

Analyzing the Negative Impact of Supply Chain Regionalization

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Abstract: In response to increasing global trade, IKEA implemented a more efficient supply chain strategy and introduced a new policy in 2011 to localize its supply chain. The objective of this inquiry was to examine the alterations in supply chain management. Following the transition from centralized to regionalized supply chains, corporations faced adverse consequences such as decreased operational efficiency, increased operating expenses, and reduced adaptability in meeting market needs. These implications include increased complexity in supply chain management, decentralized operating models that result in repeated investments in fixed assets, and trade restrictions that create challenges in integrating information. The article proposes implementing efficient management systems, enhancing collaboration with local suppliers, and utilizing artificial intelligence to optimize the structure of the supply chain based on the observed impacts and outcomes. The objective is to offer risk management guidance for firms that have reached maximum production capacity and require a shift in their supply chain management methods.

Keywords: Efficiency, Cost, Flexibility, Supply Chain Regionalization

1. Introduction

The global supply chain faces various risks, including political conflicts, trade barriers, natural disasters, and pandemics, as well as the possibility that trade policies and tariff barriers could lead to increased costs of transnational transportation. Consequently, many companies are looking to change their supply chain strategies to better disperse these risks and avoid the negative impacts of policy changes. Against this backdrop, IKEA, a leading company in the warehouse-style furniture shopping industry, has chosen to regionalize its supply chain, reducing its dependence on any single region.

In 2011, in response to the challenges of globalization and growing global demand, IKEA began transforming its supply chain strategy from centralized to regionalized production [1]. This shift primarily involved moving from a centralized production model to a more regionalized one to optimize its vast and complex product system more effectively, better meet market demand, and reduce operational costs [2]. By deepening its regional production strategy and increasing production efforts in various regions, IKEA has shortened the cost required to move products from production to the consumer's hands, actively establishing closer cooperative relationships with local suppliers. Implementation of this strategy has further strengthened IKEA's competitive advantage in the global market and laid a solid foundation for the execution of its sustainable development strategy. By 2016, IKEA's two major groups, Inter IKEA Group and The Ingka Group, shifted from their previous

cooperative operating model to a complete division, with Inter IKEA Group taking over all operations and The Ingka Group transforming into a pure retailer [3, 4].

IKEA is regarded as a mature brand in the warehouse-style furniture purchasing market. Several researchers have studied its development history. For instance, Tefi investigated IKEA's development history, looking at how the company became a leading industry enterprise through constant strategic reforms [5]. However, the majority of these studies concentrate on IKEA's distinct sales strategy and particular marketing psychology approaches, with little attention paid to changes in supply chain management. Recognizing the acknowledged benefits of IKEA's supply chain changes and innovations, there remains a research void about their drawbacks [6]. To fill the research gap, this study will ask, "What are the benefits and drawbacks of the supply chain regionalization policy?" In the short term, the policy of regionalizing supply chains has resulted in dramatic transformations throughout the sector, with IKEA becoming a worldwide organization in just a few years. However, while IKEA today operates in 31 markets around the world, the pace of global expansion has slowed over the years. Perhaps by continually recognizing regionalization problems, the corporation can identify areas for improvement, resulting in more efficient modifications.

To address the investigative questions raised above, the next sections of this report will provide information on IKEA's plan for transforming its supply chain from centralized to regionalized. Following that, it will conduct a thorough investigation of some incidents and data that have emerged in recent years as a result of the company's strategic changes. The examination of the adjustment method will then be linked to the subsequent modifications made to IKEA's overall operating model. Finally, by taking into account current phenomena and repercussions, the research anticipates possible dangers and threats to the regionalized supply chain approach. It will also advise preventive measures for IKEA in order to ensure the company's long-term viability and growth.

2. Case Description

IKEA, founded in 1943, has become renowned for its unique business model and efficient cost management, emerging as a leader in the furniture and home decor industry. With over 400 stores worldwide, spanning more than 50 countries, IKEA has attracted a broad consumer base with its innovative designs, strong functionality, and reasonable pricing. Looking at IKEA's product development history over the years, continuous innovation and optimization in supply chain management are key reasons it has been able to become a top brand in the industry.

