Operations Management Design

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For businesses to thrive, their operations management techniques must continue to evolve over time. There are many considerations which should be taken into account. Operations managers would be wise to follow the current trends. They should also take note of emerging technologies and embrace them fully. In an effort to optimize their supply chain, they should evaluate their suppliers and make strategic changes as necessary. Every effort should be made to ensure that the actions of the corporation are ethical, and managers should audit operations to ensure they are sustainable and utilize renewable resources in an environmentally friendly way where possible. Additionally, it is often helpful to examine the operations of competing companies for insight into how they are structured and how their supply chains function.

Element 1: Emerging Trends in Operations Management

I argue that there are several current and emerging trends within operations management; I will present my case using Venkataraman (2018) to assert their importance and the methods by which they possess influence over the future of operations management. The first of three emerging trends in operations management is splintering. Supply chain risks have been increasing sharply. Supply chains are becoming more global, and the fact remains, companies are facing greater supply chain risks, including an inability to obtain resources, an inability to obtain labor, and difficulties due to mal-integration of information technology systems within the company's supply chain. Splintering is thus a formidable solution. Splintering is the act of breaking orthodox supply chains into smaller supply chains. The smaller supply chains enable a better response to increasing levels of business complexity. Additionally, it saves money and enables improved customer relations and service. These enhancements are small but admirable strides toward a positive change in the future of operations management through a reduction in

the cost of goods sold and an increase in customer service through increased availability of goods and faster production (Venkataraman, 2018).

The second emerging trend in operations management is sustainability. Sustainability involves using materials that will not deplete limited resources, and sustainability dictates that a corporation use methods or systems which will not harm natural cycles (Venkataraman, 2018). It has only been most recently that customers and consumers have been increasingly concerned that companies operate in a so-called 'socially responsible' manner. Gone are the days that strategies for operations and supply chain management would focus entirely on costs and efficiency. Sustainability, as a current operations management trend, will certainly change the future of operations management through the incorporation of responsible labor practices and conduct which minimizes detriment to the environment. Collectively, sustainable practices will help define and improve a company's brand.

A third current and emerging trend which has gained traction within operations management is the practice of corporate social responsibility (Chief Executive, 2018). Separate and apart from sustainability operations, corporate social responsibility extends these concepts further to refer to the incorporation of self-regulation within a company. The primary purpose of self-regulation is to ensure that the company is contributing to societal goals, including philanthropic, activist, or charitable concerns. Principally, a company may meet these goals through engaging in volunteering or through its involvement-in and continued support-of ethical practices (Chen, 2020). Corporate social responsibility becomes exponentially more important as a company grows. This is because, as a company grows in public-visibility and becomes more successful, there is an increasing responsibility to set the standard for ethical behavior within the industry. An example of a company leading the way within their industry in corporate social

responsibility is Starbucks (Chen, 2020). According to Starbucks' 2019 Global Social Impact Report, Starbucks created a college achievement plan for its employees. Under this program, over 3,200 employees have received sponsorship and, as a result, have graduated with college degrees. The corporation aims to achieve 21,800 more graduates within six years from the release of the report. Additionally, Starbucks contributes to their local communities and promotes volunteerism through its employment of 100 company workers in 20 different cities that are paid hourly to contribute 20 hours of their weekly 40-hour work week volunteering in communities that the company has selected and determined need support (Starbucks, 2020).

Element 2: Designing a Supply Chain Network

I contend that there are several steps that organizations should take to design a supply chain network, and I will present my case using Pinto (2018) to define these design considerations and detail principal departments that are involved. First and foremost, within the design of a supply chain network, the corporation must apply constraints dictated by its competitive strategy to filter out any suppliers who do not align. This consideration ensures that the needs of the customers are given the highest priority. In a manufacturing corporation, this might be a consideration that dictates the use of a particular material in the construction of one part of the product that is necessary to ensure durability. In another product-based corporation, this may be a consideration for the speed of production and availability of quantities of the product. According to Pinto (2018), the second step an organization must consider to supply chain network design is the projection of market competition, whether it be from local or international companies. Of third importance is the firm's financial horsepower. The company should consider the liquidity of its assets and any constraints which may inhibit future growth by answering introspective questions such as the following: Will the company be able to grow using

its present facilities? Will they need to build new ones? Should they partner with an existing member of their supply chain? For a successful supply chain design, due contemplation should be given to the three aforementioned design considerations.

In designing a supply chain network, numerous internal departments should be involved to produce optimal results. The facilities management department should be in communication with inventory management and the information technology departments. They should work with the sourcing and logistics divisions as well (Sage Publications, 2018). Each internal department is consulted and works together to ultimately make decisions such as whether to sell directly to consumers or to outsource their component manufacturing and assembly to contractors. Determinations will be made from the type of operating facilities needed to the number of manufacturing plants (or warehouses/distribution centers) as well as the general flow of information and inventory. Based on the decisions made internally, external organizations that provide warehousing, manufacturing, inventory distribution, or labor may be selected.

