Final Project-Milestone Three: Sustaining Operations

Joan Zimmerman

Southern New Hampshire University

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Sustaining Operations Case Study Analysis

For an organization to stay competitive in the marketplace, it should entail a sustainable supply management process. This allows it to timely ship materials used in the production and also distribute the products to customers on a timely basis. Companies utilize various approaches in the production units enabling them to use the available resources efficiently. The company under analysis in the case study is BYD Auto Co. Ltd. It is an automotive company that deals with machinery production, such as trucks, buses, forklifts, and petrol engine vehicles (Nickerson & Rarick, 2011). This paper analyzes the theories and techniques implemented at the company and presents ways to enhance sustainable operations.

**Theories and Techniques**

***Just in time (JIT)***

This theory allows for efficient processing systems. Suppliers and manufacturers have a healthy relationship that enables products to be delivered just as needed. The aspect helps manage the cost incurred during delivery while maximizing the storage facilities on the premises. When ordering inventory when needed, it means that the company does not house safety stock and operates under low levels of inventory (Che-Ani, Kamaruddin, & Azid, 2017). It requires a manufacturer to be accurate while making the forecast for the products.

***Advantages***

Using JIT at BYD Ltd. helps manage the space needed to store the stock. Since the company deals with the production of heavy-duty machinery and vehicles, it would require ample storage for raw materials. However, they maximize the space needed to handle these materials.

It leads to waste reduction. Commodities used in machinery production are not piled up on the premises, which could lead to damage. It helps save money by avoiding the purchase of unnecessary stock.

***Disadvantages***

The company risks running out of raw materials. With the increasing demand for automobiles, the company may end up failing to meet the market needs.

The institution lacks control over the time frames.

It has to rely on the supplier's timeliness, and in case they fail to deliver the items on time, it impacts the relationships with their customers.

**Toyota Production System (TPS)**

TPS theory operates under three primary components. These are respected for stakeholders, continuous improvement, and standard work practices. BYD’s organizational culture involves coordination across various departments to enhance efficiency through the manufacturing process. This helps identify problems where appropriate action is taken immediately. Employees are allowed to come up with innovative strategies which are applied to enable the firm to stand on competitive advantage (Kehr & Proctor, 2017)

***Advantages***

It allows the company to carry out training for employees. This leads to a highly skilled workforce that utilizes innovative strategies in the production process.

It leads to quality products. Since workers are equipped with appropriate skills, it reduces errors, also enabling them to spot potential defects.

***Disadvantages***

Since materials are offered in discrete form, it may lead to inefficiencies in the manufacturing process.

**Lean**

It is a highly coordinated manufacturing system that focuses on using minimum resources to produce high-quality products. BYD has achieved the practice by utilizing a decentralized supply chain system, which allows strong coordination among stakeholders. This reduces unnecessary shipment of material, and distributors are keen to deliver the exact amount of procured products.

***Advantages***

It improves productivity and efficiency. Employees focus on delivering quality products.

Resources are maximally utilized, hence reducing wastage.

***Disadvantages***

Since the approach does not provide room for errors, equipment failure may lead to inconsistent production make it difficult to reach the production target.

**The relationship among TPS, Lean and JIT**

The aspects focus on reducing waste during production. It means that the company can manufacture vast goods while utilizing minimum resources making sure the products are offered at an affordable price. Their manufacturing processes share information related to quality services ensuring that they offer standard products.

**Sustainability**

**Triple Bottom line Concept**

Organizations in assessing their profits use the concept. These are acquired after a firm offers sustainable corporate solutions. The idea uses three approaches to sustainability which are highlighted below

 ***Social sustainability.*** This approach measures the business profits in terms of human capital. The company's social bottom line increases when it entails fair labor practices and involvement in corporate social responsibility programs.

***Environmental sustainability.*** The approach requires an institution to consume fewer natural resources. This means that the firm survives for a prolonged period and becomes successful in the business environment. Also, an organization ought to monitor its waste and emissions.

***Economic sustainability.*** The triple bottom line model measures the aspect through the impact made on the economic environment of an organization. An enterprise that supports various networks and the community contributes to financial health.

BYD can use this approach to engage in CSR programs. Since it utilizes natural resources, it is supposed to give back to society through engagement in community programs such as sensitizing green energy. It can also be engaged in the production of solar panels hence reducing high reliance on hydro-electricity that uses traditional fuels to operate heavy machinery. Also, the batteries used in electric cars need to be recycled. Therefore, the firm can collaborate with consumers to ensure that depleted batteries are returned to their production units.

**ISO 14000 Integration**

ISO 14000 is focused on monitoring the process used in the production process to enhance environmental sustainability. BYD utilizes methods that limit carbon dioxide emissions by automobiles through the manufacture of electric cars. These are supposed to rely on power from the batteries, and upon the wear and tear of a car battery, the components can be recycled.

**Corporate Responsibility Principles**

Corporate responsibility principles are focused on customers, employees, business partners, shareholders, and local communities. However, the most essential principles are those directed to clients. They should enable the firm to provide quality and secure products to customers helping solve the client’s challenges (Cagno, Tardini, & Trucco, 2017). Before engaging in contracts, BYD should offer appropriate information to customers so that they can make reliable decisions. The prices should be friendly, ensuring that the firm stands on a competitive edge.

Customer satisfaction should be the primary concern for an enterprise. This is because they are the primary contributors to the success of the business; thus, their taste and preference should be met. BYD has managed to offer quality products enabling it to compete on the global market. Their resources are made available at the premises without delay, and the workforce is highly trained to meet the market demand for quality automobiles.

References

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