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An incisive assessment of Walmart's supply chain management

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ABSTRACT

This paper aims to conduct an in-depth analysis of Walmart's supply chain management. The fundamental objective is to understand the efficiency of its supply chain and its influence on the global market. The paper seeks to elaborate on three objectives which will serve as the primary interests of the research. The first objective is to establish the importance of supply chain management in Walmart's phenomenal rise as a corporate giant. The second objective is to highlight the extent of efficiency of its supply chain management. The final objective of the paper is to discuss the challenges that Walmart currently faces and the scope for improvement in a particular area.

Keywords— Walmart, Global supply chain management, Case study, Global influence, Business, Logistics, Challenges

1. INTRODUCTION

Walmart, one of the biggest retailers on earth and the world's biggest commercial employer, has a truly global influence that touches consumers and businesses around the world every day. Rapidly expanding into emerging markets and developing countries, Walmart is a tough competitor for retailers as well as a source of best practice in a number of retail disciplines such as procurement, logistics, systems, and store format innovation. Walmart's supply chain management and logistics department have played a crucial role in its evolution as a global brand. Today, it stands as the world's largest company by revenue and also the largest private employer in the world. Walmart's investments outside America have seen mixed results. Its operations and subsidiaries in the United Kingdom, Central America, South America, and China are highly successful, whereas its ventures failed in Germany and South Korea.

2. RESEARCH AIMS AND OBJECTIVES

The aim of the research is to evaluate the efficiency of Walmart's Supply Chain Management and its pivotal influence on the global market. The primary objectives of the study are as follows:

- To understand the evolution of Walmart's supply chain
- To analyze the efficiency in its supply chain management and its influence on the global market
- To identify the current challenges involved in its supply chain management
- To suggest any suggestions/recommendations for improvement.

3. DATATYPE AND COLLECTION OF DATA

In this research, the researchers have dealt with secondary data. The data has been collected from various sources such as reputed journals, magazines, books, websites, etc. On the other hand, the researchers have also studied the various reviewed literature focused on Walmart's Supply Chain Management in the form of literature review. In this case, the researchers have mainly concentrated on two aspects: authenticity and quality of the data. Accessibility of the secondary data has been considered as a major issue related to this research.

4. LITERATURE REVIEW

Logistics: Walmart's Biggest Single Global Advantage

4.1 About in-house Supply Chain Development

Unlike many other retailers which grew to rely on third-party wholesalers and distributors, the development of Walmart's logistics system was largely achieved in-house. This is largely due to the fact that Walmart's early pattern of growth saw it set up outlets in often isolated rural communities- meaning that distributors found it difficult and uneconomical to deliver to Walmart's stores. Therefore, the retailer was pretty much left on their own when it came to distributing products to its stores.

This self-reliance saw Walmart build and operate its own distribution centers and also run its own fleet of trucks. Similarly, the implementation of the automation and mechanization of distribution centers and the introduction of inventory management and merchandise-tracking technologies were all developed and implemented internally by Walmart. Walmart also began using warehouse automation technologies and demanded suppliers to provide the retailers with custom-designed technologies better aligned to Walmart's own business and objectives. Finally, the inclusion of suppliers within a vertically integrated, data-driven supply chain was initiated by Walmart and developed using Walmart technologies like Retail Link.

4.2 Establishing a Supply Chain in the 1960s

In its early stages of development, distribution to its stores used to be a problematic affair. The stores were often too small to receive huge consignments of merchandise from suppliers, so in order to accommodate the shipments, they would deliver it to Walmart's warehouse where the consignments are broken down and redistributed to the stores. However, this process proved to be very expensive and inefficient for Walmart. In the early 1960s, Walmart laid the foundation basis for its supply chain strategy. They soon set about preparing designs for huge warehouses. The approach adopted was based around the idea of hub and spoke approach where all the stores had to be within a day's drive of a distribution center. This would in return enable Walmart to open its stores near the distribution center while still observing the day's drive rule until it saturated the market.

As a result, Walmart's strategy on logistics 'hand-in-hand with Walmart's use of technology, allowed the company to blow past competitors in areas of cost, real-time management of merchandise, and customer satisfaction'

4.3 Key Highlights of Walmart's Supply Chain Management

4.3.1 High level of customer service: Walmart focuses its services on maintaining and regulating its supply chain in an efficient manner in order to deliver to its consumers in the best way possible. Although it is sometimes evident in a lot of companies that due to cost cutting in scm, the customer satisfaction is not fulfilled. But Walmart has managed to cut costs as well as deliver low prices to its customers. Wal-Mart still continues to grow and expand into the international arena and this phenomenal growth of the company is attributed to its continued focus on customer needs and reducing cost through efficient supply chain management practices. (Uygun, 2014)

4.3.2 EDLP: Walmart has been able to provide its customers with good products at a low cost with the concept of Everyday Low Prices. Walmart put this practice into effect by eliminating the intermediaries and making a contact directly with the suppliers. This also helped them save a lot of costs on advertisement, as it became the best-known retailer in the world by providing best products at low costs. Walmart is also able to negotiate with manufacturers and learned the best cost reduction techniques.

