

14. How does contingency theory inform decision making when implementing improvement efforts?
15. Should a firm consider the law of diminishing marginal returns when striving to improve quality? Why or why not?
16. Are the perspectives of quality independent of one another? If not, describe ways in which they are interrelated.
17. How can an understanding of the multiple dimensions of quality lead to improved product and service designs?
18. What is your concept of quality? Is it multidimensional, or does it focus on a single dimension such as features, reliability, or conformance? Explain your answer.
19. Describe an instance in which you and a co-worker (or superior) perceived the needs of a customer very differently. How did your differences in perception influence how each of you wanted to meet your customer's needs?

CASES

Case 1-1 FedEx: Managing Quality Day and Night

FedEx Homepage: www.fedex.com

As darkness falls across America and most businesses are locking up for the evening, one company is gearing up for a long night's work. FedEx, the world leader in the overnight package delivery market, delivers more than 7.6 million packages per business day. Most of us know FedEx as the overnight delivery company with white delivery vans, courteous drivers, and the distinctive purple-and-orange FedEx logo. But behind what the casual observer sees is a very complex company with the capacity to deliver millions of packages to millions of addresses around the globe overnight. Throughout the course of virtually every day and night, FedEx mobilizes its army of 165,000 employees, 47,500 vans and trucks, and 647 planes to get the job done.

For FedEx, getting the job done means managing quality 24 hours per day, with a watchful eye on customer expectations. The company's goals are simple: 100% customer satisfaction, 100% on-time deliveries, and 100% accurate information available on every shipment to every location around the world. Although these sound like far-fetched goals, the company goes to great lengths to try to make them a reality. One of the principal weapons that FedEx uses in pursuit of its goals is its total commitment to quality management.

Quality management at FedEx encompasses all its operations. Although the company is the acknowledged leader in the air freight industry, a formal Quality Improvement Process (QIP) plays an integral role in all the company's activities.¹⁰

At the heart of the QIP program is the philosophy that quality must be a part of the way that FedEx

does business, not part of the time, but all the time. As a result, themes such as "Do it right the first time," "Make the first time you do it the only time anyone has to," and "Q = P" (quality = productivity) are important parts of the FedEx culture. To reinforce these themes, the company teaches its employees the 1–10–100 rule. According to the rule, if a problem is caught and fixed as soon as it occurs, it costs a certain amount of time and money to correct. If a mistake is caught later in a different department or location, it may cost 10 times that much to repair. And if a mistake is caught by a customer, it may cost 100 times as much to fix.

A number of substantive strategies have been implemented by FedEx to support its quality efforts. Quality action teams (QATs) design work processes to support new product and service offerings. A set of service quality indicators (SQIs) has been established to determine the main areas of customers' perception of service. Through careful tracking of these indicators, the company generates a weekly summary of how well it is meeting its customer satisfaction targets. An SQI team works through problems revealed by the indicators. For example, if problems were being created by confusion in FedEx labeling instructions, the team would work on improving the clarity of the instructions. Some of the company's tactics to ensure total quality are extraordinary. For example, every night FedEx launches an empty airliner from Portland, Oregon, bound for Memphis. The jet follows a course that brings it close to several FedEx terminal airports. The purpose of the jet is to swoop down and pick up FedEx packages if any of the company's regularly scheduled airplanes is experiencing mechanical difficulty.

¹⁰www.fedex.com.

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Along with a focus on its external customers, FedEx's approach to quality also involves strengthening the bonds between its internal customers, or employees. To reinforce this notion, the company asks all its employees to ask the following three questions when they interface with a co-worker:

1. What do you need from me?
2. What do you do with what I give you?
3. Are there any gaps between what I give you and what you need?

The company also reaches out to its employees in a number of substantive ways. To do this, the company adopted its People-Service-Profit (PSP) philosophy, which articulates the view that when people are placed first, service and profit follow. An aggressive training program, competitive wages and benefits, profit sharing, bonuses, and a state-of-the-art employee grievance process are all elements of the PSP philosophy. Employee recognition also plays an important role in the company's quality pursuits. For example, each quarter FedEx divisions select their best quality

success story, which is entered in a company-wide competition. Presentations are made by the finalists before the company's CEO, executive vice president, and other top managers. The award for being a finalist is a gold quality pin for each member of the team and the opportunity to be interviewed on the company's internal television network.

The quality efforts practiced by FedEx have paid off. The company has achieved a remarkable 99.7% on-time delivery level. The list of awards the company has won are too numerous to publish. The most impressive are the Malcolm Baldrige award; the AT&T Top Performer award; the Quality Carrier of the Year award, presented by Merck Pharmaceuticals; and the Company of the Year Distinguished Service award, presented by the National Alliance of Businesses. Will FedEx's pursuit of quality end here? Asked if winning the Malcolm Baldrige award signifies that FedEx has achieved the ultimate level of quality, CEO Fred Smith said, "Receipt of the award is simply our license to practice." Apparently, the quest for improved quality at FedEx will continue, day and night.

Discussion Questions

1. What is FedEx's "common language" of quality? Is it important for a company to establish a "common language" of quality? If so, why?
2. There are several different perspectives of quality, including the operations perspective, the strategic perspective, the marketing perspective, the financial perspective, the HR perspective, and the systems perspective. Which of these perspectives are being emphasized by FedEx? Why?
3. Is FedEx's level of emphasis on quality appropriate? Why or why not?

Case 1-2 Graniterock Company: Achieving Quality through Employees

Graniterock Homepage: www.graniterock.com

Graniterock, a California-based mining and construction company, was founded in 1900, but its journey toward improved quality did not start until many decades later. The managers at Graniterock knew that a resulting decline in customer satisfaction was inevitable and responded to this self-assessment by deciding it needed to become more customer focused. At Graniterock, this meant not only learning more about the customer but also providing its employees the training and skills necessary to properly implement the company's new philosophy.

At first, this focus on HR management was emphasized through employee training. As explained by ex-CEO Bruce Woolpert, you can't have employees out telling customers "yes" unless everyone else in the company knows how to follow up on "yes." As a result, an aggressive training program was implemented,

involving on-the-job training and classroom time for a majority of the firm's employees. A program called IPDP (Individual Personal Development Plan) was created to help each employee take responsibility for his or her own training program. As the program gained momentum, remarkable things started to happen. One employee indicated that he wanted to learn to read better. As a result of that request, the company initiated a reading program that has helped a number of Graniterock's employees improve their reading skills. As part of the company's effort to reduce process variability and increase product reliability, many employees were trained in statistical process control, root-cause analysis, and other quality-minded competencies. Today, Graniterock spends up to \$1,600 per year for training of each employee, which is more than 10 times the average for the mining and construction industries.