Chapter 2
Operations Strategy and Competitiveness

September 24, 2008

OBJECTIVES

- Operations Strategy
- Competitive Dimensions
- Order Qualifiers and Winners
- Strategy Design Process
- A Framework for Manufacturing Strategy
- Service Strategy Capacity Capabilities
- Productivity Measures

Operations Strategy

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Competitive Dimensions

- Cost or Price
  - Make the Product or Deliver the Service Cheap
- Quality
  - Make a Great Product or Deliver a Great Service
  - Delivery Speed
    - Make the Product or Deliver the Service Quickly
- Delivery Reliability
  - Deliver It When Promised
- Coping with Changes in Demand
  - Change Its Volume
- Flexibility and New Product Introduction Speed
  - Change It
- Other Product-Specific Criteria
  - Support It
Dealing with Trade-offs

For example, if we reduce costs by reducing product quality inspections, we might reduce product quality.

For example, if we improve customer service problem solving by cross-training personnel to deal with a wider-range of problems, they may become less efficient at dealing with commonly occurring problems.

Order Qualifiers and Winners

- **Order qualifiers** are the basic criteria that permit the firm’s products to be considered as candidates for purchase by customers.

- **Order winners** are the criteria that differentiate the products and services of one firm from another.

Service Breakthroughs

- A brand name car can be an “order qualifier”

- Repair services can be “order winners”

  Examples: Warranty, Roadside Assistance, Leases, etc.

Strategy Design Process

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In the Kaplan and Norton’s Generic Strategy Map, under the Financial Perspective, the Productivity Strategy is generally made up from two components:

1. Improve cost structure: Lower direct and indirect costs
2. Increase asset utilization: Reduce working and fixed capital

In the Kaplan and Norton’s Generic Strategy Map, under the Customer Perspective, there are three ways suggested as means of differentiating a company from others in a marketplace:

1. Product leadership
2. Customer intimacy
3. Operational excellence

In the Kaplan and Norton’s Generic Strategy Map, under the Learning and Growth Perspective, there are three principle categories of intangible assets needed for learning:

1. Strategic competencies
2. Strategic technologies
3. Climate for action

In the Kaplan and Norton’s Generic Strategy Map, under the Financial Perspective, the Revenue Growth Strategy is generally made up from two components:

1. Build the franchise: Develop new sources of revenue
2. Increase customer value: Work with existing customers to expand relationships with company
### Operations Strategy Framework

- **Customer Needs**
  - New product vs. Old product
  - Competitive dimensions & requirements
- Quality, Dependability, Speed, Flexibility, and Price

#### Enterprise capabilities

- R&D
- Technology
- Systems
- People
- Distribution

#### Operations and Supplier Capabilities

- Support Platforms
  - Financial management
  - Human resource management
  - Information management

### Steps in Developing a Manufacturing Strategy

1. Segment the market according to the product group
2. Identify product requirements, demand patterns, and profit margins of each group
3. Determine order qualifiers and winners for each group
4. Convert order winners into specific performance requirements

Ref: example on p. 35

### Service Strategy Capacity Capabilities

- **Process-based**
  - Capacities that transforms material or information and provide advantages on dimensions of cost and quality
- **Systems-based**
  - Capacities that are broad-based involving the entire operating system and provide advantages of short lead times and customize on demand
- **Organization-based**
  - Capacities that are difficult to replicate and provide abilities to master new technologies

### What is Productivity?

**Productivity** is a common measure on how well resources are being used. In the broadest sense, it can be defined as the following ratio:

\[
\text{Outputs} \div \text{Inputs}
\]
**Total Measure Productivity**

Total Measure Productivity = \[ \frac{\text{Outputs}}{\text{Inputs}} \]

or

\[ \frac{\text{Goods and services produced}}{\text{All resources used}} \]

**Partial Measure Productivity**

Partial measures of productivity =

- Output or Output or Output or Output
  - Labor
  - Capital
  - Materials
  - Energy

**Multifactor Measure Productivity**

Multifactor measures of productivity =

- \[ \frac{\text{Output}}{\text{Labor} + \text{Capital} + \text{Energy}} \]
  - or

- \[ \frac{\text{Output}}{\text{Labor} + \text{Capital} + \text{Materials}} \]

**Example of Productivity Measurement**

You have just determined that your service employees have used a total of 2400 hours of labor this week to process 560 insurance forms. Last week the same crew used only 2000 hours of labor to process 480 forms.

Which productivity measure should be used?

Answer: Could be classified as a Total Measure or Partial Measure.

Is productivity increasing or decreasing?

Answer: Last week's productivity = 480/2000 = 0.24, and this week's productivity is 560/2400 = 0.23. So, productivity is decreasing slightly.
An operations strategy is concerned with which of the following?

- Setting specific policies and plans
- Short-term competitive strategies
- Coordination of operational goals
- All of the above
- None of the above

Answer: c. Coordination of operational goals

Typically a strategy breaks down into what major components?

- Operations effectiveness
- Customer management
- Production innovation
- All of the above
- None of the above

Answer: d. All of the above

A criterion that differentiates the products and services of one firm from another can be which of the following?

- An order qualifier
- An order winner
- PWP
- None of the above

Answer: b. An order winner

A travel agency processed 240 customers on Day 1 with a staff of 12, and 360 customers the on Day 2 with a staff of 15. What can be said about the productivity shift from Day 1 to Day 2?

- An increase in productivity from Day 1 to Day 2
- A decrease in productivity from Day 1 to Day 2
- The same productivity from Day 1 to Day 2
- Can not be computed from data above
- None of the above

Answer: a. An increase in productivity from Day 1 to Day 2 (Day 1 productivity = 240/12 = 20
Day 2 productivity = 360/15 = 24)
Question Bowl

In addition to traditional financial measures, what critical questions can a Balanced Scorecard help a company answer?

a. How do customers see us?
b. What must we excel at?
c. How can we continue to improve and create value?
d. All of the above
e. None of the above

Answer: d. All of the above