4.3.3 Tech-enabled: Walmart has been successful in building an efficient supply chain due to the correct use of technology in the business. With features such as RFID, CPFR and EDI, the supply chain of Walmart are internet based which enables crisp and faster communication among different parties.

- **RFID:** Radio Frequency Identification tags are used in warehouses to identify items and get their details in a nutshell. The tags contain all the information about that particular product which can be identified, once scanned with the scanner. As the products get scanned, it creates a real time database which displays a clear picture of how much inventory is available and how much has been ordered. It also enables the company to target minimum inventory and deliver at the right time, place and price.
- **CPFR:** Collaborative Planning Forecasting and Replenishment technique helps in estimating demand and coordinate business plans with supply chain partners. The data is shared between the vendors and Walmart to ensure inventory availability during the season of more sales and otherwise. Accordingly, the orders are placed to replenish the stores with required items.
- **EDI:** Electronic Data Interchange reduces the manual efforts of transferring data from one entity to another. The data is transferred faster and more accurately among supply chains. It also reduces the chances of duplication of data and eliminates multiple data. Hence, resulting in the efficient working of the supply chain.

4.4 Cross-docking

Walmart started using the cross-docking technique in its retail sector to cut costs and provide Just in Time inventories. In cross-docking, the goods are continuously transferred to the company's distribution centers instead of waiting in the warehouse. After packing and selection, the goods are not kept ideal at anyplace for more than 48 hours. This reduces time and also keeps replenishing the shelves. However, this depends on the customer's demand and how they react to the inventory kept in stores. As this technique requires close coordination, the above-mentioned technology helps them to communicate efficiently. (Jawad, 2017)

4.5 Logistics

Walmart has come up with its own transportation system wherein they have more than 3500 trucks serving for distribution centers. It has combined technology with logistics which provides them with faster replenishment of goods (within a week) and faster communication with all suppliers. (Nguyen, 2017)

5. CHALLENGES TO WALMART'S SUPPLY CHAIN

5.1 Runs its own fleet of transport means

Walmart has been seen less on outsourcing trucks and vehicles for delivering the goods in the past years, by doing this they faced many problems and pull-backs. Few of them includes the cost of owning trucks, deviation from their competency, higher pay (it is observed that the truck drivers' salaries have been hiked), inventory management issues.

5.2 Problems in their operating cycle

There are hundreds of distribution warehouses of Walmart around the world. Each of them is connected with the delivery parties. When the orders are received, the products are sent to these parties individually. This increases the cost and time taken to deliver the goods. Due to this, the end-customer grieves about the product not having on the shelves of the store.

5.3 JIT

No doubt Just in Time (JIT) has helped the company with smaller investments and space reduction, but they are facing a few challenges because of JIT and it had cost a lot for them. One major problem they are facing is that their products are running out of stock and are not available in the stores. Since the delivery parties are linked to the individual warehouses and are dependent on the orders accordingly, it takes time for the products to reach the store. Walmart's business deals with products which are mostly available from many sources which are also their competitors, if the customers don't find it in their store/stock, they will order it from somewhere else.

5.4 Frequent changes in the IS

The advent of ERP is one example where the company had to change its working way of the whole organization internally. Since Walmart is a big company with subsidiaries in many countries, it was costly and tedious to adopt such a system. Not only IS, but other changes in the IT segment as well, Walmart has been investing in IT intensively, due to which costs go up while setting up the systems.

5.5 Cultural dynamics

Its failure in countries like India, China, Korea, Indonesia, Japan, etc. have displayed that adaptation is more important than having standardized products (or segment of products) all throughout. In India, people's perception of big stores is that they will get expensive items there as compared to a small retail store because in a large store the expenses will be high. People tend to buy small quantities of vegetables and other edibles as they think freshness of the vegetables is more important than price difference, that's the reason Walmart was not able to make its mark on this particular niche as they meant to sell in bulk at a cheaper rate. In Germany, they were not able to make an impact because there no deviation is allowed in terms of supply chain processes and not more of IT is supported in their systems, eventually they had to merge up with the local retailers to be in the business. Such cultural issues have affected the company at large and they had to even merge with local retailers to be in the business or leave the country.

5.6 Punishing the suppliers

If the delivery is not on time, Walmart charges its suppliers with 3 percent chargeback. This increases the pressure on suppliers, there's a problem in maintaining long term relationships with them which the company has least focused upon. Not only this, with investment in IT drastically, their suppliers and vendors also have to follow and be up to date with technological changes even if it is costing them a lot.