Up to this day, the long-implemented policy of regionalization in supply chain management has propelled IKEA to the forefront of the industry. When people say they are purchasing furniture, IKEA is the first brand that comes to mind. IKEA's regional supply chain adjustments strategy has allowed for a more refined management of the global supply chain and localization tweaks. Based on this model, IKEA's success has sparked imitation and learning among other furniture retailers. IKEA implements region-specific supply chain strategies globally, optimizing product design, raw material procurement, manufacturing, and distribution in accordance with market demand, consumer habits, and logistical conditions in different areas. The goal is to ensure that consumers in various parts of the world can have a consistent shopping experience. IKEA has also established regional distribution centers through partnerships with local suppliers. These centers not only serve as warehouses for storing goods, but they also provide flexible delivery services to improve immediate response and personalized service, further enhancing the customer experience. IKEA has even developed its e-commerce channels and set up online order processing centers to improve the online shopping experience and realize an integrated online and offline logistics service system. Furthermore, IKEA has realized global supply chain monitoring and optimization. Data analysis enables the company to accurately forecast market demand, optimize production plans and inventory levels, and reduce stockpiling and product waste.

During the year 2015, IKEA worked with the "Sheng Nuo" Group in Zhejiang, China, a company that manufactures and sells home items and polyurethane foam. After selecting regional suppliers, IKEA introduced a set of modifications known internally as the "I-WAY" norms of conduct. IKEA presented its views to the group, stating, for example, that the large manufacturing space resulted in different stages of mattress manufacture being distributed across multiple locations, directly increasing internal logistics costs for mattress production. As a result, a supply chain strategy transformation was proposed, guided by professionals in areas such as product design, testing, production, procurement, warehousing, distribution, and retail, with the goal of shortening the entire production process, integrating resources, and optimizing the production flow. IKEA's strategy yielded significant results, with data indicating that production capacity for mattress covers grew by around 50% following the change [4]. Furthermore, an effective production management system was established within the group. IKEA established its first laboratory outside of company headquarters in Älmhult, Sweden, where they conduct product testing and integrate supplier and employee training. It also serves as a good reference and model for global supply chain management strategies.

3. Analysis

3.1. Reasons on Reduced Efficiency

It is precisely because production activities in various regions are becoming more aligned with the market that IKEA has had to make strategic adjustments to its regional supply chain. Such strategic changes, due to the complexity of regionalization, lead to increased management difficulties for the company and can result in reduced efficiency. Compared to other companies, IKEA, as a warehouse-style furniture retail brand, needs to coordinate a larger number of production bases and suppliers, significantly increasing the managerial workload. Different production bases and suppliers may face varying policy and legal risks, such as labor laws and employment regulations in different countries. Some countries may have stricter labor regulations, including minimum wage standards, work hour restrictions, and labor rights, all of which could impact a company's production decisions and lead to inefficient operations.

Maria-Therese Gustafsson used the origins and purposes of the Financial Conduct Authority (FCA) legislation and extensive data to demonstrate the confrontations between non-local supply chains and local laws and regulations [7]. Oláh et al. have also demonstrated that expanding markets will require engaging with consumers from all over the world, emphasizing that while such practices may change existing economic systems, customer expectations and the constant evolution of purchasing habits will make supply chain networks more complex and variable [8].

3.2. Reasons on Increased Costs

IKEA has made strategic adjustments to its supply chain in different countries due to the necessity of having a worldwide supply network. While these improvements will provide access to various regional markets, they will also lead to a more decentralized operational approach and, to some degree, result in higher expenses. IKEA's decision to produce and deliver furniture in different countries may result in a decrease in the overall volume of mass manufacturing. As a result, the company may not be able to fully take advantage of the cost advantages that come with economies of scale. To establish a regionalized supply chain, IKEA needs to have numerous manufacturing bases spread out in different locations. This necessitates recurring investments in permanent assets, such as factories and storage equipment. Alongside physical assets, working capital is also a crucial consideration for IKEA. It is imperative for IKEA to recruit and develop local workers to attain a high level of expertise. Regionalization incurs higher costs and places greater economic strain on IKEA than the globalization policy, which enables global sharing and utilization. Škare et al. has emphasized the cost increases

caused by inflation through extensive research on data regarding inflation and the global economy, which has brought significant shocks to the supply chain [9]. When costs gradually exceed profits and risks outweigh returns, some enterprises may choose to alter their development strategies [9].

