CHAPTER TWO

OPERATIONS STRATEGY AND COMPETITIVENESS

Chapter Objectives

Upon completion of this unit, you will be able to:

- Describe the linking of corporate strategy and operations strategy
- Describe the role of operations strategy as a source of competitive strength in a global marketplace
- Explain how to link marketing strategy to operations strategy through the use of competitive priorities.
- Provide examples of how firms use competitive priorities for competitive advantage
- Distinguish between make-to-stock, standardized-services, assemble to order, make-to order, and customized-services strategies and show how they relate to competitive priorities
- Explain how operations strategy is a pattern of decisions directed at processes, systems, and procedures in order to achieve certain competitive priorities.
- Formulate operations strategy for manufacturing and services

2.1. Introduction

Developing a customer driven operations strategy begins with corporate strategy which coordinates the firm's overall goals with its core competencies. It determines which customers the firm will serve, which new products or services it will produce, which responses it will take to changes in its business and socio-economic environment, and which strategy it will employ in international markets. Based on the corporate strategy, a market analysis categorizes the firm's customers, identifies their needs, and assesses competitor's strengths. This information is used to develop competitive priorities, which are the operating advantages that the firm's processes must possess to outperform its competitors. The competitive priorities and the directives from corporate strategy provide input for the functional strategies, or the goals and long-term plans of each functional area. Through its strategic planning process, each functional area is responsible for identifying ways to develop the capabilities it will need to carry out functional strategies and achieve corporate goals. This input, along with the current status and capability of each area, is feedback into the corporate strategic planning process to indicate whether corporate strategy should be modified.

In this unit, we focus on operations strategy, which specifies the means by which operations implement the firm's corporate strategy. Hence, we will try to describe the linking of corporate strategy and operations strategy. Besides, we will define what operations strategy is and how it relates to competitive priorities. We then address operations strategy in manufacturing and services and how operations performance is measured.

2.2. The strategic importance of operations

In order to understand the strategic role of operations in manufacturing and services we need to first understand the meaning of the word „strategy‟ and its different forms in organizations. Strategy is a course of action together with decisions on the specification and deployment of resources required to attain a stated objective. Depending on the size and type of organizations there are three forms of strategy: corporate, business and operational or functional.

1. Corporate strategy

This relates to the organization as a whole. How should the business fulfill its long-term objectives and satisfy its mission? A mission here means a statement of the purpose or the main reason for the organization's existence. For example, a business school's mission statement may be: „to be amongst the top ten business schools in Europe, providing programs at undergraduate, postgraduate and executive levels. ‟ Similarly, a mission for a construction firm may be: „to provide quality dam and highway bridges both at home and overseas. ‟

2. Business strategy

This relates to how an organization intends to compete in the market place. It sets the strategic objectives for various functions in the business, such as marketing, finance, operations, and so on. For example, a firm's competitive strategy may include: Produce at lowest cost (cost leadership)

- make products different (differentiation)
- Focus on one group of customers (focus).

The business strategy usually covers plans for three to five years ahead and is reviewed annually. It should specify what needs to be done over the next year or so in order to achieve the long-term goals of the business.

3. Operational or functional strategies

These are concerned with how the individual business functions such as personnel, marketing and production can contribute to the achievement of a firm's corporate and business strategies. Operations strategy is the pattern of decisions and the course of action taken either by the individual functions within a business (micro operations), or the whole organization (macro operation), in order to create goods and services which will satisfy the organization's business strategy. This means that operation's resources must be selected, deployed and managed in the most effective manner using the right technology, workforce, systems and procedures to meet the strategic goals of the organization.

2.2.1. Competitive advantage and competitive priorities

Many firms strive for competitive advantage, but few truly understand what it is or how to achieve and keep it. Competitive advantage can be viewed as any activity that creates superior value above its rivals. The strongest competitive advantage is a strategy that can‟t be imitated by other companies. In general, a competitive advantage can be gained by offering the customer a greater value than the competitors.

The key to developing an effective operations strategy lies in understanding how to create or add value for customers i.e. how to gain competitive advantage. Specifically, competitive advantage can be gained (value can be added) through the competitive priority (priorities that are selected to support a given strategy). Generally, there are 8 possible competitive priorities for process which fall in to four groups:

1. Cost: With in every industry, there is usually a segment of the market that buys strictly on the basis of low cost. To successfully compete in niche market, firm must necessarily, be the low-cost producers and even doing this does not always guarantee profitability and success. Products sold strictly on the basis of cost includes commodity like flour, petroleum, sugar etc. In other words, customers can't easily distinguish the products made by one firm from those of another. As a result, customers use cost as the primary determinant in making a purchase. To compete based on cost, operations managers must address labor, materials, scrap, overhead and other cost to design a system that lower the cost per units of the product or service. Low cost operation /make it cheap is thus, one of the competitive priority.

