Chapter 14
Order Fulfillment, Content Management, and Other Support Services

Learning Objectives

Upon completion of this chapter, you will be able to:
1. Describe the role of support services in EC.
2. Define EC order fulfillment and describe its process.
3. Describe the major problems of EC order fulfillment.
4. Describe various solutions to EC order fulfillment problems.
5. Describe content issues and management of EC sites.
6. Describe other EC support services.
7. Discuss the drivers of outsourcing support services and the use of ASPs.

Content

How BikeWorld Fulfills Orders
14.1   Order Fulfillment and Logistics—An Overview
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Real-World Case: How Dell Computer Fulfills Customer Repair Orders

Answers to Pause/Break Section Review Questions

Section 14.1 Review Questions

1.   Define order fulfillment and logistics.

Fulfillment is all of the activities needed to provide customers with ordered goods and services, including related customer services. Logistics is defined as the operations involved in the efficient and effective flow and storage of goods, services, and related information from point of origin to point of consumption.

2.   List the nine steps of the order fulfillment.

The order for fulfillment process has nine steps. The steps include: making sure the

customer will pay, checking for in-stock availability, arranging shipments, insurance, production, plant services, purchasing and warehousing, contacts with customers, and returns.

3.   Compare logistics to reverse logistics.

Logistics is the shipment of goods to customers while reverse logistics is customers returning those goods. Reverse logistics is generally more difficult because there is no expected flow of goods.

4.   Compare traditional logistics to e-logistics.
E-logistics is different because instead of sending large shipments to a few locations, it deals with sending many small packages to many small locations (usually homes).

Section 14.2 Review Questions

1.   Describe the order fulfillment problem of the 1999 holiday season.

During this period many start-up EC sites had orders greater than they had planned for or were able to handle. The logistics process broke down with many orders being shipped late.

2.   List some problems along the EC supply chain.

Some problems include inventory levels, incorrect or slow shipments and demand forecasting.

3.   Explain how uncertainties create order fulfillment problems; list some of these problems.

The scope of the order fulfillment mechanism depends on the volume of orders to process. The greatest uncertainty is forecasting this volume. If the order fulfillment mechanism is too large, idle time is created, if the order fulfillment mechanism is too small, orders are not shipped on time.

Section 14.3 Review Questions

1.   List the various order-taking solutions.

The solutions can include the use of EDI, EDI/Internet, Internet, extranet or other more automated solutions.

2.   List solutions for improved delivery.

Some solutions include partnerships with delivery carriers, and forwarders that can immediately ship products to customers.

3.   Describe same-day shipments.

Same-day shipments are product orders that can be delivered to the customer in the same day that the product is ordered. Same-day shipments are very difficult because of the fast processing time needed, but necessary in certain industries.

4.   Describe some innovative e-strategies for order fulfillment.

Two examples are merge-in-transit and rolling warehouses.

5.   Describe how the return of items can be effectively managed.

There are several different methodologies for return handling, including: returning the item to the place where it was purchased, separate logistics for returns, outsourcing returns, and physically dropping off the returned items to collection stations.

6.   Describe issues in B2B fulfillment.

The major issues are shipment size, multiple distribution channels, variety of shipment frequency, uneven breadth of carrier services, fewer carrier EC offerings and complex EC transaction paths.

Section 14.4 Review Questions

1.   Describe content creation and management.

Content creation is the process of creating content for Web sites, while content management is the process of managing the content itself and its delivery.

2.   Describe catalog content and the options for its management.

Catalog content is the material in an online catalog or store. It can be managed by the business offering the catalog, by suppliers, by aggregators, by vertical exchanges or by outsourcing.

3.   Discuss the issue of Web site language translation.

Web sites can be translated into different languages to address different markets. This can be done manually or by translation software. The latter is cheaper and easier, but not always accurate.

4.   Explain how content maximization works.

Content maximization is a technical solution to managing the amount of information being served at any particular time to avoid bottlenecks.

