

**2. Describe avatars. Why do we use them?**

Avatars are animated computer characters that exhibit humanlike movements and behaviors that individuals use to portray themselves in virtual worlds.

3. List some business activities in virtual worlds. Categorize them by type.

Some categories include creating and managing virtual businesses, conducting business activities and providing 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.

3. *Describe the impact of competition on whole industries.*

Large changes in business models and intense completion can reshape industries as intermediaries are removed and new needs discovered. Examples of industries in flux include the travel and health care industries.

4. *How does Craigslist influence the classifieds industry and its competitors?*

The low cost (often free) and detailed nature of ads create a heavy competitive burden on tradition classifieds.

### **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.

## **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 HIPPA may continue to benefit WebMD.

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

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: HOW BLUE NILE, INC. IS CHANGING THE JEWELRY INDUSTRY**

#### **Questions**

1. *Using the classifications of EC (Section 1.3, Chapter 1), what can you say about Blue Nile?*

The company is a pure-play, B2C company.

2. *In what ways is the company changing its industry?*

The site provides a variety and openness on pricing that was not available.

3. *What are the critical success factors of the company?*

Important aspects of the firm include information, selection, pricing and guaranty.

4. *Research Blue Nile's affiliate marketing program via Linkshare. How does this program help Blue Nile?*

This allows for cross-exposure to related (but not competing) sites.

### **EC Application Case 2.3: Craigslist**

#### **Questions**

1. *Identify the business model used by Craigslist.*

The site generates income based on the sale of specific classified ads. This corresponds to the Advertising model.

2. *Visit [craigslist.org](http://craigslist.org) and identify the social network and business network elements.*

The site contains a huge number of social discussion forums.

3. *Why is Craigslist considered a site that "changes the world"?*

Student's answers will vary but may focus on the huge reach of the site and its ability to bring users together.

4. *What do you like about the site? What do you dislike about it?*

Student responses will vary.

5. *What are some of the risks and limitations of using this site?*

Student responses will vary.

### **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 marketspace 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. *Explain why sell-side and buy-side markets in the same company are usually separated, whereas in an exchange they are combined?*

These two markets are separated in 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 sellers 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. *Some say that blogs and wikis are going to eliminate e-mail. Discuss.*

Student opinions will vary.

8. *Compare wikis and blogs.*

Both allow for easy publishing of information on the web. Blogs are closely controlled, whereas wikis are generally open to the community.

9. *Discuss how wikis, blogs, and virtual worlds can be used for collaboration.*

Student experiences will vary. All provide numerous methods.

10. *Discuss the competitive advantage of Craigslist in classifieds.*

Student opinions will vary. The low cost (often free) and detailed nature of ads create a heavy competitive burden on tradition classifieds.

11. *Discuss the value of a virtual world as an EC environment. Why does it attract users? Why does it attract companies?*

Student opinions will vary. The focus will be on the benefit of the dynamic environment versus the difficulty in creating a presence.

12. *Discuss the reasons why Twitter is becoming so popular.*

Student opinions will vary, but the desire for individuals to communicate and interact easily with each other will be a focus.

13. *Discuss the potential risks of using Web 2.0 tools.*

Student opinions will vary. Some examples will include their public nature, their lack of a track record and technical issues.

### **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](http://www.prenhall.com/turban).)**

1. Visit *bluenile.com*, *diamond.com* and *jewelryexchange.com*. Compare the sites. Comment on the similarities and the differences.

Student responses will vary. All sites appear to sell gems and jewelry. Bluenile.com appears to be a more marketing/customer driven presence, while the others appear to compete more 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 *blogger.com* and find its capabilities. Then enter *blogsearch.google.com* and find what this site helps you to do. Write a report.

Student reports will vary.

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 *Web 2.0 Journal* at *web2.sys-con.com* and find recent material on wikis and blogs. Write a report.

Student reports will vary.

10. Enter *yahoo.com* and find what personalization methods it uses.

Student answers may vary. Yahoo! Provides a variety of different services and personalizations. The site allows you to create a profile with personal information and customized news and features. These customizations also integrate with Yahoo!'s other services.

11. Enter *Timberland Boot Studio* (*timberland.com*) and design a pair of boots. Compare it to building your own sneakers at *nike.com*.

Student answers may vary. Both services provide a variety of customizations for shoes. Students will differ on the importance of the interface in each option and possible selections.

12. Enter *cars.com*. List all services available to sellers and to buyers of cars. Compare it to *carsdirect.com*. Also, identify the revenue sources of the sites.

