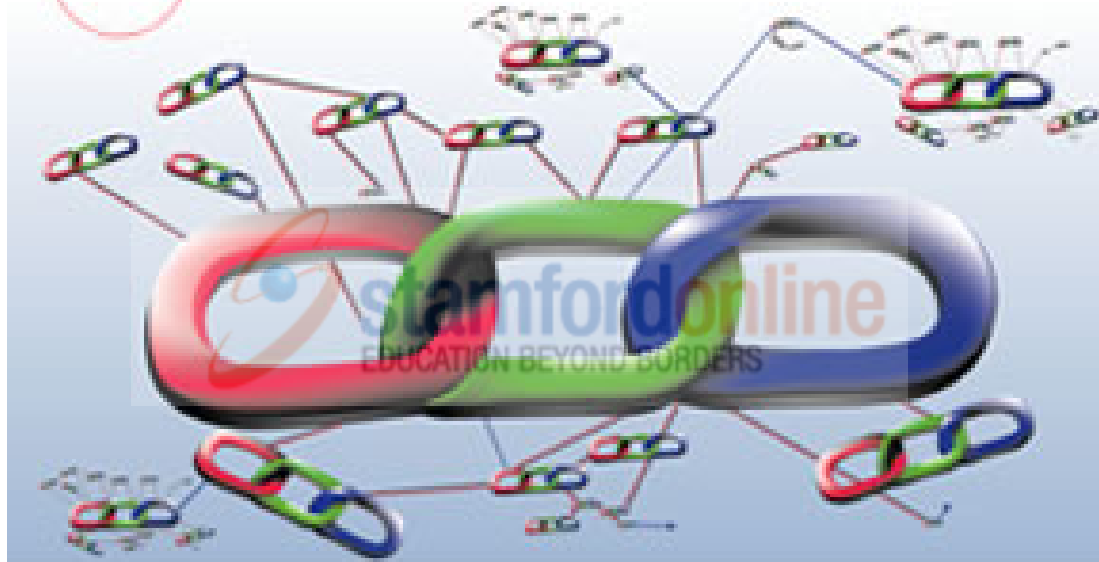


THE VCOR MODEL



LECTURE 8

Operations and Value Chain Management



Chapter

8

LEARNING OUTLINE

Follow this Learning Outline as you read and study this chapter.

What Is Operations Management and Why Is It Important?

- Explain what operations management is.
- Contrast manufacturing and services organizations.
- Describe managers' role in improving productivity.
- Discuss the strategic role of operations management.

Value Chain Management

- Define value chain and value chain management.
- Describe the goal of value chain management.
- Discuss the requirements for successful value chain management.

LEARNING OUTLINE (cont'd)

Follow this Learning Outline as you read and study this chapter.

Value Chain Management (cont'd)

- Describe the benefits that result from value chain management.
- Explain the obstacles to value chain management.

