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### Supply Chain Resilience in Garments Industry

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#### Abstract

**Context:** The transition from just useful to more creative and trendy things has given the fashion and clothing industry with unique supply chain issues, such as extremely changeable customer demand. These challenges have been presented as a result of the move away from only utilitarian items. The main objective of the fashion and garment business is to optimize profits over the long term by limiting expenditures while simultaneously optimizing returns on investment and customer happiness. This will ultimately lead to the greatest amount of money being made. In order to make the most of this responsiveness, the supply chain evolved into a structure that was more agile, using a broad variety of different tactics. Methods include manufacturing done in close proximity. Because of this, the fashion and clothing industries have placed a significant amount of emphasis on reshoring as a management technique for the purpose of increasing supply chain demand responsiveness (SCDR).

The purpose of this study is to design a plan for the garment industry that takes into consideration supply chain demand responsiveness (SCDR) as well as reshoring. Because of this, reshoring fashion enterprises would have an easier time pleasing their clients, since the supply chain would become more adaptable and responsive.

The approach that was used in this research was one that blended the use of inductive reasoning with exploratory methods. Primary data were collected via semi-structured interviews, while secondary data were obtained from

academic literature. Both sets of data were examined qualitatively through the use of thematic topics.

**Conclusions:** The statistics illustrate the many components that make up the supply chain for the manufacture of clothing. These are the requirements that must be met before one can consider a supply chain to be responsive. In addition to this, it collects information on the many factors that are contributing to the relocation of garment manufacture from other nations to the United States. In addition, connections have been found between these two characteristics, which demonstrates the influence that reshoring has on the achievement of demand responsiveness in the garment supply chain.

This study contributes to the development of the theoretical framework by demonstrating that it is relevant to the logistics of the supply chain in the garment industry and that it is compatible with those processes. As a result, it could be useful for both apparel firms and their suppliers to analyze how responsive their supply chain is. The core dataset contains real information, as opposed to hypothetical information, that connects a variety of practices from market-leading organizations with the theory, hence enhancing the depth and breadth of the latter. It is possible for companies to learn more about the reshoring problem and SCDR by making use of the relationships they already have. This helps determine the most effective reshoring approach for the brand to implement in order to achieve SCDR.

**Keywords:** Apparel Manufacturing, Supply Chain Demand Responsiveness, Reshoring of Apparel Manufacturing, Strategic Development

#### Introduction

In other words, the risks to which a particular company is vulnerable have an effect that is analogous to the impact of a sword that has two edges. This shows that the risks that an individual firm faces have a double-negative effect on the organization as a whole, which is not a desired conclusion. This outcome is not ideal since it suggests that the risks that an individual company faces have a double-negative impact. This is due to the fact that there are large degrees of operational interdependencies, as stated by Christopher, Mena, Khan, and Yurt (2011). The explanation for this may be found in the statement that came before this one. According to Ali and Shukran (2016), Crum and Ireland (2005), and Wagner and Bode (2008), any disruptions to the flow of materials or information that are induced by the occurrence of a risk may have a negative impact on the financial performance, market performance, and operational performance of enterprises that are a part of the supply chain as a whole.

This can have a negative impact on the supply chain as a whole. This has the potential to have a detrimental effect on the whole supply chain. This has the potential to have a negative impact on the supply chain as a whole. The whole of the supply chain may suffer as a result of this situation, which has the potential to have a negative effect. As a result of this predicament, the whole supply chain may be placed in peril, which has the ability to produce troubles. This situation has the potential to cause problems. In the most recent few years, there has been a higher emphasis made on the examination of the building of resilience within supply chains in order to avoid the negative impacts of interruptions. This has been done in order to decrease the amount of damage that may be caused by disruptions. This is done in order to avoid the adverse impacts that would have been brought about by interruptions if they hadn't been prevented. This is done in an attempt to defend against the potentially harmful implications that interruptions may have, and it is done in this way to protect against such repercussions. This is done for the purpose of improving the efficacy with which negative effects may be minimized, which is also the reason why it is done. This is done in order to make supply networks less sensitive to the effects that are brought about as a result of interruptions in the operations of these networks. The goal of this action is to make supply networks more resilient. This chapter provides a summary of the historical framework upon which the thesis is created. It concentrates on the key elements that it has, and it specifies the research topic as well as the research gap that needs to be filled in order to proceed with the study. In addition to that, this chapter will outline the essential components that it has. In addition to this, it provides an overview of the scope of the investigation, outlines the objectives of the study, and outlines the research questions that served as the foundation for the investigation. In the course of the history of humanity, there has been a significant amount of development in both directions with respect to the manufacturing of different types of clothes. According to Nuruzzaman, Haque, and Azad (2010), the manufacturing sector, which was mostly centered in industrialized nations at the beginning of the 19th century, started relocating to low-cost countries in the 1980s in an effort to discover cheaper workforce. This migration occurred as a result of an increase in the demand for employment in these countries. It is believed that this pattern first emerged as a reaction to the process of globalization, as well as the growth of globalization that was pushed by globalization. This movement was pushed forward by the desire to profit from the economy of these countries at a time when they were undergoing tremendous economic growth. This desire was the driving factor behind this movement. In the 1990s, there was a major rise in the degree of globalization in the supply chain, which corresponded with the rapid expansion of the fashion dynamics. This growth in globalization occurred at the same time as the growth in fashion dynamics. This acceleration of globalization had place at the same time as the rapid growth of the fashion dynamics. This acceleration in the pace of change in the fashion dynamics was happened concurrently with the expansion of globalization that took place at the same time. Since that time, it has been an urgent need for the industry to acquire items from a large number of diverse suppliers who are situated in different parts of the world. The term "outsourcing," which refers to the process of transferring industrial activities to a site other than where