2. Quality: quality is a dimension of a product or services that is defined by the customer. Today, more than ever, quality has important implications. As for operations, two competitive priorities deal with quality.

a. High performance design: - is determination of the level of operations performance required in making a product or performing a service. This may include:
   - Superior features, close tolerance, and greater durability.
   - Helpfulness, courteousness and availability of service employees.
   - Convenience of access to service locations
   - Safety of product or service.
b. Consistent quality: measurement of the frequency with which the product or service meets design specifications. Customers wants product or service that consistently meets the specifications they contracted for, have come to expect or saw advertised.

For example, bank customers expect that the bank will not make errors when recording transactions. To compete on the basis of consistent quality, managers need to design and monitor operations to reduce errors. A firm that does not have consistent quality does not last long in a competitive global market place.

3. Time: As the saying goes," time is money". Three competitive priorities deal with time include:

a. Fast delivery time (delivery speed): is the elapsed time between the customer's order and filling it. An acceptable delivery time depends on the nature of the products. For example, an acceptable lead time can be a year for a complex customized machine, several weeks for scheduling elective surgery and minutes for ambulance.

   Manufacturers can shorten delivery time by storing inventory or by having excess capacity.

b. On time delivery: measurement of the frequency with which delivery time promises is met.
c. Development speed: measures how quickly a new product or service is introduced, covering the elapsed time from idea generation through final design and production. Development speed is especially important in the fashion apparel industry.

4. Flexibility: flexibility is a characteristic of a firm’s operations that enables it to react to customer needs quickly and efficiently. Some firms give top priority to two types of flexibility: customization and volume flexibility.

- **Customization:** is the ability to satisfy the unique needs of each customer by changing product or service design. For example, a hairdresser works with the customer to design a hair style that may be unique to the individual. Customization typically implies that the operating system must be flexible to handle specific customer needs and changes in design.
- **Volume flexibility:** is the ability to accelerate or decelerate the rate of production quickly to handle large fluctuations in demand. Volume flexibility is an important operating capability that often supports the achievement of other competitive priorities.

2.2.2. Operations Strategy

Operations strategy is concerned with setting broad policies and plans for using the resources of the firm to best support the firm‟s long-term competitive strategy. It has a long-term impact on the nature and characteristics of the organization. In large measure, strategies affect the ability of an organization to compete.

Strategies: are plans for achieving goals. The organization strategy provides the overall direction for the organization. It is broad in scope, covering the entire organization. Operations strategy is narrower in scope, dealing primarily with the operations aspect of the organization. Operations Strategy relates to products, processes, methods, operating resources quality, costs, lead times, and scheduling.

New Strategies:

Traditional strategies of business organizations have tended to emphasize cost minimization or product differentiation. While not abandoning these strategies, many organizations are adopting new strategies that are based on quality and/or time.

1. Time Based Strategies

This strategy focusses on reducing the time required to accomplish various activities (such as the time taken to develop new products or services and to market them, the time needed to respond to a change in customer demand, or the time needed to deliver a product or perform a service). By doing so, organizations seek to improve service to the customer, and to gain a competitive advantage over rivals who take more time to accomplish the same tasks.

The rational is that by reducing time; costs are generally less, productivity is higher, quality tends to be higher, product innovations appear on the market earlier, and customer services improved.

Some of the areas in which organizations have achieved time reduction are:

- Planning time
- Product/service design time
- Processing time
- Change over time
- Delivery time
- Response time for complaints.

2. Quality-based Strategies (will be discussed in later chapters)

This strategy focuses on satisfying the customer by integrating quality in to all phases of the organization. This includes not only the final product or service that is provided to the customer, but also the processes related to the design, production, or service after the sale.

2.2.3. Selecting competitive priorities

In certain situations, firms can improve on all competitive priorities simultaneously. For example, in a manufacturing firm, scrap from mistakes in operations and the need to rework defective parts and products sometimes might account for 20 to 30 percent of a products cost. By reducing defects and improving quality, the firm can reduce costs, improve productivity, and cut delivery time –all at the same time.

At some point, though, further improvements in one area may require a trade-off with one or more of the others. A survey of manufacturers indicated that raising the degree of customization or producing high performance design products may lead to both higher costs and higher prices. Therefore, firms must choose a selected set of competitive priorities to emphasize. Sometimes trade-offs are not possible because a competitive priority has become a requirement for doing business in particular market segment. Such a requirement is called an order qualifier.

In such situations, customers will not place orders for products or services unless a certain level of performance can be demonstrated. Fulfilling the order qualifier will not ensure competitive success in a market; it will only position the firm to compete. For example, in the market for TV sets, one measure of quality is product liability. Customers expect to purchase a set that will not require repairs for many years. Products that do not live up to that level of quality do not last long in the market. In the electronics industry in general, product reliability is rapidly becoming an order qualifier. In the automobile-repair industry, because quality has not yet become an order qualifier in all segments, trade-offs between low-cost operations and quality can still be used to gain an advantage.