Current Issues in Operations Management

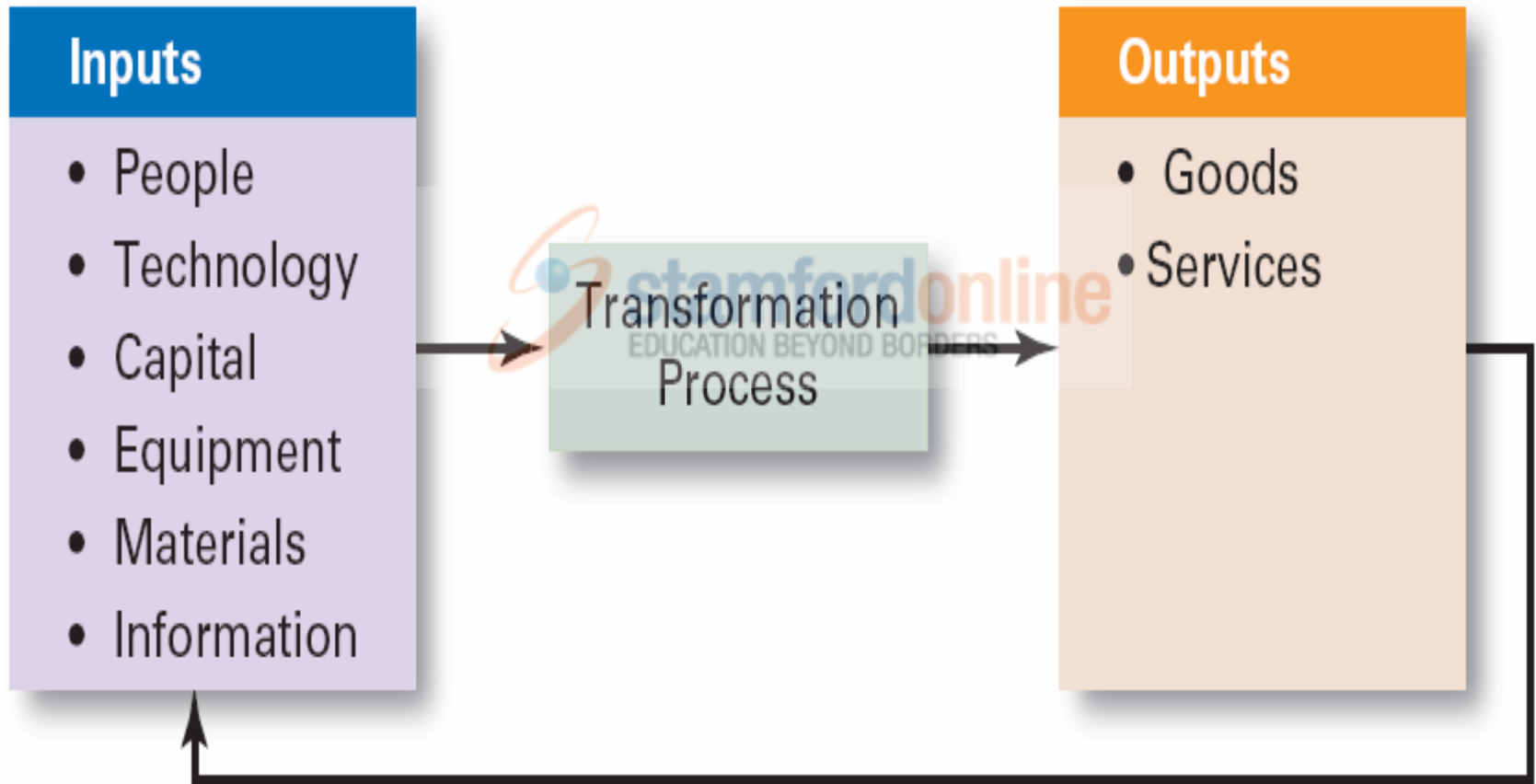
- Discuss technology's role in manufacturing.
- Tell some of the various quality dimensions.
- Explain ISO 9000 and Six Sigma.
- Describe mass customization and how operations management contributes to it.

What Is Operations Management?

- Operations Management
 - The design, operation, and control of the transformation process that converts such resources as labour and raw materials into goods and services that are sold to customers.
- The Importance of Operations Management
 - It encompasses both services and manufacturing.
 - It is important in effectively and efficiently managing productivity.
 - It plays a strategic role in an organization's competitive success.



Exhibit 19–1 The Operations System



Manufacturing and Services

- Manufacturing Organizations
 - Use operations management in the transformation process of turning raw materials into physical goods.
- Service Organizations
 - Use operations management in creating nonphysical outputs in the form of services (the activities of employees interacting with customers).

Managing Productivity

- Productivity
 - The overall output of goods or services produced divided by the inputs needed to generate that output.
 - A composite of people and operations variables.
- Benefits of Increased Productivity
 - Economic growth and development
 - Higher wages and profits without inflation
 - Increased competitive capability due to lower costs

Exhibit 19–2 Deming’s 14 Points for Improving Productivity

- **Plan for the long-term future.**
- **Never be complacent concerning the quality of your product.**
- **Establish statistical control over your production processes and require your suppliers to do so as well.**
- **Deal with the best and fewest number of suppliers.**
- **Find out whether your problems are confined to particular parts of the production process or stem from the overall process itself.**
- **Train workers for the job that you are asking them to perform.**
- **Raise the quality of your line supervisors.**
- **Drive out fear.**
- **Encourage departments to work closely together rather than to concentrate on departmental or divisional distinctions.**
- **Do not adopt strictly numerical goals.**
- **Require your workers to do quality work.**
- **Train your employees to understand statistical methods.**
- **Train your employees in new skills as the need arises.**
- **Make top managers responsible for implementing these principles.**

Source: W.E. Deming, "Improvement of Quality and Productivity Through Action by Management," *National Productivity Review*, Winter 1981–1982, pp. 12–22. With permission. Copyright 1981 by Executive Enterprises, Inc., 22 West 21st St., New York, NY 10010-6904. All rights reserved.

