

- 7 An electronics company makes communications devices for military contracts. The company just completed two contracts. The navy contract was for 2,300 devices and took 25 workers two weeks (40 hours per week) to complete. The army contract was for 5,500 devices that were produced by 35 workers in three weeks. On which contract were the workers more productive?
- 8 A retail store had sales of \$45,000 in April and \$56,000 in May. The store employs eight full-time workers who work a 40-hour week. In April the store also had seven part-time workers at 10 hours per week, and in May the store had nine part-timers at 15 hours per week (assume four weeks in each month). Using sales dollars as the measure of output, what is the percentage change in productivity from April to May?
- 9 A parcel delivery company delivered 103,000 packages in 2009, when its average employment was 84 drivers. In 2010 the firm handled 112,000 deliveries with 96 drivers. What was the percentage change in productivity from 2009 to 2010?
- 10 A fast-food restaurant serves hamburgers, cheeseburgers, and chicken sandwiches. The restaurant counts a cheeseburger as equivalent to 1.25 hamburgers and chicken sandwiches as 0.8 hamburger. Current employment is five full-time employees who work a 40-hour week. If the restaurant sold 700 hamburgers, 900 cheeseburgers, and 500 chicken sandwiches in one week, what is its productivity? What would its productivity have been if it had sold the same number of sandwiches (2,100) but the mix was 700 of each type?

CASE: THE TAO OF TIMBUK2*

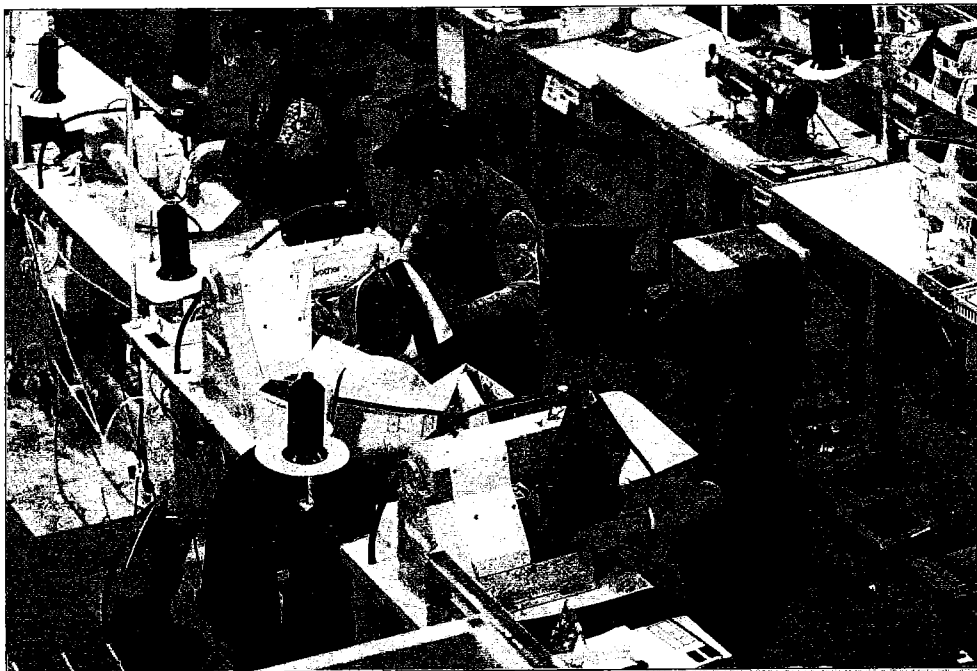
"Timbuk2 is more than a bag. It's more than a brand. Timbuk2 is a bond. To its owner, a Timbuk2 bag is a dependable, everyday companion. We see fierce, emotional attachments form between Timbuk2 customers and their bags all the time. A well-worn Timbuk2 bag has a certain patina—the stains and scars of everyday urban adventures. Many Timbuk2 bags are worn daily for a decade, or more, accompanying the owner through all sorts of defining life events. True to our legend of 'indestructibility,' it's not uncommon for a Timbuk2 bag to outlive jobs, personal relationships, even pets. This is the Tao of Timbuk2."