Section 14.5 Review Questions

1.   Describe the role of EC consultants and list their major types.

EC consultants can play many roles in assisting businesses as they design and manage EC Sites. There are three major types of EC consultants: EC specific consultants, general consultants and hardware/software consultants.

2.   Describe the value directory services. Provide three examples of what value they add.

Student answers will vary. Directory services aggregate buyers and sellers, provide basic information and may have some aspect of endorsement.

3.   Explain why specialized search engines are needed.

As the number of sites increases, search engines become generalized. Specialized engines keep their focus.

4.   List some other EC support services.

Additional services include trust services, trademark and domain names, digital photos, global business communities, commercial databases, consulting, KM, client matching, rating sites, encryption sites and coupon-generating sites.

Section 14.6 Review Questions

1.   List the major reasons why companies outsource EC support services.

Reasons are listed on page 549.

2.   Which types of services are outsourced the most?

IT services are most often outsourced.

3.   Describe the benefits of ASPs.

ASPs can provide many of the services required by an EC firm. These vendors can provide an unbundled variety of services. Their primary advantage is cost for SMEs and allowing a firm to concentrate on its core competence.

4.   Comment on the risks of using ASPs.

When using an ASP you are entrusting an important part of your business to a third party.

Answers to EC Application Case Questions

EC Application Case 14.1: The Rise and Fall of Kozmo.com

1.   Draw the supply chains for food and rented items at Kozmo. What logistics problems did these supply chains present.

Each supply chain takes items from a "manufacture" (video store or restaurant) and moves it to the customer with Kozmo.com as the "distributor." The problem with the logistics is that the "distributor" is an extra step in the order from the "manufacturer" to the delivery to the customer.

2.   Compare Kozmo.com with Domino's Pizza. Why did Domino's do so well while Kozmo failed? Analyze the situation from an order fulfillment point of view.

Dominos goes straight from "manufacturer" to customer. Dominos is extending a core portion of its business. Student responses will vary. There are a huge number of potential orders, and issues with the "manufacturer" can delay them.

3.   The partnership with Starbucks was said to be extremely innovative, but it was cancelled by Kozmo.com when its financial problems began. (Kozmo.com had paid money to Starbucks for the permission to place the drop-in boxes.) Analyze this partnership.

This partnership provided a secure location for returns and assisted in advertising and branding.

4. Later in this chapter, you will learn about "returns." After you have read that discussion, come back to this case and answer the following question: What advice could you have given Kozmo.com regarding the return of rented items?

Student responses will vary.

EC Application Case 14.2: UPS Provides Broad EC Services

1.   Why would a shipper such as UPS expand to other logistic services?

Firms might enter these related industries because of their existing investments in

infrastructure that could support other services.

2.   Why would shippers want to handle payments?

Shippers may want to handle payments because it facilitates the overall process of shipping, and thus adds to their business.

3.   Why does UPS provide software tools to customers?

UPS provides these goods because it eliminates the need for direct customer service while using existing shipping information to grow EC and UPS's business.

*4.   What B2B services does UPS provide? (Note: Check **ups.com** to make sure that your answers are up-to-date.)*

UPS provides a wide range of business services involved with shipping and logistics operations. Examples include integration with shipping and e-commerce systems, desktop-based shipping applications, logistics services for warehousing and shipping, and mobile commerce applications for shipment management.

EC Application Case 14.3: Akamai Corporation

1.   What services are provided by Akamai?

The company primarily provides a hardware/software solution for media mirroring to increase the speed of media in Web pages as viewed by end users. Additionally, the company provides complementary services.

2.   What is the company's revenue model?

The company charges Web sites that want to mirror their content on Akamai servers.

3.   What are the service's limitations?

The service is still limited by the speed of a user's LAN and connection, as well as the volume of requests on a mirror server.

