7 According to Wal-Mart's 10K report for fiscal year ended 2006, the following information is found:

	2006	2005
Cost of sales	240,391	219,793
Inventory	32,191	29,762

What is Wal-Mart's inventory turnover?

INTERNET ENRICHMENT EXERCISES

- 1 Using the United Parcel Service Web site at http://www.ups.com and the Federal Express site at http://www.fedex.com, compare rates for shipping a three-pound package, that you will wrap yourself, from New York City to Los Angeles, California. This is a wedding anniversary gift for your parents and is valued at about \$100. Your parents' wedding anniversary is in two weeks and you have already purchased and packed the gift. Which service should you use? Why?
- You are at work in your New York City office and need to send a repair part to a Los Angeles manufacturing plant. The part is a small computer control module weighing only one pound and is valued at about \$25. The machine that needs the part is not operating and it has been estimated that for every hour the machine is not operating, the company loses \$150. Which service should you use? Why?



CASE: PEPE JEANS

Pepe began to produce and sell denim jeans in the early 1970s in the United Kingdom and has achieved enormous growth. Pepe's success was the result of a unique approach in a product market dominated by strong brands and limited variety. Pepe presented a range of jeans styles that offered a better fit than traditional 5-pocket Western jeans (such as those made by Levi Strauss in the United States)—particularly for female customers. The Pepe range of basic styles is modified each season, but each style keeps its identity with a slightly whimsical name featured prominently on the jeans and on the point-of-sale material. Variations such as modified washes, leather trim, and even designer wear marks are applied to respond to changing fashion trends. To learn more about Pepe and its products, visit its Web site at http://www.pepejeans.com.

Pepe's brand strength is such that the company can demand a retail price that averages about £45 (£1 = \$1.6) for its standard products. A high percentage of Pepe sales are through about 1,500 independent outlets throughout the United Kingdom. The company maintains contact with its independent retailers via a group of approximately 10 agents, who are self-employed and work exclusively for Pepe. Each agent is responsible for retailers in a particular area of the country.

Pepe is convinced that a good relationship with the independent retailers is vital to its success. The agent meets with each independent retailer three to four times each year in order to present the new collections and to take sales orders. Because the number of accounts for each agent is so large, contact is often achieved by holding a presentation in a hotel for several retailers. Agents take orders from retailers for six-month delivery. After Pepe receives an order, the retailer has only one week in which to cancel because of the need to place immediate firm orders in Hong Kong to meet the delivery date. The company has had a long-standing policy of not holding any inventory of jeans in the United Kingdom.

After an order is taken and confirmed, the rest of the process up to delivery is administered from the Pepe office in Willesden. The

status of orders can be checked from a Web site maintained by Pepe. The actual orders are sent to a sourcing agent in Hong Kong who arranges for manufacturing the jeans. The sourcing agent handles all the details associated with materials, fabrication, and shipping the completed jeans to the retailer. Pepe has an outstanding team of young in-house designers who are responsible for developing new styles and the accompanying point-of-sale material. Jeans are made to specifications provided by this team. The team works closely with the Hong Kong sourcing agent to ensure that the jeans are made properly and that the material used is of the highest quality.

A recent survey of the independent retailers indicated some growing problems. The independents praised the fit, quality, and variety of Pepe's jeans, although many thought that they had become much less of a trendsetter than in their early days. It was felt that Pepe's variety of styles and quality were the company's key advantage over the competition. However, the independents were unhappy with Pepe's requirements to place firm orders six months in advance with no possibility of amendment, cancellation, or repeat ordering. Some claimed that the inflexible order system forced them to order less, resulting in stockouts of particular sizes and styles. The retailers estimated that Pepe's sales would increase by about 10 percent with a more flexible ordering system.

The retailers expected to have some slow-moving inventory, but the six-month order lead time made it difficult to accurately order and worsened the problem. Because the fashion market was so impulsive, the current favorites were often not in vogue six months in the future. On the other hand, when demand exceeded expectations, it took a long time to fill the gap. What the retailers wanted was some method of limited returns, exchange, or reordering to overcome the worst of these problems. Pepe was feeling some pressure to respond to these complaints because some of Pepe's smaller competitors offered delivery in only a few days.

Pepe has enjoyed considerable financial success with its current business model. Sales last year were approximately £200M. Cost of

sales was approximately 40 percent, operating expenses 28 percent, and profit before taxes nearly 32 percent of sales. The company has no long-term debt and has a very healthy cash position.