Strategic Role of Operations Management

- The era of modern manufacturing began in the U.S over 100 years ago.
- After WWII, U.S. manufacturers focused on functional areas other than manufacturing.
- By the 1970's, foreign competitors' integrated manufacturing technologies were producing quality goods at lower costs.
- U.S manufacturers responded by investing in updated technology, restructuring organizations, and including production requirements in their strategic planning.

Value Chain Management

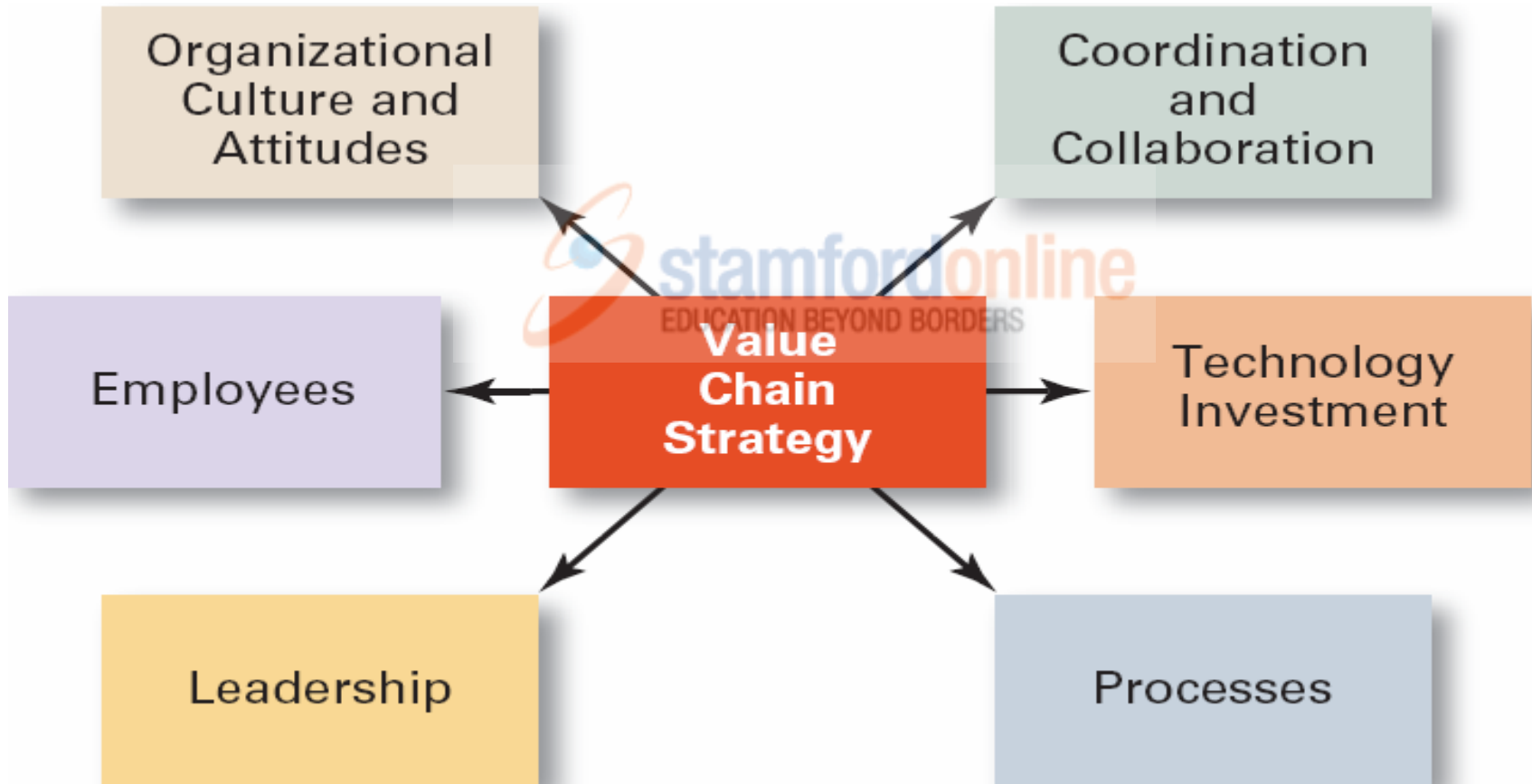
- Value
 - The performance characteristics, features and attributes, and any other aspects of goods and services for which customers are willing to give up resources (i.e., spend money).
- The Value Chain
 - The entire series of organizational work activities that add value at each step beginning with the processing of raw materials and ending with the finished product in the hands of end users.