Answers to Discussion Questions

1. Discuss the problems of reverse logistics in EC. What types of companies may suffer the most?

The process of reverse logistics in EC is difficult because reverse logistics is not scheduled or controlled by the company, it is controlled by consumers. This means that

returns can happen at any time and from a variety of locations. Because the good was not sold from a physical location, returning the good to the firm will be difficult because some sort of shipping or other method must be used. Small businesses have the largest issues with reverse logistics because their small transaction size does not allow the level of planning an organization afforded with larger businesses.

2. *Explain why UPS defines itself as a "technology company with trucks," rather than a "trucking company with technology."*

UPS feels that it derives its business processes by its technology and not by its experience in traditional trucking. The firm believes that its core competency and strategic differentiation is its ability to use technology to control the trucking process.

3. *Chart the supply chain portion of returns to a virtual store. Check with an e-tailer to see how it handles returns. Prepare a report based on your findings.*

Student reports will vary.

4. *Chart the supply chain of BikeWorld (in the opening case). Discuss how FedEx services improved the supply chain.*

Supplier -> BikeWorld ->Customer . FedEx improved the supply chain by acting as the intermediary and shipping orders.

5. *Under what situations might the outsourcing of EC services not be desirable?*

Student answers will vary. When those services are too expensive, critical to the business or complex/proprietary.

6. *Why does it make sense to use a consultant to develop an e-strategy?*

Student answers will vary. It can be argued that an experienced consultant can help a business avoid mistakes and realistically evaluate the possibilities of EC.

7. *Discuss the advantages of EC content syndication.*

EC content syndication allows a firm to have access to a much larger potential poll of content for a much lower price than generating it internally.

8. *UPS and other logistic companies also provide financial services. Discuss the logic of this.*

These companies are expanding their service offering with the hope of capturing existing customers. This service may also be an extension of shipping as it relates to factoring and purchasing known A/R.

9. Discuss the strategy of automatic Web page language translation.

Automatic Web page translation allows a firm to rapidly access a huge number of new markets (individuals who do not speak English). At issue is the accuracy of the tools that provide this translation and any potential ill effect of improper translation.

10. Differentiate order fulfillment in B2C from that of B2B.

B2C order fulfillment deals generally with inventory and logistics to the customer, while B2B deals with shipment size, multiple distribution channels, variety of shipment frequency, uneven breadth of carrier services, fewer carrier EC offerings and complex EC transaction paths.

11. Discuss the benefits and risks of outsourcing e-content.

Benefits would include ease of access to content at lower prices. Risks include the content of pieces (may not meet specifications/organizational goals) and control over its level of relativity.

12. *Discuss the pros and cons of using ASPs.*

ASPs can provide services that may be difficult or expensive to re-create. They allow a business to focus on its core competencies. ASPs are a risk because important functions of the firm have been outsourced, and the firm has given up a level of control over those functions.

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. The U.S Postal Service is also in the EC logistics field. Examine its services and tracking systems at **usps.com/shipping***. What are the potential advantages for EC shippers?*

Student reports will vary.

2. Enter **rawmart.com** *and find what information the site provides that supports logistics. Also find what shipment services they provide online.*

Rawmart.com provides several services in support of logistics focusing on shipping freight. The company helps match shippers with a variety of freight carriers online.

3. Visit **ups.com** *and find its recent EC initiatives. Compare them with those of*

*fedex.com. Then go to **onlinestore.ups.com** and simulate a purchase. Report your experiences.*

Both firms provide a wide variety of shipping software and solutions related specifically to electronic commerce. Both firms provide plug-ins to electronic commerce applications that allow for the immediate calculation of e-commerce shipping amounts. Both firms provide a wide variety of specific shipping and returns options. FedEx appears to deal specifically with business-level shipping, while UPS additionally provides logistics services. Both firms also provide an application for shipment management via mobile devices.

4. *Visit **freight-online.**com and the sites of one or two other online freight companies. Compare the features offered by these companies for online delivery.*

Student reports will vary.

