

The Improvement on Inditex's Logistics and Supply Chain

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Abstract: During the COVID-19 pandemic, interruptions in the supply chain have become a common occurrence in every industry. In the fast fashion industry, there are a range of problems with supply chain management that are clearly evident. During this time, more and more firms in the industry start to reconsider the supply chain system that they were using previously and try to figure out solutions to disruptions. This paper takes Inditex as a case study, which is the market leader in the fast fashion industry and received relatively less impact from the pandemic. In the meantime, the paper listed several issues Inditex could solve and provided some potential solutions to the company from three dimensions by using previous research journals from other scholars in a range of fields and official company annual reports. Overall, Inditex needs to pay more attention to those problems related to sustainability and the environmental impact of their production because consumers are more aware of the environment than firms expected.

Keywords: Supply Chain, Inditex, Sustainability, COVID-19 Pandemic, Logistics

1. Introduction

The COVID-19 pandemic began to spread globally toward the end of 2019, affecting the operations of a variety of organizations in numerous industries. Some businesses experienced supply chain interruptions as a result of government measures such as quarantine and maintaining social distance from others in public locations. During this time, the fast fashion business is an excellent example of one of the many industries heavily struck by the epidemic. In 2020, most brands in this sector will witness a decrease in revenue. For instance, despite an unprecedented 77 percent increase in online sales, Inditex's overall sales in 2020 were €20.4 billion, a 28 percent decrease from the previous year [1].

Meanwhile, the trend in clothing sales has shifted from conventional offline buying to visiting genuine internet stores. Due to financial difficulties, numerous well-known businesses in the industry closed many physical stores throughout the world. However, in this situation, Inditex, a Spanish international apparel firm, was able to swiftly migrate the sales channel online, which had an impact on the whole fast fashion sector and its competitors. Because Inditex is the world's largest fast fashion firm, with over 5000 outlets in 93 countries, a number of research articles have examined the company's supply chain and logistics [2].

As for the academic background, Md. Afzalul et al. selected Inditex as their target and employed a qualitative research technique, drawing on their background in real-world management. Their

objective was to demonstrate that Inditex and Zara's products are effectively supported through the integration of diverse supply chain practices [3]. Anna Stooksbury utilized a comprehensive case study method to examine the fast fashion business model that has contributed to the success of Inditex in several aspects, such as their inventory system. This analysis was conducted through extensive secondary research [4]. Mercedes and Isabel utilize the frameworks of corporate reputation and corporate social responsibility to examine the efforts taken by Inditex in response to the COVID-19 outbreak [5].

While many research studies use Inditex as a case study, the present circumstance that Inditex is in has witnessed some drastic changes as a result of the epidemic. To be more explicit, the share of online buying grew as a result of COVID-19 limitation regulations implemented by governments worldwide. As a result, Inditex must adapt its goals to reflect changes in customer behaviour. Inditex's biggest challenge is figuring out how to sell online anyplace in the globe. This paper will analyse the current situation of the company, problems in Inditex's supply chain during the business transformation, how to adjust the optimization in the future, and several related suggestions for Inditex using secondary data from previous research papers, official annual reports, and data. The goal of this article is to demonstrate how to make greater use of the integrated stock system after it has been well-used, so that Inditex's and the logistics service's efficacy will be increased and brand loyalty will be much stronger than planned.

This research paper will employ an empirical study to discuss the influence of the integrated stock system and the supply chain of Inditex on its e-commerce operations. In the beginning, it will discuss the basic information about Inditex with official data from the firm, its current situation, and some information about the integrated stock system that Inditex uses. Later, it will analyze those problems that the supply chain of Inditex faced during the operating transformation by comparing the previous data from its annual reports and academic journals. After that, it will give some related suggestions that could help deal with the problems that were mentioned before.

2. Case Description

Industria de Diseo Textil, S.A. (Inditex) is a Spanish multinational apparel corporation and the world's largest fashion group [6]. Its most visible brand is Zara, but it also owns various other brands, such as Zara Home, Bershka, Massimo Dutti, Uterqüe, and Lefties. The great majority of the company's retail outlets are corporately owned, and franchises have mostly been provided in countries where corporate property cannot be granted to foreigners. [7]. Inditex's business is based on a simple premise: adapt rapidly to changing market conditions. Whereas traditional couture houses take about a year to bring a product from conception to the runways and then to physical sales, Inditex's procedure takes slightly less than two months, allowing it to replenish its stores with a diverse range of new products on a weekly basis and respond quickly to them. [8].