Value Chain Management

(cont'd)

- What is Value Chain Management?
 - The process of managing the entire sequence of integrated activities and information about product flows along the entire value chain.
- Goal of Value Chain Management
 - To create a value chain strategy that fully integrates all members into a seamless chain that meets and exceeds customers' needs and creates the highest value for the customer.

Exhibit 19–3 Six Requirements for Successful Value Chain Management



Value Chain Management (cont'd)

- Requirements for Value Chain Management
 - A new business model incorporating:
 - Coordination and collaboration
 - Investment in information technology
 - Changes in organizational processes
 - Committed leadership
 - Flexible jobs and adaptable, capable employees
 - A supportive organizational culture and attitudes

Benefits of Value Chain Management

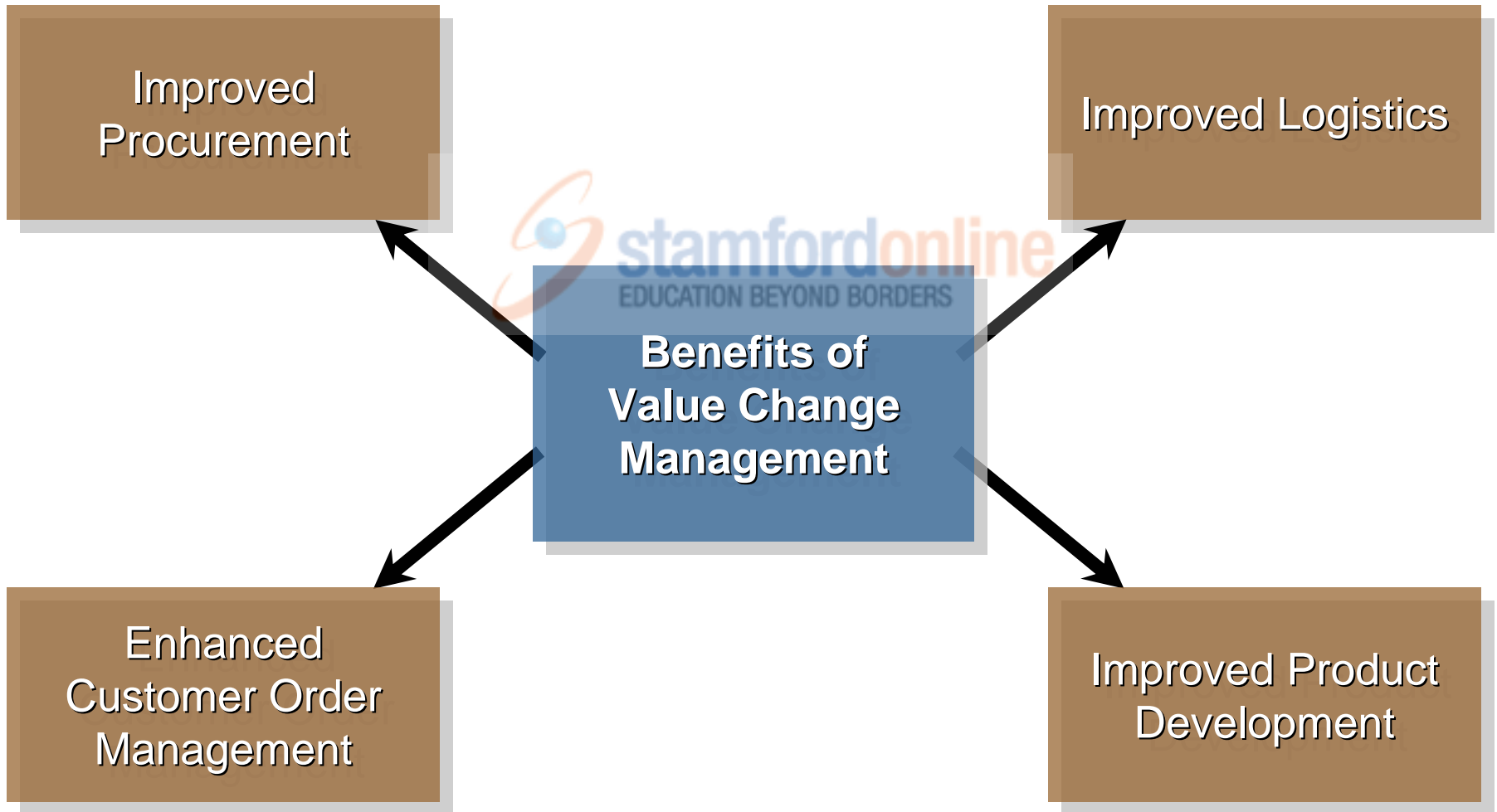
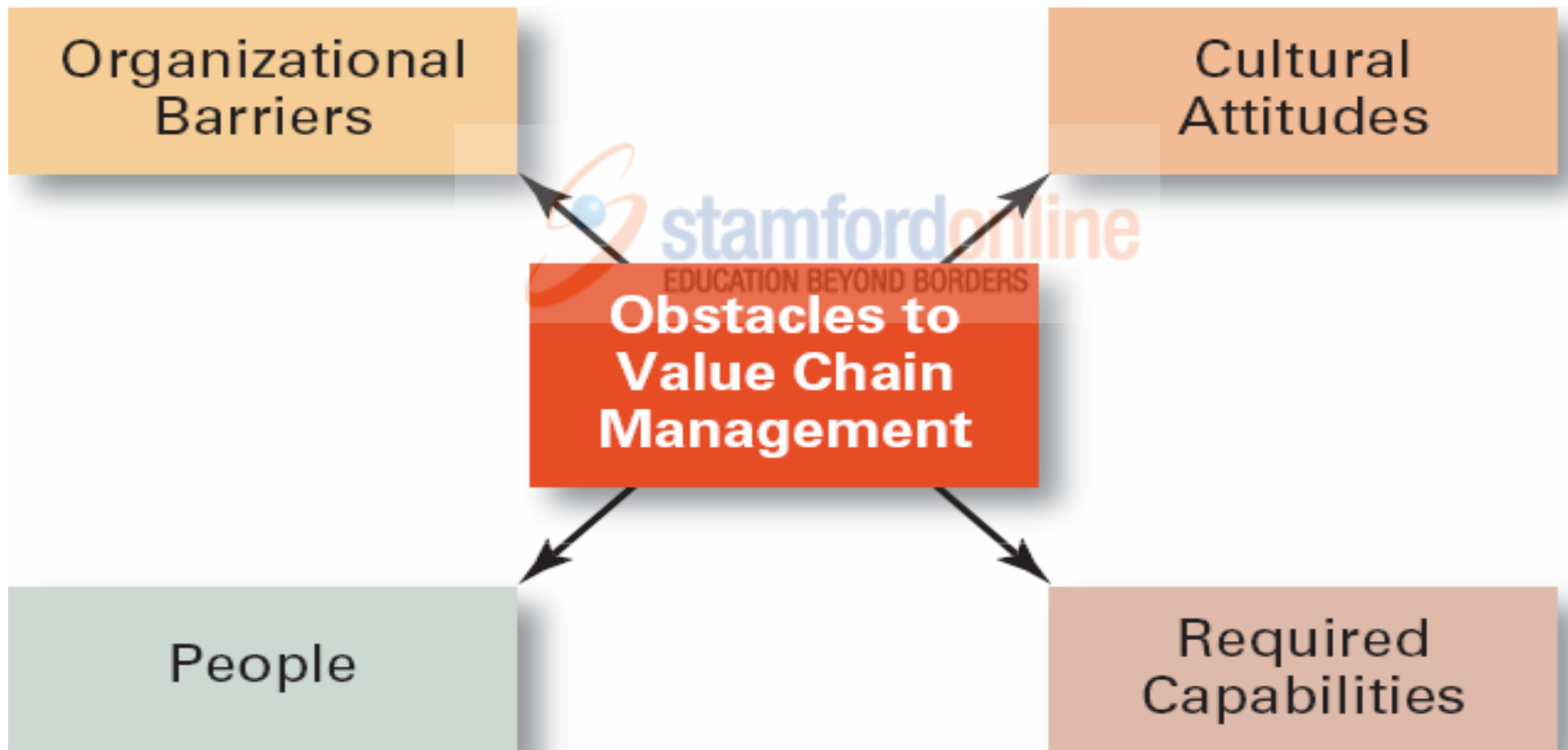