5.7 Understanding the environment globally

In countries where they couldn't sustain their business, there was a lack of understanding of the work environment and threats revolving thereof. For example, In China, they failed due to local protectionism, infrastructural deficiency, consumer behavior, etc. In Japan, ALL the suppliers were lacking behind the technology so they didn't adapt to the changes which Walmart brought. In Korea, infrastructural issues, merchandise mix, high operational costs, etc.

6. INFLUENCE OF WALMART IN THE GLOBAL MARKETS

6.1 Local Retailers

Walmart has established itself so well in the market that they are able to sell goods at a lower price than its competitors. This low price is because it gets all the goods from its suppliers at a very low price. Suppliers are bound to provide them with the prices they claim because when they sell their products through Walmart, consumers are aware of them and can trust the brand. Hence, whatever may be the price, they choose to sell via Walmart at prices claimed by them. This can create problems for the local supermarkets and other retailers as they sell products at a higher price than Walmart. Hence, resulting in lower sales which eventually makes a loss for local markets. Also, Walmart is present in almost all states in the US. Their expansion is a threat to the local shops and their business. This effect of deteriorating business of other retailers due to expansion of a big company like Walmart at different places is called the Walmart effect. Therefore, a lot of countries resist the entry of such supermarkets.

6.2 Consumers

Consumers all across the globe benefit from the prices offered by Walmart. In a study done in the US, it was found that poorer families shop at Walmart 'regularly'. Walmart offers more discounts on valuable goods like chicken, eggs, vegetables, etc. than the general stores. Hence people prefer to buy even these small items from this large supermarket. Due to this, Walmart's competitions also offer lower prices. Hence, customers gain the advantage of having an option to buy goods at the least prices. It also paves the path for customers who otherwise don't come to Walmart for shopping. As soon as there is a discount, they would rather prefer buying things from a store which offers cheaper goods of the same quality. Hence, it also develops new customers due to this.

6.3 Suppliers

Walmart's buying power has affected its suppliers as well. As it expanded to Mexico, it encouraged local suppliers to supply goods and gain benefit. It has also asked its upstream suppliers to provide RFID tags soon. Walmart was never an importer but it became one. It imported \$18 billion worth of goods from China which they got at a cheaper price compared to the fixed local prices. Hence, suppliers benefit all over, although at low prices. But some suppliers have to face consequences due to competitive prices. (Basker, 2007)

7. SUGGESTIONS AND FURTHER DISCUSSIONS

7.1 Demand forecasting

Since inventory management is a problem of the company and both time and cost are high managing the inventory, proper or enhanced demand forecasting should be done by the company's supply chain and procurement department. The demand should be averaged per store and on the basis of that, orders should be placed to the vendors and suppliers at regular intervals. This would ensure that the distribution is independent of Walmart inspection directly and the goods will reach the stores efficiently.

7.2 Conveying sustainability

Achieving the motive of EDLP (Every Day Low Price), the company has been observed to forget other sustainability issues such as bullying suppliers, cutting costs through burdening employees, etc. They need to show that they are concerned about the stakeholders more socially, environmentally, and economically.

7.3 Working on cultural-ism

Walmart has been observed to be making mistakes in the cultural aspects when they open their businesses in other countries. They have failed miserably in Germany, Korea, Japan, and in India as well just because of the lack of understanding the market and cultural aspects in these countries. The concept of EDLP and ascent investment in IT doesn't work everywhere because of the prevailing technology and environment.

7.4 Make themselves a 3PL

Walmart works as a retail store along with the transportation and distribution department. It has a great opportunity to open a separate entity altogether which focuses only on logistics aspects and keep the retail stores and shipment apart from that. By doing this, initial cost might be more but they can afford to take the risk and it will save their time and cost at a drastic level eventually. The reason they are No.2 in the retail sector after Amazon is that they have not taken any big step to change the pattern of retail sector, unlike Amazon. They are 'happy' with short term goals and acquisitions around the globe.

7.5 Relaxation to suppliers and vendors- By the new policy of charging 3 percent to the suppliers if they don't supply the goods effectively, Walmart's products are reaching the stores' shelves, but it is creating a lot of pressure on the vendors. They also won't want to lose such a big retailer like Walmart and because of that they are pressing on their functions and might be making losses or taking the excessive workload.

8. CONCLUSION

Through this study on Walmart and its supply chain practices, it can be implied that Walmart is a giant in terms of supermarkets and managing its logistics to provide customers with the products at low price. It holds the buying power with suppliers and uses its own transport system to deliver goods. However, there are certain challenges faced by it in terms of operating cycle, Just in Time and technology. This study gives a detailed insight into how Walmart can make its practices better and expand further. The study also talks about the company's impact on the global markets and how its competitors perceive it. The company was able to offer a vast range of products at the lowest costs in the shortest possible time. This was possible mainly due to two factors – Wal-Mart's highly automated distribution centers, which significantly reduced shipping costs and time, and its computerized inventory system, which speeded up the checking out time and recording of transactions. Therefore, one can say that Wal-Mart was able to achieve leadership status in the retail industry because of its efficient supply chain management practices.

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