2.3. Service and manufacturing strategies

Operation strategy cannot be done in a vacuum. It must be linked vertically to the customer and horizontally to other parts of the enterprise. Operations strategy can be a key element in achieving strategic corporate objectives. As noted elsewhere in the previous unit, it is essential to have input from all of the functional areas, including operations, in formulating corporate strategy. This increases the likelihood that corporate strategies will be matched with functional capabilities.

2.3.1. Service strategies

Operations strategy in service firms is generally inseparable from the corporate strategy. For most services, the service delivery system is the business, and hence, any strategic decision must include operations considerations. Competitive priorities provide a basis for the design of processes. Standardized services, assemble-to-order and customized-services strategies are used for processes devoted to the delivery of services.

a. Standardize service strategy: processes that provide services with little variety in high volumes tend to use the standardized-services strategy. Typical competitive priorities are consistent quality, on-time delivery, and low cost. Because of the high volume, processes providing the primary service can be organized so that the flow of customers follows a linear pattern in the facility. The tasks required of the employees and equipment are repetitive and routine, ideal for the standardized-services strategy.

b. Assemble-to-order strategy: the assemble to order services strategy amounts to designing operations to include processes devoted to producing a set of standardized services and processes devoted to assembling standardized offerings for a specific customer's needs.

The assembly processes must be flexible so that the correct package can be assembled for the customer. Typical competitive priorities are customization and fast delivery time. For example, long distance telephone service provider's offer customized service packages to retain customers in a highly competitive industry.

c. Customized-services strategy: processes designed to provide individualized services tend to use a customized-services strategy. Typical competitive priorities include high performance design and customization. Volume, in terms of service requirements per customer, is low. Nested processes tend to be grouped by the function they perform, and customers are routed from process to process until the service is completed. This strategy enables the production of a high variety of customized services while providing reasonable utilization of the processes. Many different routing patterns may exist in a facility employing a customized-services strategy. Barber shops and beauty salons, appliance repair shops, and interior decorating services are also suited for a customized services strategy.

2.3.2. Manufacturing strategies

Manufacturing strategies differ from those in services because of the ability to use inventories. Make-to-stock, assemble-to-order, and make-to-order strategies address the competitive priorities of processes devoted to manufacturing.

a. Make-to-stock strategy: manufacturing firms that hold items in stock for immediate delivery, thereby minimizing customer delivery times, use a make-to-stock strategy. This strategy is feasible for standardized products with high volumes and reasonably accurate forecasts. This strategy is also applicable to situations in which the firm is producing a unique product for a specific customer if the volumes are high enough.

Examples of products produced with a make-to-stock strategy include garden tools, electronic components, soft drinks, and chemicals. The term mass production is often used to define firms using a make-to-stock strategy. Because their environment is stable and predictable, mass production firms typically have a bureaucratic organization, and workers repeat narrowly defined tasks. The competitive priorities for these companies typically are consistent quality and low costs.

b. Assemble-to-order strategy: the assemble-to-order manufacturing strategy is an approach to producing customized products from relatively few assemblies and components, after customer orders are received. Typical competitive priorities are customization and fast delivery time. The assemble-to-order strategy involves assembly processes and fabrication processes. Because they are devoted to manufacturing standardized components and assemblies in high volumes, the fabrication processes focus on creating appropriate amounts of inventories for the assembly processes. Once the specific order from the customer is received, the assembly processes create the product from the standardized components and assemblies produced by the fabrication processes. The fabrication processes should be efficient to keep costs low, while the assembly processes should be flexible to produce the varied products demanded by the customers. Stocking finished products would be economically prohibitive because the numerous possible options make forecasting relatively inaccurate. For example, a manufacturer of upscale upholstered furniture can produce hundreds of a particular style of sofa, no two alike, to meet customers' selections of fabric and wood.

c. Make-to-order strategy: manufacturers that make products to customer specifications in low volumes tend to use a make-to-order strategy. With this strategy, a firm is viewed as a set of processes that can be used in many different ways to satisfy the unique needs of customers. This strategy provides a high degree of customization, which is a major competitive priority for these manufacturers. Because most products, components, and assemblies are custom-made, the manufacturing process must be flexible to accommodate the variety. Specialized medical equipment, castings, and expensive homes are suited to the make-to-order strategy.

Summary

- Strategic plan provides the frame work with reference to which other functional plans could be formulated. This is to mean that operations strategies are derivations from strategic plans.
- Customer driven operations strategy requires translating market needs into desirable capabilities for the operations function called competitive priorities. There are eight priorities: low-cost operations, high performance design, consistent quality, fast delivery time, on time delivery, development speed, customization and volume flexibility. Trade-offs among them are sometimes necessary. Management must decide on which dimensions the firm‟s processes should excel.
- With time based competition, managers seek to save time on the various steps taken to deliver a product or service.
- Process devoted to producing services choose one of the following three operations strategies: standardized services, which facilitates low-cost operations, consistent quality, and on time delivery, assemble-to-order services, which facilitates customization and fast delivery time, and customized services, which facilitates high performance design and customization.