Amancio Ortega and his wife launched Inditex in 1965, with a modest workshop selling clothing to his previous job, a provincial shirt manufacturer, among others. Zara Home, an internet-based retail business, opened in 2007, and in September 2010, Zara entered the digital commerce sector, launching its website in Spain, the United Kingdom, Portugal, Italy, Germany, and France. [9]. It was an early user of technology in the fast fashion business, which was completely implemented for Zara in 2016, and Inditex aims to follow suit with numerous popular brands owned by the company in 2018, with the rest of the group adopting it by 2020. More than that, it is still necessary to support logistics, as previously said; nevertheless, investment in this sector is expected to decrease in the coming years. Two logistics sites received a stunning €150 million investment. The company's headquarters are housed in a contemporary structure in Spain. The 90,000-square-meter facility will be operational by summer 2018 and will supplement the existing logistics infrastructure. The other logistics facility is in the Netherlands [10]. SINT is Inditex's integrative inventory management

system, allowing the corporation to execute online orders from both retail storage and online depots, resulting in enhanced efficiency, decreased carbon impact, lower levels of leftovers, and shorter wait times. With its open modular digital infrastructure fully matured and deployed, the Inditex Open Platform can make significant leaps in real-time adaptation to its customers' demands [11].

3. Analysis of Problems on Inditex

3.1. Issue on Safety of Global Supply Chain

While the SINT system that Inditex now employs has been very effective in improving the efficiency of its supply chain, it still suffers from the following problems: As Inditex is a multinational corporation, it is difficult to take care of all the parts of its supply chain. In the meantime, Inditex has a complicated supply chain around the world, as some of its suppliers and subcontractors are from Southeast Asia, like Vietnam and Thailand. This would be a difficulty for the multinational company in managing safety norms in the supply chain.

According to Carla Antonini and others, a fire broke out in 2013 at one of Inditex's suppliers in Bangladesh. Following a thorough examination of this occurrence, the business determined that the plant was an illegal subcontractor with inadequate fire safety conditions [12]. If nothing changes, the working environment in these types of apparel manufacturers will deteriorate, and people working inside will be unsafe. If there are any connected articles, the brand's reputation will be ruined. It is critical to understand how workplace safety incidents might disrupt supply chain events. When an event occurs, it not only causes economic loss to the organization but also productivity loss and the restoration of damaged property, affecting the firm's capacity to meet the needs of its consumers, such as past orders that were not met on time. As a result, the supply chain's efficiency would be worse than previously [13]. Due to time consumption and scale, the complexity of maintaining a global supply chain for major organizations is rather significant, which implies that certain minor issues may go unnoticed.

3.2. Issue on the Development of Green Supply Chain

Inditex has been working on sustainability for some time; for example, they have switched from plastic bags to paper boxes and paper fillings for the delicate. Inditex even has a section on its own website dedicated to introducing its sustainability journey and progress. Nonetheless, the fast fashion business is one of the most environmentally damaging in the world [14]. This is due to the market's distinctive qualities, which require them to produce a large number of items on a regular basis in order to keep up with current fashion trends and meet client requests. As a result, it is difficult for a company like Inditex to have an entirely green supply chain; for example, the production of clothing necessitates the use of vast quantities of chemical compounds [15].

Certain consumers of fast fashion brands who prioritize environmental concerns have started to alter their buying patterns by opting to acquire products from eco-conscious enterprises. Ultimately, the pollution generated during the manufacturing process would lead to a decline in fast fashion sales and a negative impact on the brand's reputation. Decreased revenues would result in reduced corporate expenditure on sustainability, causing slower-than-expected progress in the green supply chain.

3.3. Issue on Low-Cost Logistics of Inditex's Supply Chain

As one of the characteristics of fast fashion is its low price, firms like Inditex would send their manufacturing orders to these developing countries with low labour costs to manufacture these products. During the process of sending the garments to Europe and North America, it used to employ container boats to deliver these products to the destination. However, as the trend of online shopping

becomes more and more popular, the shipping time of garments needs to be shorted for more purchases from the client. Therefore, air cargo has been more important for delivering the garment.

However, the environmental repercussions are far-reaching, since switching only 1% of clothing exports from ship to plane would result in a 35% increase in carbon footprint. [16]. The long logistical chain in the case of textiles means that throughout the fabrication phase, when raw fibers are turned into ready-made garments, these items have already been shuttled around the world once or possibly many times. Many unsold articles of clothing are burned or transferred to landfills or poor nations, generally headed for Africa, and are seldom repurposed. [17]. It would be impossible to implement a green supply chain if the firm chose low-cost logistics. Inditex must consider all of the aforementioned reasons, as well as transitioning to ecologically friendly packaging and supplying stain-resistant items.