they are now located, has become one of the most important and often adopted business strategies in the past three decades. This is because the term refers to the method of moving industrial operations to a location that is different from where they are currently placed. In addition, the phrase has developed into one of the most often used phrases in the English language. Pay rates in low-cost nations have led to expectations among managers of enormous savings, which was one of the key attractions for these countries in the first place. [C]onsiderably, this was one of the primary draws for these countries. [T]his was unquestionably one of the most important factors that contributed to the success of these nations. The country's average level of pay for employees has been one of the primary draws for foreign direct investment during the last several years. In addition, the firm has started to realize a financial advantage as a consequence of an expanded diversity of raw materials, skill sets, a wide range of suppliers, and other resources. This has allowed the company to expand its supplier base, which has allowed it to acquire a greater variety of raw materials. Because of this, the firm now has access to a wider range of raw materials, suppliers, and other resources. Because of this diversity, the organization now has access to a greater variety of resources, which has contributed to the company's continued success. The internationalization of the supply chain has reportedly directly led to an increase in both the lead time and the complexity of the supply chain, as stated by Eriksson *et al.* 2021. Recent studies suggest that this strategy, which could or might not include globalization or manufacturing in another country, might not always be successful. According to Stanczyk *et al.* (2017), global supply chains may result in more expensive consequences owing to the greater geographical and cultural distance between nations, issues with product quality, and an increased requirement for inventory levels. All of these factors contribute to a rise in the need for larger inventory levels. It is possible that all of these variables will lead to an increase in the volume of inventory that is required. The overall impact of all of these different factors is to bring about an increase in the requirement for a bigger amount of inventory. This is the result of the cumulative effect. Once again, business strategies are being used in order to cut down on the length of time that is necessary in order to get a product to market (Iarnien and Vienaindien 2014). In addition, demand forecasting is becoming more complex and unpredictable as a consequence of the diverse consumer behaviours and the rapid change in fashion trends. This is because of the broad range of consumer behaviours and the rapid transition in fashion trends. The combination of these two elements has led to this result. To more successfully satisfy the expectations of their clients in the quickest and most resource- and time-efficient manner feasible, businesses are continuously inventing novel supply chain strategies in an attempt to meet those criteria. According to the definition provided by Qrunfleh and Tarafdar (2013), a supply chain strategy is a set of processes that are used to combine retail outlets, customer service, retail manufacturing, and logistics. Additionally, a supply chain strategy may also include other components. The movement of products around the supply chain is going to be streamlined using these different ways. The process of manufacturing goods is yet another element that may be incorporated in a supply chain strategy. This ensures that goods are generated and given in the necessary amounts and

at the specified times in order to fulfil service level requirements, boost customer satisfaction, and cut down overall system costs. In addition, this helps to guarantee that overall system costs are kept to a minimum. One of the most significant goals of supply chain strategy is to raise the degree to which fashion firms' supply networks are responsive to the demands that consumers make on them. This is what brings up the problem of demand responsiveness in the first place, which is why it is one of the most important goals of supply chain strategy. The fact that this is the case is what elevates the topic of demand responsiveness to the status of one of the most important objectives of supply chain planning. Due to the fact that the fashion industry is continuously confronted with novel circumstances, it is vital for enterprises operating in the fashion sector to be able to swiftly adjust to shifting conditions. Because of this, the financial success of firms that sell apparel is strongly dependent on how attentive and flexible the brands are to the requirements of their clientele.