Furthermore, regionalization of supply chains leads to higher transportation costs. The spread of IKEA's supply chain across multiple locations may result in higher transportation distances for raw materials and completed furniture goods. Regionalization allows for more frequent transportation of commodities, but it also limits the volume of each shipment when compared to global transportation, making it impossible to fully leverage economies of scale and mobilize all resources. Furthermore, multiple batch transfers raise product risk and storage costs, resulting in a higher transportation cost per unit. Elomri et al. examined the performance of global supply networks following the commencement of COVID-19 and used a rise in corporate transportation costs and time as a case study to highlight the interdependence of transportation costs and supply chains [10]. As IKEA moves to and executes a supply chain regionalization strategy, it must devote significant effort to analyze and optimize its transportation network, as well as offer specifics on new expenditures, resulting in severe internal pressure on the company.

3.3. Reasons on Decreased Flexibility

In order to increase earnings, IKEA has changed its supply chain approach from centralized to regional. This change will allow for global distribution of IKEA's products, but the impact of regional trade obstacles and the problems of integrating information systems will limit the company's capacity to adapt to market demand. According to this concept, local market fluctuations and preferences in different countries are difficult to transmit promptly to all links in the supply chain, particularly for businesses such as IKEA, which face regular demand changes and severe market competition. Regionalization may cause an inability to alter production plans in time, resulting in the loss of market possibilities. Blanchard et al. also stated that current regional trade obstacles have become a significant factor for organizations when changing their supply chain strategies [11]. It also underlines the global trade sector's volatility and how a decentralized supply chain model makes future market trends even more difficult to predict [11].

In addition, the varying effectiveness of economies of scale in different regions might result in lesser production and procurement quantities in certain locations, which contributes to the self-contained nature of regional supply chains. IKEA's advanced and innovative designs appeal to a wide range of consumers. However, the closed-loop nature of their supply chains imposes limitations on cross-regional and cross-cultural innovation exchanges. Consequently, IKEA experiences some restrictions in introducing and implementing new technologies and processes. Ehsan and Simme have demonstrated that economically challenged countries often adopt a protectionist approach to production, hesitating to embrace innovative technology and products [12]. This demonstrates that relying solely on local resources is insufficient to overcome the influence of a local closed-loop supply chain when enterprises choose regionalization instead of utilizing extensive centralized resources to overcome barriers [12].

4. Suggestion

4.1. Suggestion on Efficient System

According to the regionalization of supply chains, different regions will face distinct policy and legal risks, as well as a demand for sensitive conditions. The introduction of an efficient supply chain management system can enhance the overall efficiency of regionalized supply chains. In this regard, the article suggests that IKEA needs to develop flexible strategies to adapt to various legal regulations and market demands. By establishing a diversified supplier base, IKEA can mitigate the impact of

regulatory changes on the supply chain and reduce reliance on any single market. In addition, there should be increased scrutiny of supply chain partners to ensure that they comply with relevant laws and regulations, thereby reducing compliance risks.

Roscoe S. et al. article confirms the necessity for enterprises to consistently modify their supply chain operations in order to conform to and adhere to limits imposed in order to achieve geopolitical goals [13]. Brexit policy in the UK has had a significant impact on the pharmaceutical industry, forcing companies to abandon their contracts with the European Union, pay substantial penalties for breach of contract, and instead establish new corporate bases in the UK for further development [13]. In order to achieve a balance between regionalization and efficiency, IKEA must carefully oversee operations, develop innovative supply chain strategies, establish a variety of supplier sources, and ensure the ability to quickly find alternatives to preserve market competitiveness in the face of political challenges.