Student reports will vary.

13. Enter *craigslist.org*. From what you know about the design of Web sites and from comparisons with *monster.com*, what suggestions would you make to improve the site?

Student reports will vary.

14. Enter ups.com.

- a. Find out what information is available to customers before they send a package.
- b. Find out about the “package tracking” system; be specific.
- c. Compute the cost of delivering a 10" × 20" × 15" box, weighing 40 pounds, from your hometown to Long Beach, California. Compare the fastest delivery against the lowest cost.
- d. Prepare a spreadsheet for two different types of calculations available on the site. Enter data for two different calculators. Use Excel.

Student reports will vary.

15. Enter nichemarketsolutions.com/template.asp and find the tools it makes for EC activities described in this chapter. Also find other EC mechanisms. Prepare a list.

Student reports will vary.

16. Register at Second Life, and enter the site.

- a. Find what IBM and Coca-Cola are doing on the site.
- b. Find out what three universities that you are familiar with are doing on the site.
- c. Write a report.

Student reports will vary.

17. Create an avatar in Second Life. Let your avatar interact with avatars of some companies. Why do we consider an avatar a mechanism for EC? Write a report.

Student reports will vary.

### **Team Assignments and Role Playing**

1. *Reread the Blue Nile case and discuss the following.*

- a. *What are the key success factors for Blue Nile?*

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

- b. *Amazon.com makes 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 stock since 2004 (symbol: NILE, go to money.cnn.com).*

Student responses will vary.

2. *Read the opening case about EMS and answer the following questions.*

- a. *Why not just have meetings and send e-mails rather than using blogs, wikis, and RSS feeds?*
- b. *What are the benefits to EMS of combining its BI system with the Web 2.0 tools?*
- c. *In what ways is corporate performance bolstered?*
- d. *How can customers of the retail stores utilize the Web 2.0 tools?*
- e. *Can the company use any other Web 2.0 technologies? What and how?*

Student answers will vary.

3. *Assign each group to a large e-tailer (e.g., Amazon.com, Walmart.com, Target.com, Dell.com, Apple.com, and HP.com). Trace the purchasing process. Look at the catalogs, search engines, shopping carts, and any other mechanism that improves e-shopping. Make a presentation that will include recommendations for improving the existing process.*

Student presentations will vary.

4. *Enter en.wikipedia.org/wiki/Businesses\_and\_organizations\_in\_Second\_Life and view the list of businesses. Identify some virtual companies and explore several in depth. Find what product (service) they offer and how much they charge if they sell their product (service). Then, identify several companies that are related to real-world businesses. (e.g., SL Bay auctions allow you to purchase real-world items with Linden dollars).*

Student reports will vary.



5. *Build your own business in Second Life (SL). This can be each member or each group. Using the company cited in question 4, determine what business you want to build. Then obtain a copy of Terdiman's book (2008) or a similar guide. Register at SL and go to work. In your project do the following:*

- a. Select a business category and develop a business strategy.*
- b. Develop a business plan and model (see the Online Tutorial) for your virtual enterprise.*
- c. Choose where to set up your business.*
- d. Conduct a budget and cash flow analysis (see Appendix B in Terdiman 2008).*
- e. Buy virtual land and other virtual properties.*
- f. Develop marketing and advertising plans (examine the competition)!*
- g. Look for any possible revenues; make a pricing decision.*
- h. Examine the possibility of running your business in "Teen SL."*
- i. Plan all support business using the SL tools.*
- j. Watch for legal issues and other risks.*
- k. Build the business (using the SL tools).*
- l. Build a supporting blog. How would you use it for viral marketing?*

Student reports will vary.

6. *Topics for class discussion:*

- a. Compare and contrast competition in traditional markets with that in digital markets.*
- b. Some say that blogs and wikis are going to eliminate e-mail. Discuss.*

Student opinions will vary.

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**Closing Case 2.3: SECOND LIFE****Questions**

1. *Enter the Second Life site (secondlife.com) and identify EC activities there. (You need to register for free and create an avatar.)*

Student experiences will vary.

2. *Which types of transactions are observable at the site?*

Student experiences will vary. Some include the sale for access, the sale of goods, services and tools to use in the world.

3. *Which business models are observable at the site?*

Student experiences will vary. B2C is often cited.

4. *If you were a travel agent, how would you utilize the site?*

Student opinions will vary. Agents could use the site to dramatically demonstrate the locations you could travel to.

5. *Have your avatar communicate with five others. Write a report on your experience.*

Student reports will vary