SCM Case Analysis: Forecasting and Planning

Student Name

School of Business, Technology, and Health Care Administration, Capella University

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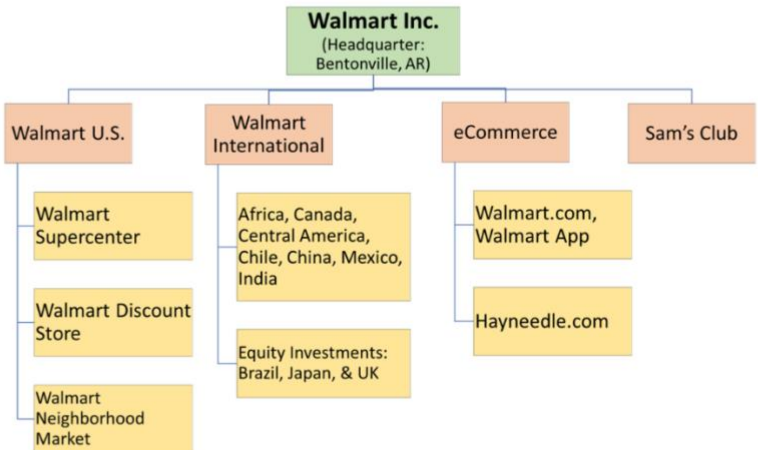
Assessment 2: SCM Case Analysis: Forecasting and Planning

Supply chain management encompasses a multitude of interconnected activities that support the operations and diverse needs of businesses (Chopra, 2018). Efficient supply chains require a balance between the supply of goods and consumer demand. Each activity within the supply chain, such as production, inventory management, distribution, and retail, can be optimized through demand forecasting, which plays a crucial role in the entire supply chain (Chopra, 2018). By accurately predicting demand levels, businesses can generate the necessary information for planning their supplies. Reliable demand forecasting strategies contribute to effective inventory management, preventing overstocking or supply shortages.

Company Background: Walmart's Business Model Walmart Inc., founded in 1962 as a small discount store in Rogers, Arkansas, has grown into a retail giant with a significant market share in the United States (Walmart Inc., 2022a). With a 5.6% market share, Walmart is recognized as America's largest retail chain operator. The company operates globally and employs over 2 million associates across its operating segments (Walmart Inc., 2022b). Walmart's success is built upon its corporate philosophies of everyday low prices (EDLP) and everyday low cost (EDLC). These philosophies are supported by the company's supply chain strategies, which enable Walmart to maintain affordable prices. Consequently, Walmart's world-class supply chain strategies have positioned the company as a cost leader in the retail market (Lin, 2019).

Figure 1

Walmart's Business Model



Note. Walmart's business structure is divided into four operating segments.

Walmart's business model is structured into four key operating segments (Figure 1). The Walmart U.S. segment comprises three retail designs, while Walmart International includes operating stores in various global locations and equity investments in foreign countries (Walmart Inc., 2022b). The company's eCommerce segment operates through its retail website, including the Walmart retail app, and other acquired retail channels. Additionally, Sam's Club serves as Walmart's membership-only retail segment. These segments are interconnected, with the physical stores also functioning as hubs for online orders, offering services such as pickup and delivery, ship-from-store, and digital pharmacy fulfillment options (Walmart Inc., 2022, p. 7).

Walmart's Supply Chain Strategy Despite its segmented operating structure, Walmart's supply chain strategies remain centrally coordinated. The company's supply chain network revolves around its centralized warehouse and distribution strategy, facilitated by strategically located facilities (Yuan et al., 2021). Walmart boasts 210 distribution facilities across the United

States, staffed by a team of drivers and a fleet of distribution vehicles (Walmart Inc., 2022a). These warehouses consolidate goods from suppliers, stores, and allocate dry goods and merchandise to Walmart retail locations. On average, each distribution facility supplies goods to 90 to 150 retail locations nationwide (Walmart Inc., 2022a).

In addition to centralized warehousing and distribution, Walmart utilizes a vendor-managed inventory (VMI) system, particularly for frozen and perishable products (Lin, 2019). As the majority of Walmart's products consist of dry goods and general merchandise, the adoption of VMI ensures high-quality products in all Walmart retail stores (Walmart Inc., 2022b, p. 8). The combination of centralized warehousing and distribution with VMI supports Walmart's commitment to its low-cost pricing strategy, aligning with the EDLP and EDLC philosophies (Hugos, 2018).

Walmart and Amazon.com are two prominent retail giants known for their efficient supply chain management. This article examines the similarities and differences in their supply chain strategies, with a focus on transportation, global challenges, demand forecasting, and the impact of pricing promotions on demand. The objective is to highlight the importance of these factors in maintaining supply chain efficiency and driving sales and profitability.

Comparing Walmart and Amazon.com's

Supply Chain Strategies Walmart and Amazon.com employ similar supply chain strategies. Both companies utilize centralized warehousing and distribution methods to streamline their operations. While Walmart excels at integrating its vendors into its distribution network, Amazon.com focuses on distribution and logistics as key drivers of its business (Jindal et al., 2021). Additionally, Amazon.com leverages advanced technologies, such as robotics and artificial intelligence, to modernize its warehouse facilities, resulting in a more efficient and transparent inventory management system that supports its global operations (Hugos, 2018). By leveraging their competitive capabilities, both companies have established a strong market presence on a global scale.