Element 3: Service-Based Supply Chains

In an effort to better visualize supply chain design, I will synthesize the design elements and considerations previously asserted and conduct a supply chain design for a hypothetical, service-based corporation. Information technology corporations were once constricted to servicing only local residential or business computers. However, in these days, with the widespread accessibility of high-speed internet, remote technical support is not only viable but, in some instances, preferred. A company's employee may need technical assistance or may be experiencing computer trouble, and today, help is just a phone call away. Gone are the days of waiting for a technician to arrive onsite. Be that as it may, an information technology company providing the service of remote technical support still needs suppliers to deliver parts to clients

and industry-specific tools to their own office. The service-based I.T. company will most likely outsource in these instances and have no onsite manufacturing. Given the limited scope of the example I have given, they may not even have a need for warehouses or distribution centers. For in-house tools, they may resort to suppliers that prioritize delivery speed, such as Amazon. For parts that the I.T. company may need for its clients, they may seek a supplier who provides a white-label service to ensure that the packaging reflects their company name, not the actual supplier. Secondarily, the quality of parts is going to be particularly important. The method I have designed incorporates splintering, an emerging trend in operations management today.

Element 4: Goods-Based Supply Chains

There are many strategies used in supply chain design within goods-based companies. I assert that Wal-Mart is a model corporation that demonstrates the fullest comprehension of supply chain optimization. Direct proof of my assertion was made just this year during the Coronavirus international pandemic. While many companies have closed their doors for business, Wal-Mart has managed to maintain operations with few interruptions to their supply chain. Examples of failing businesses include Pier 1 Imports and Stein Mart, and there will be more by year's end. Wal-Mart has not only survived the pandemic and kept good stock and inventory levels, but its corporate stock has increased by 21% since the beginning of the year (Yahoo Finance, 2020). Wal-Mart takes advantage of the emerging trends in operations management, including splintering, sustainability, and corporate social responsibility. According to Sage Publications (2018), Wal-Mart partners with P&G to track and manage the inventory of all of its products in Wal-Mart stores. This outsourcing decision comes at the cost of giving P&G premium shelf-spaces for all of its products throughout the store but permits Wal-Mart's relief of the responsibilities and duties of inventory tracking and management. Wal-Mart has some

suppliers label their product under the brand “Great Value.” This strategy enables remarkably lower prices since Great Value products are only sold in Wal-Marts, which eschews marketing and advertising expenses in exchange for exclusivity (Hip2Save, 2020).

Element 5: Multiple Layers of Suppliers

Corporations may have many layers of first and second-tier suppliers. In concept, second-tier suppliers provide basic services, raw materials, or components for manufacturing for the primary company’s manufacturing or production processes, while first-tier suppliers provide systems, finished goods (or components), and services to the primary company (Venkataraman, 2018). An example of a company utilizing tiers of suppliers is L.L. Bean, Incorporated. They contract with shirt manufactures globally, their first-tier suppliers, to produce the company’s shirts. The shirt manufacturers, in turn, rely on textile mills, cotton plantations, and other companies, which collectively constitute second-tier suppliers. There are many advantages to this arrangement. Firstly, L.L. Bean, Incorporated saves on costs in several forms, principally, in not bearing the burden of upfront manufacturing facilities’ costs. Secondarily, they save on the logistical challenges of manufacturing and production. Both advantages alleviate responsibilities, thus permitting a focus on the company’s primary goods or services model without diverting effort or focus to concerns not essential to their principal deliverables. There are also a couple of disadvantages, such as loss of control over the intricacies of manufacturing and loss of influence over facility management and its day to day operations (Venkataraman, 2018). Both disadvantages can become important if first or second-tier suppliers are conducting themselves in a manner which interferes with corporate social responsibility initiatives or sustainability claims of the primary corporation.

Element 6: Sustainability and Ethics Issues

I contend that facility location decisions are critical, and I will be using Pinto (2018) to assert that there are sustainability and ethical considerations which affect this corporate decision. Part of the criticality in this decision includes the effect these factors will have on the corporation's reputation within the public's purview. First, I will cover the sustainability considerations. When choosing a particular country for a company to lay a foundation in, it is always advisable to check the environmental quality, labor laws, and regulations. In some instances where the corporation will rely on natural resources, their regional proximity, and accessibility via local transportation methods is a concern. From a clean energy standpoint, questions about carbon emissions, the use of renewable energy sources, and recycling should be answered. Additionally, the cost-effectiveness of the internet and telecommunications access in that region, as necessitated by the firm, can be weighed in.

Ethical dilemmas will come up, and the firm will at times be forced to choose between what is good for business and doing what is perceived as right ethically (Pinto, 2018). An example of a real ethical dilemma can come up when a company makes a decision (or is contemplating making a decision), which would result in relocating manufacturing facilities. This relocation will certainly result in layoffs, which will affect a higher unemployment rate in the region. Depending on the size of the manufacturing facility, additional effects will ensue, to wit: Lower standards of living in the region and economic turmoil. Uncontrollable ancillary effects matriculate in the form of increased crime rates in that community after a mass loss in jobs. This happened in the 1950s in Detroit, and in 2014 in Wichita, Kansas, and Winston-Salem, North Carolina (Pinto, 2018). Conversely, ethical dilemmas do take other forms, such as facts coming to light that a company's manufacturing plants employ child labor, or if it is uncovered that workers are working in deplorable conditions, or with excessive working hours believed to

be beyond humane, or if paid wages which are deemed to be vastly below local standards for minimum compensation.

Conclusion

For businesses to thrive, their operations management techniques must continue to evolve over time. This treatise has analyzed and synthesized many considerations that should be taken into account, including trends in operations management and supply chain network design. I have also taken a specific, critical, and scholarly position on issues of sustainability and ethical considerations. The larger the business, the greater their responsibility becomes to set an example for others when it comes to ethical business practices, and the more elaborate their corporate social responsibility initiatives must be.

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