What makes Timbuk2 so unique? Visit their Web site at www.timbuk2.com and see for yourself. Each bag is custom designed by the customer on their Web site. After the customer selects the basic bag configuration and size, colors for each of the

various panels are presented; various lines, logos, pockets, and straps are selected so that the bag is tailored to the exact specifications of the customer. A quick click of the mouse and the bag is delivered directly to the customer in only two days. How do they do this?

This San Francisco-based company is known for producing high-quality custom and classic messenger bags direct to customer order. They have a team of approximately 25 hardworking cutters and sewers in their San Francisco plant. Over the years, they have fine-tuned their production line to make it as efficient as possible while producing the highest-quality messenger bags available.

The local manufacturing is focused on the custom messenger bag. For these bags, orders are taken over the Internet. The customers are given many configuration, size, color, pocket, and strap options. The bag is tailored to the exact specifications of the



customer on the Timbuk2 assembly line in San Francisco and sent via overnight delivery directly to the customer.

Recently, Timbuk2 has begun making some of its new products in China, which is a concern to some of its long-standing customers. The company argues that it has designed its new products to provide the best possible features, quality, and value at reasonable prices and stresses that these new products are designed in San Francisco. Timbuk2 argues that the new bags are much more complex to build and require substantially more labor and a variety of very expensive machines to produce. They argue that the San Francisco factory labor cost alone would make the retail price absurdly high. After researching a dozen factories in China, Timbuk2 found one that it thinks is up to the task of producing these new bags. Much as in San Francisco, the China factory employs a team of hardworking craftspeople who earn good wages and an honest living. Timbuk2 visits the China factory every four to eight weeks to ensure superior quality standards and working conditions.

On the Timbuk2 Web site, the company argues they are the same hardworking group of bag fanatics designing and making great bags, and supporting our local community and increasingly competitive global market. The company reports that demand is still strong for the custom messenger bags made in San Francisco and that the new laptop bags sourced from China are receiving rave

reviews. The additional business is allowing them to hire more people in all departments at the San Francisco headquarters—creating even more jobs locally.

QUESTIONS

- 1 Consider the two categories of products that Timbuk2 makes and sells. For the custom messenger bag, what are the key competitive dimensions that are driving sales? Are their competitive priorities different for the new laptop bags sourced in China?
- 2 Compare the assembly line in China to that in San Francisco along the following dimensions: (1) volume or rate of production, (2) required skill of the workers, (3) level of automation, and (4) amount of raw materials and finished goods inventory.
- 3 Draw two diagrams, one depicting the supply chain for those products sourced in China and the other depicting the bags produced in San Francisco. Show all the major steps, including raw material, manufacturing, finished goods, distribution inventory, and transportation. Other than manufacturing cost, what other costs should Timbuk2 consider when making the sourcing decision?

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SUPER QUIZ

- 1 A strategy that is designed to meet current needs without compromising the ability of future generations to meet their needs.
- 2 The three criteria included in a triple bottom line.
- 3 It is probably most difficult to compete on this major competitive dimension.
- 4 Name the seven operations and supply competitive dimensions.
- 5 This occurs when a company seeks to match what a competitor is doing while maintaining its existing competitive position.
- 6 A criterion that differentiates the products or services of one firm from those of another.
- 7 A screening criterion that permits a firm's products to be considered as possible candidates for purchase.
- 8 A diagram showing the activities that support a company's strategy.
- 9 A measure calculated by taking the ratio of output to input.

1. Sustainable 2. Social, economic, environmental 3. Cost 4. Cost, quality, delivery speed, delivery reliability, coping with changes in demand, flexibility and new-product introduction speed, other product-specific criteria 5. Straddling 6. Order winner 7. Order qualifier 8. Activity-system map 9. Productivity

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FOOTNOTE

- 1 J. Elkington, "Toward the Sustainable Corporation: Win-Win-Win Business Strategies for Sustainable Development," *California Management Review* 36, no. 2 (1994), pp. 90–100.