Walmart's Transportation Strategy

Walmart's transportation strategies are closely interconnected with its warehouse and distribution strategies (Yuan et al., 2021). The company takes pride in its distribution fleet, consisting of approximately 90,000 trucks and tractors, along with 12,000 drivers responsible for operating its delivery vehicles (Cortes, 2022). To fulfill its supply chain needs, Walmart employs cross-docking, a method where goods from suppliers are transferred directly to Walmart's trucks through its warehouse docks, enabling efficient delivery to target stores (Lin, 2019). Moreover, for its eCommerce and omnichannel distribution, Walmart has partnered with crowdsourced-fulfillment platforms like DoorDash and InstaCart (Jindal et al., 2021). To support its sustainability goals and enhance eCommerce delivery performance, Walmart plans to invest in electric-powered vans for Last Mile Delivery, with a rollout scheduled for 2023 ("Walmart To Purchase," 2022).

Global, Economic, and Political Challenges in the Supply Chain

Walmart's global supply chain is susceptible to various uncertainties that can hinder its efficiency. Operating in 23 countries apart from the United States, the company faces global challenges like pandemics, which can cause delays, bottlenecks, and congestion in its upstream supply chain (Metzger, 2021). Climate and weather conditions, technological gaps, and industrial capabilities of suppliers are additional global challenges affecting supply chains (Chopra, 2018).

Economic challenges often intertwine with political factors, as political policies can influence economic stability (Chopra, 2018). Walmart identifies inflation, fluctuating petroleum prices, energy costs, labor expenses, and recessions as crucial economic facets that can impact its supply chain efficiency (Walmart Inc., 2022b, p. 16). Macroeconomic factors like tariffs and import costs also affect supply chain performance, influencing supply availability and retail prices (Chopra, 2018). Walmart is currently grappling with rising inflation rates, which may impact the prices of essential grocery items and pose a burden for consumers (Moran, 2022). Furthermore, political factors such as trade agreements, government stability, and regulations can significantly affect Walmart's supply chain efficiency, including the capability of foreign suppliers to fulfill orders and import and export regulations (Chopra, 2018; Walmart Inc., 2022).

Finally, political facets such as trade agreements, government stability, and government regulations have serious effects on the supply chain efficiency of businesses the size of Walmart (Chopra, 2018). As the company explained, political instability may pose hurdles to the capability of foreign suppliers to fulfill orders. Meanwhile, trade agreements can impact the supply agreements of the retail giant with its foreign suppliers. Finally, government regulations may pose an additional burden for Walmart in terms of product importation and exportation (Walmart Inc., 2022).

While the company has no secure way to prevent hurdles caused by global, economic, and political uncertainties in the business, Walmart can reduce the negative implications of the mentioned challenges by efficient inventory management and demand forecasting (Blanchard, 2010). Through these functions, the company can maintain a sufficient volume of goods among its warehouses and distribution facilities without the pressure of experiencing a shortage if a global, economic, or political dilemma occurs.

Role of Demand Forecasting

Demand forecasting is a supply chain function that involves the application of forecasting tools and processes for demand planning (Chopra, 2018). Demand forecasting is crucial in maintaining supply chain efficiency which also enables the company to secure a sufficient supply of products to secure sales. Forecasting the level of demand is vital in boosting the resilience of businesses, particularly for Walmart as a retail firm. It is important to understand that among retail firms, the turnover rate of goods can be materially high; therefore, it is crucial to furnish enough supply of goods to meet the needs of the consumers. Demand forecasting is not a fool-proof process because businesses depend only on available historical information, making errors and inaccuracies highly possible; but it is a necessary component of supply chain planning, mainly in inventory management (Chopra, 2018). Demand forecasting also provides businesses the opportunity to make the appropriate adjustments in their procurement and distribution schedule given the impact of seasonality such as holidays. Events like this can alter typical purchasing behaviors of consumers which prompts businesses to either increase or decrease supply in the inventory.

Effect of Pricing Promotions on Demand

Pricing promotions, from the marketing viewpoint, can stimulate consumer spending. In the supply chain, various pricing promotion strategies have the same function which can then increase demand for a particular product (Chopra, 2018). As was mentioned earlier, the driving forces of Walmart's retail activities are encompassed in everyday low prices (EDLP) and Everyday low cost (EDLC) philosophies of the company; therefore, for the company, pricing strategies must be strategically decided to attract new customers and maintain the loyalty of their clients. Pricing strategies for the company can influence consumers' loyalty to the firm, more so to the brands carried by the retailer (Nijs et al., 2018). More importantly, pricing promotions are a driver to balance supply and demand. Retailers are price takers, as such, it is through promotions that they can be a step ahead of their competitors (Chopra, 2018). On this note, the demand for a particular product must be sustained. Shortage in demand for products included in the promotion can affect the satisfaction of consumers and can generate negative effects on the business which will reflect in the sales and profits (Faith, 2018).

Conclusion

Planning is a critical part of supply chain management because it ensures that the individual supply chain activities are aligned towards the same goal and compatible with one another. Coordination, therefore, is a critical facet of supply chain management, effectively linking suppliers with businesses and retailers with their customers. The case of Walmart's supply chain processes and strategies illustrate how supply chains are influenced by the business environment and model of the operations. The case also illustrates the significance of knowledge of external challenges on supply chain planning and demand forecasting. Lastly, pricing strategies and considerations are also essential in supply chain management as a driver for the demand that directly translates to improved sales and profitability.

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