Pepe was feeling considerable pressure and felt that a change was going to be needed soon. In evaluating alternatives, the company found that the easiest would be to work with the Hong Kong sourcing agent to reduce the lead time associated with orders. The agent agreed that the lead time could be shortened, possibly to as little as six weeks, but costs would increase significantly. Currently, the agent collects orders over a period of time and about every two weeks puts these orders out on bid to about 1,000 potential suppliers. The sourcing agent estimated that costs might go up 30 percent if the lead time were shortened to six weeks. Even with the significant increase in cost, consistent delivery schedules would be difficult to keep.

The sourcing agent suggested that Pepe consider building a finishing operation in the United Kingdom. The agent indicated that a major retail chain in the United States had moved to this type of structure with considerable success. Basically, all the finishing operation did for the U.S. retail chain was apply different washes to the jeans to give them different "worn" looks. The U.S. operation also took orders for the retail stores and shipped the orders. The U.S. firm found that it could give two-day response time to the retail stores

The sourcing agent indicated that costs for the basic jeans (jeans where the wash has not been applied) could probably be reduced by

10 percent because the volumes would be higher. In addition, lead time for the basic jeans could be reduced to approximately three months because the finishing step would be eliminated and the orders would be larger.

chapter 10

The Pepe designers found this an interesting idea, so they visited the U.S. operation to see how the system worked. They found that they would have to keep about six weeks' supply of basic jeans on hand in the United Kingdom and that they would have to invest in about £1,000,000 worth of equipment. They estimated that it would cost about £500,000 to operate the facility each year. They could locate the facility in the basement of the current Willesden office building and the renovations would cost about £300,000.

QUESTIONS

- Acting as an outside consultant, what would you recommend that Pepe do? Given the data in the case, perform a financial analysis to evaluate the alternatives that you have identified. (Assume that the new inventory could be valued at six weeks' worth of the yearly cost of sales. Use a 30 percent inventory carrying cost rate.) Calculate a payback period for each alternative.
- 2 Are there other alternatives that Pepe should consider?

The idea for this case came from a case titled "Pepe Jeans" written by D. Bramley and C. John of the London Business School. Pepe Jeans is a real company, but the data given in the case do not represent actual company data.

SELECTED BIBLIOGRAPHY

Burt, D. N.; D. W. Dobler; and S. L. Starling. World Class Supply ManagementSM: The Key to Supply Chain Management. 7th ed. New York: McGraw-Hill/Irwin, 2003.

Chopra, S., and P. Meindl. Supply Chain Management: Strategy, Planning, and Operations. 3rd ed. Upper Saddle River, NJ: Prentice Hall, 2006.

Handfield, R. B., and E. L. Nichols. *Supply Chain Management*. 2nd ed. Upper Saddle River, NJ: Prentice Hall, 2007.

Hayes, R.; G. Pisano; D. Upton; and S. Wheelwright. Operations Strategy and Technology: Pursuing the Competitive Edge. New York: John Wiley & Sons, 2005. Simchi-Levi, D.; P. Kaminski; and E. Simchi-Levi. Supply Chain Management. 3rd ed. New York: McGraw-Hill, 2007.

Vollmann, T.; W. L. Berry; D. C. Whybark; and F. R. Jacobs. Manufacturing Planning and Control Systems for Supply Chain Management: The Definitive Guide for Professionals. New York: McGraw-Hill/Irwin, 2004.

Webster, S. *Principles and Tools for Supply Chain Management*. New York: McGraw-Hill/Irwin, 2006.

FOOTNOTES

- 1 M. L. Fisher, "What Is the Right Supply Chain for Your Product?" Harvard Business Review, March-April 1997, pp. 105-16.
- 2 Hau L. Lee, "Aligning Supply Chain Strategies with Product Uncertainties," *California Management Review* 44, no. 3 (Spring 2002), pp. 105–19. Copyright © 2002 by the Regents of the University of California. By permission of the Regents.
- 3 This section is adapted from Scott E. Sampson and Craig M. Froehle, "Foundations and Implications of a Proposed Unified Services Theory," *Production and Operations Management* 15, no. 2 (2006), pp. 337–38.
- 4 "Have Factory Will Travel," The Economist, February 12-18, 2000, pp. 61-62.
- 5 Adapted from Martha Craumer, "How to Think Strategically about Outsourcing," Harvard Management Update, May 2002, p. 4.
- 6 This section is adapted from E. Feitzinger and H. Lee, "Mass Customization at Hewlett-Packard: The Power of Postponement," Harvard Business Review, January-February 1997, pp. 116–21.