Supply Chain Location and Efficiency

Supply Chain Management

The supply chain is an integral part of any business. By mapping out a clear, thorough supply chain, a business can carefully monitor its products and make decisions regarding the best suppliers, vendors, and distributors. Understanding the flow of materials from conception to completion also aids in making sound decisions regarding the best practices to use for any business. As companies increasingly move toward outsourced suppliers and distributors to perform costly tasks for them, the need to find better ways to control and manage supply problems becomes paramount.

Products must be delivered with speed, quality, and agility through the supply chain. In the 1980s, market share was lost to corporations with more efficient supply chains. To gain a competitive advantage, companies have responded to these demands by offering more information on websites and increasing their service commitment in numerous global regions. To keep customers satisfied and competitors at bay, operations managers must refocus and redesign the supply and service chains physically and logically.

Global Supply Chains

With the increase of a global economy and product distribution, companies must implement a supply chain and inventory management able to address the need of such a dynamic entity. Companies faced with diverse sourcing and production must now consider costs associated with materials, distribution, warehousing, and inventory. Companies are finding it to be more cost effective to establish a supply chain within each country of distribution, which requires a great deal of planning, cooperation, negotiating, and information sharing. Global markets depend on speedy international shipping schedules and keeping costs of products competitive despite obvious cultural and business challenges.

Several key areas must be managed by operations managers in the global supply chain environment:

- Location – determine the location and manage each facility as well as their respective sourcing points and distribution methods.
- Production – understand and manage what is being produced at each facility.
- Inventory – determine how much to order, when to order, and safety stock levels for each facility.
- Transportation – analyze the modes of available transportation for each facility as well as constraints such as shipment size, containers, routing, scheduling, and customs requirements.
Efficient Supply Chains

Efficient supply chains are most apparent where demand is relatively predictable and the source of supply is stable. The goal of an efficient supply chain strategy is to minimize the total cost of operations while fulfilling the needs of the customer. Production and distribution capacity utilization should be maximized, and economies of scale should be pursued. Operations managers should strive to remove as much wasteful activity or waypoints along the supply chain process as possible to ensure efficiency. Often, companies expanding globally are challenged in efficiency by having to support and service so many regions and facilities. Successful management of efficiency in this area, however, can lead to competitive advantage.

Location Selection

As stated, location selection is a critical decision facing operations managers. According to Heizer and Render (2005), here are some key considerations in the selection:

- Costs of labor including wages, relocation, and training
- Availability of labor that meets educational or skill requirements
- Logistical challenges for raw material
- Logistical challenges for shipment to markets (customers)
- Host government legislation including tax, right-to-work, and environmental laws
- Presence and cost of utilities
- Presence and cost of suitable facility site or sites
- Transportation availability and cost
- Exchange rates and strength and stability of currencies
- Import and export regulations and costs
- Desirable community attributes
- Safety of workforce including political or cultural instability

These selection variables need to be weighed according to cost, benefits, and risk to make wisest use of the capital investment.

Reference