## Chapter

# 1 Creating Customer Value Through Operations

### **Course Introduction**

Today's objectives:

- What are the course requirements
- What is OM
- Why study OM

#### **TEACHING TIP**

Ask the students to share their ideas on a business they would like to start. Discuss the major OM, Accounting, Finance, Human Resources, Management Information Systems, and Marketing decisions.

#### Course objectives:

- Primary goal of this textbook is to gain an understanding of how to make operations a competitive weapon
- Strategy and analysis

#### **Syllabus**

- Go over course outline
- Performance measures
- Office hours and other administration
- Questions
- Nature of assignments

#### **TEACHING TIP**

Introduce with AutoShare. A car-sharing service that leverages an integrated network of locations, people and web-enabled technology to provide greater mobility to customers

#### A. A Process View

Operations management deals with processes. A **process** is an activity or group of activities that takes one or more inputs, transforms them, and provides one or more outputs for its internal or external customers.

- Every process and every person in an organization has customers
- External customers: end users or intermediaries buying the finished product and service
- Internal customers: one or more other employees who rely on inputs from earlier processes

#### **TEACHING TIP**

Understanding these relationships is important to becoming an effective manager because processes must be designed with the customer in mind. Review Figure 1.1 Processes and operations to illustrate relationships

#### 1. How processes work

- Ad agency (example)
- The ad agency requires inputs from external sources to produce outputs, which are advertisements for clients
  - The account executive (AE) gathers the pertinent information from client and passes it along to creative design team and media planning team
  - The AE also gives the information to the accounting department for billing
  - The creative design team passes the layout design to a production team
  - The creative design team, media planning team, and production team send billable hours and expense items to accounting for billing
  - Accounting prepares invoice that is approved by the AE before sent to client

#### 2. Nested processes

- Process within a process
- Interconnectivity within a business
- Nature of each process's inputs and outputs
- a. Feedback at each output

#### 3. Service and manufacturing processes

- a. Differences
  - Customer highly involved in operations processes for services
  - Manufacturing outputs can be produced in advance and stored
  - Quality of physical goods can be monitored using physical measures of specific characteristics whereas services use perceptual characteristics

#### b. Similarities

- Review Figure 1.3 illustrating continuum of services and manufacturing process outputs
- Manufacturing and service providers perform both types of processes
  - ⇒ Lexus committed to after sales service support
  - ⇒ Disney produces and licenses goods related to characters
- Inventory

- ⇒ Hospitals keep inventories of medical supplies
- ⇒ Some manufacturing processes do not store inventory due to cost

## B. Supply Chain View

Most services or goods are produced through a series of interrelated business activities. Processes must add value for customers throughout the supply chain; reinforcing the link between processes and performance.

#### TEACHING TIP

Ask the students to share their ideas on inputs and outputs for: A hospital and a manufacturer. **Input Examples**: Hospital – Medical professionals, building, diagnostic equipment, etc. Manufacturer – workers, managers, drills, metal, energy, etc. **Output Examples**: Hospital – healed patients. Manufacturer – physical products.

#### 1. Core processes

- A set of activities that delivers value to external customers
  - Supplier relationship process: working effectively with suppliers can add significant value
  - Order fulfillment process: activities required to produce and deliver product/service to external customers
  - Customer relationship process: identifying, attracting and building relationships
  - New service/product development process: designing, developing and launching new services/goods

#### 2. Support processes

Provides vital resources and inputs to the core processes

#### 3. Operations strategy

 Pattern of decision and investments in products, services and processes used to implement a corporate strategy and create customer value

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#### 4. Corporate strategy

- Review Figure 1.4 illustrating customer value is the critical link between corporate strategy, competitive priorities and operations strategy
- a. Business settings
- To stay ahead of competition managers engage in environmental scanning where they monitor trends in the socioeconomic environment for potential opportunities or threats
- b. Developing core processes
- Allocate resources to develop new core processes or improve existing processes
- Core processes can be extended into new customer benefit bundles and new markets
- c. Global perspective
- Two approaches for international expansion
  - Strategic alliance
  - Locate operations in a foreign country
- 5. Market analysis
- A market analysis first divides the firm's customers into market segments, and then identifies the needs and opportunities of each segment

