Lecture Notes

# Chapter 2: Operations and Supply Chain Strategies

## Learning Objectives

## 2.1 Compare the different levels of strategic planning by identifying the performance measures in each.

## 2.2 Describe how to formulate and evaluate operations strategy.

## 2.3 Contrast the formulation and evaluation of operating strategies for service organizations with those for manufacturing organizations.

## 2.4 Compare the different types of productivity measurements by how they are strategically used.

## 2.5 Describe how both manufacturers and service organizations formulate and evaluate their supply chain strategies.

## 2.6 Identify the key capabilities firms need to formulate and implement global operations and supply chain strategies and manage the risks related to them.

## 2.7 Describe what companies are doing to incorporate sustainability into their supply chain strategy and the problems they face in doing so.

## Operations Profile: Chubbies’ Supply Chain Strategy Keeps the Fun in Short-Shorts

## One of the fastest growing clothing brands on college campuses across the United States is Chubbies (San Francisco, CA).

## To support their growth, Chubbies developed a unique manufacturing and supply chain strategy.

## They raised millions in financing to expand their inventory and develop their own manufacturing operations in San Francisco, proudly labeling their clothing as produced in the United States.

## 2.1 Levels of Strategic Planning

### Corporate Strategy

## A corporate strategy attempts to address the fundamental question of what industries and markets the organization should enter and compete in.

## Corporate strategic planning is the broadest in scope (highest level in the hierarchy), has a long-term time horizon, and establishes the overall goals and directions for the corporation as a whole.

## Decisions made at this level include what businesses to acquire or divest, whether or not to acquire suppliers or distributors, and how to allocate resources between the different units.

## Companies are increasingly considering sustainability when in their corporate strategies.

## There are three performance targets that measure sustainability, i.e. triple bottom line.

## A firm’s triple bottom line not only includes the economic value it provides its shareholders but also the environmental and social value the company creates.

## Three overlapping components of sustainability are economic, environmental, and social value.

### Business Unit Strategies

## For corporations that own a portfolio of businesses, each needs a business unit strategy.

## Each of these businesses is typically referred to as a Strategic Business Unit, or SBU.

## A business unit strategy establishes how each business unit should compete within its particular industry or market.

## The core competencies of the SBUs refer to the activities they excel at, or strive to excel at.

### Functional Strategies

## Functional strategies should coordinate and integrate the activities and resources within each functional area.

## Functional strategies are developed and implemented at a lower level in the corporate hierarchy, have shorter time horizons, and are more specific and detailed in terms of their action plans than the higher level business strategies.

## 2.2 Formulating and Evaluating Operations Strategies

## The purpose of a firm’s operations strategy is to use the company’s operational resources effectively to help it achieve a competitive advantage.

## An operations strategy, which provides the roadmap for all of the decisions managers of the firm’s operations function make, is usually formulated in terms of the competitive priorities or core competencies of the firm, such as its ability to compete on prices and costs, quality, flexibility, time (speed), and innovation.

### Critical Elements of an Operations Strategy

## An operations strategy has four critical elements--customers, operational capabilities or critical success factors (CSFs), product factors, and core competencies--that can enable a company to achieve competitive advantage.

## Operations can come up with product-related features that customers most value or production technologies and processes that competition cannot easily imitate.

Product Factors

## Product factors include the nature of the product, its stage in the product life cycle, and the process used to produce that product.

## The nature of the product refers to the distinctive features or characteristics that identify the good or service.

## Products that are in the mature stages of their life cycles require different core competencies.

## Streamlining the processes enables a firm to make the delivery of the products more efficient.

Customers

## The ultimate aim of operations and supply chain strategies is to produce and deliver those products or services that not only satisfy but also captivate customers, the people, and groups who consume a firm’s products or services.

## Each downstream partner of that firm in the supply chain is also a customer.

## For example, you may be the end-user of the Crest toothpaste produced by Proctor & Gamble (P&G), but a retail store such as Walmart is also an intermediate customer.

Critical Success Factors

## Every industry has some unique strategic factors, such as resources or capabilities, which affect a company’s ability to successfully compete.

## These elements are called CSFs.

## Each firm should determine its own CSFs based on what is important to the customers in the target market.

## CSFs can originate from superior technology, operations and processes, logistics and distribution capabilities, marketing channels, etc.

Core Competencies

## There are five core competencies: price, quality, time, innovation, and flexibility.

## Core competencies are skills or key areas of expertise that a company has developed over time which distinguish the company from its competitors on the satisfaction of the costumer’s needs.

## A company cannot excel in all five core competencies. Therefore, a company has to identify a subset of these core competencies that it can be good at, and develop and nurture it.

Price

## One is to produce the product at a lower cost than the company’s competitors.

### For commodity products the firm can try to achieve economies of scale that drive the production down.

### If the product offering is not a commodity, the firm should try lowering cost of raw materials or labor.

## The second way a firm can compete on price is to be willing to accept a smaller profit margin.

### Walmart, for example, operates with lower profit margins by selling its products at low prices.

Quality

## Quality describes product’s fitness for use depending upon the price the customer is willing to pay for it.

## The eight most common characteristics of quality are: performance, conformance, features, durability, reliability, serviceability, aesthetics, and perceived quality.