4. Suggestions

4.1. Suggestion for Safety of Global Supply Chain

Although the suppliers of Inditex are from different parts of the world, it is impossible to send staff from the headquarters to supervise subcontractors. There are several solutions to avoid unauthorized subcontractors that could help Inditex improve the problem. Felipe Caro and others claim that this issue is predictable and that it is possible to solve it by utilizing some Inditex operational variables.

Firstly, the company should study suppliers past unauthorized subcontracting behavior before starting to work with them to make sure that suppliers do not usually do these kinds of actions and send some supervisors to investigate the safety level of those factories to ensure the possibility of occurring accidents or any kinds of safety concerns is the lowest [18]. If these supervisors figure out the potential safety concerns in the factories, Inditex could tell suppliers to improve the workplace; otherwise, Inditex would switch to other factories for those orders to ensure safe production.

Furthermore, Inditex has the potential to implement a specific set of standards for the evaluation and choice of suppliers. Suppliers must regularly maintain the machinery they use in manufacturing and offer frequent training to their subordinates on how to handle emergency circumstances that may arise during production.

4.2. Suggestion for the Development of Green Supply Chain

From the perspective of chasing a greener supply chain, Inditex could introduce more groups of people to supervise Inditex to become greener from different perspectives, for instance, from the carbon emissions of the supply chain to the production of the garments of the brand, and even this kind of intervention could encourage the company to introduce more related policies to the internal management of the company, like changing the annual objectives to limit the pollution level for manufacturing and delivery, etc.

Meanwhile, the brand has the potential to transition to a closed loop system, which is a sustainable production and consumption principle that requires technological advancements in fiber recycling. This would allow for the recycling of various production materials and processes used in current fashion products, ensuring that all types of garment materials can be recycled by Inditex and used to create new products [19]. A suitable method for cellulosic fiber is the employment of chemically recoverable techniques, which involve fractionating fibers into polymers by a chemical dissolving process. Chemical recycling is more effective than mechanical recycling in preserving fibers. As a result, it is expected to have the ability to produce garments using a larger proportion of recovered fibers, making up-cycling easier, and even creating yarns that achieve 100 percent recovery [17].

4.3. Suggestion for Low-Cost Logistics of Inditex's Supply Chain

As the trend of the fast fashion market changes rapidly, it is unavoidable that there are some unsold clothes in the warehouses. There is not a perfect way to realize a green supply chain and low-cost logistics. If Inditex wants to reduce the quantity of unsold clothes, the most straight-forward way is to reduce the production of garments. Once there is an increasing demand for some specific clothes, Inditex cannot satisfy that demand from the consumer as soon as possible. Therefore, optimizing transport would be a better choice for the brand. Inditex may apply load scheduling applications that not merely render logistics planning simpler but also allow for more efficient use of space for shipments and fewer trips, thereby decreasing the level of contamination caused by transport to the community. At the same time, fewer trips could also save some part of the budget for transportation and use fewer natural resources during the whole production process, which would be beneficial for both the company and the environment.

5. Conclusion

This research employed secondary sources to elaborate on the present state of Inditex and provide a fundamental overview of its integrated stock management system. In addition, the research also examined the integrated stock system and the impact of the supply chain on the company's e-commerce. The conclusion of this paper is that, despite Inditex's supply chain being among the best in the industry, there are still many problems with it that the aforementioned recommendations might help to fix. Inditex will attain a secure market leadership position in the quick fashion business after all difficulties are resolved.

This paper's contribution presents numerous viewpoints for Inditex to assess their supply chain and prospective changes, which may be separated into three components. The first section of the paper uses a specific occurrence that occurred in Bangladesh in 2013 and some related effects to stress the necessity of supply chain safety. Furthermore, it states that the importance of sustainability to customers is growing faster than corporations anticipated. Furthermore, the final section analyzes the environmental sunk cost of adopting low-cost logistics for clothing, and some associated data from past studies highlights this issue.

Despite the fact that there are still some limitations in the analysis and suggestions in this paper, there isn't much data or related cases from other industries to present those suggestions above that are feasible enough for Inditex to use in the future because they were analyzed through theoretical research. Furthermore, the number of journals referenced in this study is rather limited, which may have an impact on the level of representativeness of the analysis. In the future study of the supply chain and other business studies, the author would want to incorporate more journals to ensure the research paper's representativeness is helpful and dependable for the firm. Meanwhile, applying additional theories to validate the answers offered is realistic enough to be employed as a global corporation with a vast size and a variety of departments.

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