## C. Customer Value and Competitive Priorities

**Customer value** includes both the tangible and intangible product attributes that a customer desires; it is the combination of quality, time, and flexibility relative to prices

- Customer benefit bundles: consists of core good and/or service and a set of peripheral goods and services
- Competitive priorities: the relative weighting of the dimensions of customer value that operations management must possess to outperform its competition

#### **TEACHING TIP**

Discuss Table 1.1: Definitions, process considerations and examples of competitive priorities

#### **TEACHING TIP**

Managerial practice: learn how Costco uses operations for profit

- 1. Selecting competitive priorities
  - Firms must select a subset of competitive priorities to emphasize with operations processes and systems
  - Order winner: is a criterion that customers use to differentiate the services or products of one firm from those of another, such as cost, quality, time, and flexibility
  - Order qualifier is the minimal requirement for doing business in a particular market segment
- 2. Using competitive practices: targeting value at an airline

- Competitive priorities for the business-class segment are top quality and on-time delivery, whereas the competitive priorities for the economy-class segment are low-cost operations, consistent quality, and on-time delivery.
- a. Customer Relationship
  - High- performance design
  - Consistent quality
  - · Delivery speed
  - Variety
- b. Order fulfilment
  - Low-cost operations
  - High-performance design
  - Consistent quality
  - On-time delivery
  - Variety
- c. Supplier relationship
  - Low-cost operations
  - Consistent quality
  - On-time delivery
  - Variety
  - Volume flexibility
- d. New service development
  - Development speed
  - Customization
  - High-performance design

## D. Trends in Operations Management

There are several factors which are currently having a significant impact on operations management.

#### **TEACHING TIP**

Refer to Figure 1.5: "Growth in Service Sector Employment in Canada"

1. Productivity improvement

The value of outputs produced is divided by the value of input resources.

Productivity = 
$$\frac{\text{Output}}{\text{Input}}$$

- Labour productivity in Canadian business has improved by an average of 2.1% annually over the past four decades
- Investment in new equipment and technology was the most important factor contributing to this improvement
- Productivity measures two approaches
  - Single factor
    - ⇒ For example: labour productivity, machine productivity
  - Multifactor
    - ⇒ For example: labour cost, materials cost, and overhead costs
    - ⇒ Effective managers typically monitor multiple measures or performance

#### 2. Global competition

- Five developments have stimulated the need for sound global strategies
  - Improved transportation and communication technology
  - Loosened regulations on financial institutions
  - Increased demand for imported services and goods
  - Comparative cost advantages
  - Reduced international trade barriers
- a. Comparative cost advantages
  - What role does China play in globalization today?
  - What role does India play?
- b. Trading blocs
  - Regional trading blocs
    - $\Rightarrow$  NAFTA
    - $\Rightarrow$  EU
- c. Disadvantages of globalization
  - Relinquish proprietary technology
  - Political risks
  - Employee skills may be lower in foreign countries

#### 3. Sustainability and operations

- Environmental and social concerns cut across the entire supply chain
- Designing and managing processes to ensure that we meet humanity's needs today without hurting the ability of future generations to meet their own needs.

Performance is measured using a triple bottom line: financial, environmental and social

## E. Operations Strategy as a Pattern of Decisions

Operations strategy is the pattern of decisions and investments in products, services, and processes used to implement an organization's corporate strategy and to create customer value. The operations strategy must reflect a clear understanding of the firm's long-term goals.

#### **TEACHING TIP**

Review Figure 1.7: Operations strategy as a coordinated pattern of decisions

- Each part of an organization, not just the operations function, must design and operate processes that are part of a supply chain and deal with quality, technology, and staffing issues.
- Each function of an organization has its own identity and yet is connected with operations through shared processes