## Competing simultaneously on the basis of all eight quality dimensions would be very expensive and difficult.

## The nature of the product might force the company to make trade-offs among them.

Time

## Time as a core competency has three attributes:

### 1. Product development cycle time: the time it takes to conceptualize a new good or service, produce it, and make it available to customers.

### 2. On-time delivery: firm’s ability to deliver the products to its customers on or before the promised delivery date.

### 3. Delivery speed: the ability to deliver the product or service faster than the rest of the competition can be a competitive advantage.

Innovation

## Innovation is the process of implementing new ideas or changes that create value for customers.

## Product innovation is the development and introduction of a brand-new product or service or the improvement of an existing product or service through design changes or through the use of new components and materials.

## Process innovation refers to the changes in the way in which product is produced or a service is delivered within the firm or across a supply chain.

Flexibility

## Flexibility is a firm’s ability to produce a range of different products or services or to respond efficiently to changes in demand.

## An order winner is a competitive criterion (core competence) of a product that causes a customer to choose it instead of a competitor’s product.

## An order qualifier is a competitive criterion that must be present in a product for it to be a viable competitor in the marketplace.

## An order loser is a qualifying criterion a firm fails to meet.

## Maintaining the Fit Among Critical Elements

## If the mismatch arose from changing market trends or from customers who no longer value the core competency provided by the firm’s product.

## If the mismatch arose from a decline in the firm’s operating capabilities because its technologies have become obsolete.

## If the mismatch is the result of a change in the stage of a product’s life cycle.

## Evaluating the Performance of an Operations Strategy

## The strategic profit model (SPM or DuPont model) provides a visual representation of an organization’s financial performance.

## The balanced scorecard includes strategic nonfinancial performance measures in addition to the traditional financial metrics.

## Balanced scorecard focuses on four critical areas:

### learning and growth

### business processes

### customer

### financial

## 2.3 Formulating and Evaluating Strategies for Service Organizations

## Strategic Positioning: identifying the target market

## Formulating the Service Operations Strategy

### 1. The Service Design

### 2. The Service Operations System

### 3. The Service Delivery System

## Tactical Execution: the day-to-day activities required to support the service strategy

### Continuous Service Improvement

## Plan, Do, Check, Act (PDCA):

### Plan: recognize an opportunity for improvement and plan for a change.

### Do: test the change by implementing a small-scale pilot study.

### Check: review and analyze the results of the test and identifying the lessons learned.

### Act: take action based on what was learned from the previous step.

## 2.4 Measuring Productivity as Part of Strategic Planning

## In the context of operations, productivity is the ratio of outputs (goods and services) produced to the inputs used.

## The single-factor productivity measure uses a single input in the ratio.

## Multifactor productivity is a productivity measure that uses all of the relevant inputs used to make the product or provide the service.

## Productivity index is the ratio of productivity measured in a particular time period to the productivity measured in a base period.

## Numerous factors affect productivity in both positive and negative ways.

## The two factors that can improve productivity rapidly are technology and the way in which the firm organizes and uses it resources.

## Productivity is harder to measure in the service sector because the inputs used for measuring productivity can be more difficult to assess.

### To measure service productivity, customers should be viewed as inputs.

## 2.5 Strategies for Supply Chains

### Formulating Supply Chain Strategies

## What is the nature and number of operating facilities needed?

## What suppliers and how many are needed?

## What work should be outsourced or offshored?

## What type of relationships should the firm have with its suppliers?

## What should the distribution network be and how should it be managed?

## 2.6 Global Strategies

## An effective global, integrated sales and operations planning process for key markets.

## A procurement, manufacturing, distribution, and research and development network.

## Tight links with their customers and suppliers so that they can better predict the demand for their products.

## Logistics partnerships to ensure the firm’s efforts to source products to low-cost markets.

## The ability to effectively recruit low-cost suppliers.

## A “go-to-market” strategy, which is a firm’s plan to provide value to its customers.

### Integrating Operations and Supply Chain Strategies

## Companies that have experienced greater success integrating their operations and supply chains globally have developed three capabilities:

### supply chain adaptability, which is the ability of the supply chain to respond to changes

### financial-engineering capabilities, which is the ability to create new financial instruments

### risk anticipation and mitigation capabilities, which refers to anticipating events that could disrupt global operations

### Risk Management Strategies

## Many unforeseen events can disrupt operational and supply chain activities.

## A firm’s operations should have a risk management program that can anticipate uncontrollable events.

## Corporations are working closely with their suppliers to safeguard their supply chains against future breakdowns.

## Businesses should also be concerned about disruptions to operations and supply chains from safety and security problems.

## 2.7 Sustainability Issues

## Research study conducted by Accenture PLC (Dublin, Ireland) concluded that many leading-edge companies are incorporating sustainable practices.

## Steps to progress toward more sustainable supply chains:

### map your supply chain

### communicate expectations

### establish a baseline for supplier performance

### develop training and capacity-building programs

### monitor performance improvement

### engage in industry-wide collaboration