4.2. Suggestion on Enhancing Collaboration

According to the supply chain regionalization policy, IKEA's operational model has evolved from centralized to decentralized, demanding multiple reinvestments in significant fixed and liquid assets and resulting in higher per-unit transportation costs. It can be concluded that more sophisticated inventory management can alleviate problems caused by regional dispersion. In this regard, this essay proposes that IKEA might minimize inventory costs and increase its capacity to adapt to market changes by establishing a sensible network of regional warehouses and delivery facilities. Concurrently, in terms of factor costs, IKEA might look into multimodal transportation solutions to improve shipment routes, reduce unnecessary transfers and wait times, and enhance overall transportation efficiency. In select places, the corporation might also engage with local governments to encourage infrastructure improvements and upgrades, such as improving port facilities and optimizing the traffic network. These approaches would help to reduce transportation costs and time for the regionalized supply chain.

Edward Frazelle's article showcased various methods to reduce transportation costs [14]. Route optimization guarantees that vehicles and containers travel the most efficient routes, reducing fuel usage. Mixed-cargo negotiation tactics based on contracts can also result in increased profitability and lower expenses. Cost-cutting strategies for repetitive expenditures, such as streamlining inventory purchases, exist [14]. By using a diverse strategy, IKEA can overcome the problems of supply chain regionalization. From boosting inventory management efficiency and optimizing logistics planning to strengthening infrastructure and implementing localized procurement, these approaches work together to create a more efficient and cost-effective regionalized supply chain system. These efforts would enable IKEA to maintain efficient operations while enhancing customer satisfaction and market competitiveness.

4.3. Suggestions on AI Layout

According to the regionalization of the supply chain, there will be trade barriers and difficulties in integrating information systems, as well as restrictions on the introduction of new processes and technologies. It can be inferred that only IKEA, by utilizing big data and artificial intelligence technology to intelligently optimize the supply chain, can enhance the collaborative efficiency among regional supply chain nodes and strengthen flexibility. This article suggests that IKEA can independently develop an artificial intelligence prediction and analysis tool that can feed a large amount of daily and historical data so that AI can more accurately forecast demand fluctuations and supply risks in various regions. If a disruption occurs in a particular region's supply chain, IKEA can quickly mobilize resources from other regions to mitigate the impact.

Furthermore, based on this analysis tool, a real-time supply chain information system should be developed to collect data from all regions. The system will record all activity, whether it's browsing or purchasing product information, from offline stores or online shops, and combine it with regional trade information from recent years. Finally, the system will analyze and simulate how to attract regional consumers' attention to new products in stores. Tisdulko et al. have demonstrated that the emergence of artificial intelligence will greatly improve the gradually diminishing flexibility of supply chains. Companies can use AI-driven simulations to gain a deeper and more timely understanding of the global logistics network's operations, as well as assess the potential impact on the company's business in the near term [15].

5. Conclusion

International furniture brands face risks related to political conflicts, trade restrictions, and tariff walls in both the domestic and international markets. To adapt to these challenges, companies need to modify their operational strategies to better suit market conditions. This paper examined supply chain management using IKEA, a well-known furniture brand, as a case study. The study examined the adverse effects of alterations in supply chain management and the underlying causes of these effects. The company's implementation of a regionalization plan in supply chain management results in decreased operational efficiency, heightened operating costs, and diminished flexibility in meeting market needs.

Throughout the exploration and discussion, this investigation draws upon related literature in the fields of financial management, food, and politics. By summarizing phenomena observed during strategy implementation, the paper looks back on past developments from a current perspective to identify any shortcomings in these strategies. It provides suggestions for improving certain practices in policy implementation through a comprehensive analysis. This paper's findings are beneficial for businesses that have reached production capacity saturation and urgently need to change their supply chain management strategies while finding ways to manage risks.

However, there are also shortcomings in the investigation and discussion process of this paper. From the perspective of a company's marketing profits, regionalization of the supply chain is certain to greatly enhance profits. Nevertheless, an increase in profits does not necessarily indicate that a company is moving towards positive development. Therefore, this paper's exploration process almost exclusively used non-pure data to support arguments. Future studies could use negative case data to validate theories through comparison. The translation has been structured to maintain the same structure as the original text, with careful consideration given to cultural nuances, grammatical correctness, appropriate vocabulary selection, and direct output without additional explanatory text.

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