Exhibit 19–4 Obstacles to Successful Value Chain Management



Value Chain Management (cont'd)

- Obstacles to Value Chain Management
 - Organizational barriers
 - Refusal or reluctance to share information
 - Reluctance to shake up the status quo
 - Security issues
 - Cultural attitudes
 - Lack of trust and too much trust
 - Fear of loss of decision-making power
 - Required capabilities
 - Lacking or failing to develop the requisite value chain management skills

Value Chain Management (cont'd)

- Obstacles to Value Chain Management (cont'd)
 - People
 - Lacking commitment to do whatever it takes
 - Refusing to be flexible in meeting the demands of a changing situation
 - Not being motivated to perform at a high level
 - Lack of trained managers to lead value chain initiatives



Current Operations Management Issues

- Technology's Role in Manufacturing
 - Increased automation and integration of production facilities with business systems to control costs.
 - Predictive maintenance, remote diagnostics, and utility cost savings
- The Concept of Quality
 - The ability of a product or service to reliably do what it's supposed to do and to satisfy customer expectations.

Current Issues... (cont'd)

- Quality Initiatives
 - Planning for quality
 - Organizing and leading for quality
 - Controlling for quality
- Quality Goals
 - ISO 9000 certification
 - Six Sigma standards

Exhibit 19–5 Product Quality Dimensions

- 1. Performance—Operating characteristics**
- 2. Features—Important special characteristics**
- 3. Flexibility—Meeting operating specifications over some period of time**
- 4. Durability—Amount of use before performance deteriorates**
- 5. Conformance—Match with pre-established standards**
- 6. Serviceability—Ease and speed of repair or normal service**
- 7. Aesthetics—How a product looks and feels**
- 8. Perceived quality—Subjective assessment of characteristics (product image)**

Exhibit 19–5 (cont'd) Service Quality Dimensions

- 1. Timeliness—Performed in promised period of time**
- 2. Courtesy—Performed cheerfully**
- 3. Consistency—Giving all customers similar experiences each time**
- 4. Convenience—Accessibility to customers**
- 5. Completeness—Fully serviced, as required**
- 6. Accuracy—Performed correctly each time**

Sources: Adapted from J.W. Dean, Jr., and J.R. Evans, *Total Quality: Management, Organization and Society* (St. Paul, MN: West Publishing Company, 1994); H.V. Roberts and B.F. Sergesketter, *Quality is Personal* (New York: The Free Press, 1993); D. Garvin, *Managed Quality: The Strategic and Competitive Edge* (New York: The Free Press, 1988); and M.A. Hitt, R.D. Ireland, and R.E. Hoskisson, *Strategic Management*, 4th ed. (Cincinnati, OH: SouthWestern, 2001), p. 211.

Current Issues... (cont'd)

- Mass Customization

- Is a design-to-order concept that provides consumers with a product when, where, and how they want it.
- Makes heavy use of technology (flexible manufacturing techniques) and engages in a continual dialogue with customers.

- Benefits of Mass Customization

- Creates an important relationship between the firm and the customer in providing loyalty-building value to the customer and in garnering valuable market information for the firm.