5. *Enter **efulfillmentservice.com**. Review the products you find there. How does the company organize the network? How is it related to companies such as FedEx? How does this company make money?*

Student reports will vary. This firm assists in providing a variety of outsourced fulfillment solutions. The company organizes their networks based on company size and type of firm. This company may use companies such as FedEx in the shipping process. This firm takes a portion of each sale to cover their costs.

6. *Enter **akamai.com** and examine its latest content-maximization solutions. Examine customers' stories. What kinds of customers are most likely to use the service? For what purpose?*

Student reports will vary.

7. *Enter **categoric.com** and find information about products that can facilitate order fulfillment. Write a report.*

Student reports will vary.

8. *Enter **kewill.com**. Find the innovations offered there that facilitate order fulfillment. Compare it to**shipsmo.com** Write a report.*

Student reports will vary.

9. *Enter **unitechnetworks.com** and find out how they redirect content.*

They appear to balance loads across servers in several locations.

10. *Enter **rikai.com**. Find any Japanese Web site that deals with a topic of your choice*

and try to get the English translation. Report your results.

Student reports will vary.

11. *Enter **b2byellowpages.com** and **a2zofb2b.com** Compare the information provided on each site. What features do both sites share? How do the sites differ?*

Student reports will vary.

12. *Visit **b2btoday.com**. Go to the B2B Communities area and identify the major vendors there. Then select three vendors and examine the services they provide to the B2B community. Also enter **communityb2b.com** and examine the information provided and the usefulness of joining the site.*

Student reports will vary.

13. *Enter **emarket.com**, **google.com**, and **cnnfn.com** and find recent information about Akamai. Summarize recent information on Akamai.*

Student reports will vary based on the date of the search.

14. *Enter **ahls.com** and find out what they offer. Comment on the uniqueness of the services.*

Student reports will vary.

Team Assignments and Role Playing

1. *Each team should investigate the order fulfillment process offered at an e-tailer's site, such as **amazon.com, staples.com**, or **landsend.com**. Contact the company, if necessary, and examine any related business partnerships if they exist. Based on the content of this chapter, prepare a report with suggestions for how the company can improve its order fulfillment process. Each group's findings will be discussed in class. Based on the class's findings, draw some conclusions about how order fulfillment can be improved.*

Student reports will vary.

2. *FedEx, UPS, the U.S. Postal Service, and others are competing in the EC logistics market. Each team should examine one such company and investigate the services it provides. Contact the company, if necessary, and aggregate the findings into a report that will convince classmates or readers that the company in question is the best. (What are its best features?)*

Student reports will vary.

3. *Assign each team to a content management company. Have each team research their company and presents its capabilities and shortcomings.*

Student reports will vary.

End-of-Chapter Real-World Case Questions: How Dell Computer Fulfills Customer Repair Orders

1. What portions of order fulfillment are improved by this process?

This system improves checking for product availability, production and returns/repairs.

*2. Enter **xelus.com** and find information about its inventory optimization and other SCM-related products. List the major capabilities of the products it offers.*

Answers will vary.

*3. Enter **dell.com** and find information about how Dell conducts repair (warranty) customer service.*

Dell works through a variety of customer service operations to help the customer determine what is wrong with their system. If it appears that there is a problem with the system, Dell offers a number of different options. One option is to ship the defective system back to Dell where it can be repaired or replaced. Another option is to ship the user component that will repair the system, but the user installing the replacement component must know how to install it properly. In some cases, Dell may also send a technician to the customer's home or business.

4. Relate this case to the discussion of "returns" in this chapter.

Student reports will vary. Dell has a number of different policies to handle reverse logistics. The option of which of these policies will be used appears to be at the discretion of the customer support representative. Each of these options has both advantages and disadvantages when considered in light of the possible reverse logistics options.

5. What competitive advantages are provided by this Dell system?

By providing a number of alternatives, Dell keeps their options open and can provide a level of customer service that is appropriate to both the type of malfunction and to the customer.