### Objective

The main goals of supply chain management are to ensure that the essential products or services are given to customers in a way that results in lucrative outcomes for the organization. In other words, the supply chain management process exists to make a profit for the business. To put it another way, the process of supply chain management is intended to bring in money as its ultimate goal. In order to achieve these objectives, the management of the supply chain has to take into consideration all of the processes that are involved in the acquiring, producing, distributing, and delivering of the items or services. This involves the management of facilities for transportation, inventory, and storage, as well as the administration of suppliers and inventories, in addition to the provision of service to customers. In addition, this involves the management of facilities for inventory management.

The overall costs that are associated with running the supply chain should, to the maximum degree feasible, be reduced; this should be the fundamental objective of supply chain management. This takes into consideration any and all direct and indirect monetary outlays that have been made during the process. When companies cut the amount of money that they spend on their operating expenditures, they increase the likelihood that they will be able to boost both their level of profitability and their level of competitiveness. The supply chain provides a wide variety of options for cost reduction, some of which include the standardization and simplification of procedures, the development of the efficiency of communication and collaboration, and the use of technology for the automation of work that is repetitive. One of the most important aims of supply chain management is to increase the value for the customer, which, in turn, will lead to an increase in the value of the brand. This is only one of the many important purposes of supply chain management. Increasing the effectiveness of the supply chain may be one way in which this goal might be attained. As a direct consequence of an increase in the value that is supplied for the customer, the worth of the brand will go up, which is a good thing all around. It is possible for a business to increase the value that its customers get from that company by providing those customers with the proper product or service that not only fulfils their needs but also offers them with a better

shopping experience. This is one way that a company may work to increase the value that its customers receive from that company. It is possible to achieve this goal by supplying the customers with the proper product or service, which not only satisfies their needs but also makes the shopping experience more pleasurable for them. Not only will providing the greatest possible value to consumers make those customers happy, but it will also result in increased sales and positive recommendations from those customers via word of mouth. Both of these objectives will be brought about as a direct consequence of providing the best possible value to customers. As a direct consequence of this, the achievement of this objective should not only be seen as one of the most essential facets of supply chain management, but it should also be considered the primary focus, if not the primary emphasis entirely. This is due of the fact that it is a result of this, which is the reason why this is the case.

### Literature Review

This chapter covers the literature review in order to investigate the current research on the topic of reshoring the production of garments and the responsiveness of the supply chain to changes in demand. The study of the literature was done in order to provide context for the discussion that follows. In addition to that, the adaptability of the supply chain to varying levels of consumer demand is explored in this chapter. This chapter is comprised of two sections: the introduction, and the main body of the discussion. In the first, a review of the current research on supply chain responsiveness is presented, and in the second, a review of the process of reshoring the manufacture of garments, together with its theoretical components, is presented. Both reviews give an overview of the relevant research. The Adaptability of the Supply Chain Investigating the responsiveness of the supply chain to demand

At this stage in the procedure, we are going to make an attempt to come up with an extensive definition of responsiveness by collecting together the many concepts that have been provided by prior research in an effort to come up with a comprehensive definition of responsiveness. We examine the many definitions of responsiveness that are now in use, in addition to the previous research that has been done on the topic of responsiveness in relation to industrial systems and supply chains. In conclusion, a suggested generic for responsiveness is investigated, along with the ramifications and presumptions that surface as a result of its use. According to one definition, "the responsiveness of a manufacturing or supply chain system is defined by the speed with which the system can adjust its output within the available range of the four external flexibility types: product, mix, volume, and delivery," in answer to an external stimulus such as a client order. The variety of options that are accessible for each of the following forms of external flexibility: product, mix, volume, and delivery" The terms "product, mix," "volume," and "delivery" all make up what are known as "the four external flexibility types." (Reichhart and Holweg 2007). The author who spoke before me in this discussion brought up the idea of responsiveness in relation to many external factors such as product, mix volume, and delivery in order to satisfy the requirements of the consumer. He said that the capacity to swiftly adjust one's behaviour in response to shifting conditions was one definition of responsiveness. In

order to make the concept of supply chain responsiveness more practical, Swafford, Ghosh, and Murthy (2006) defined it as the pace at which a supply chain may expand its capability to compete in terms of price, quality, flexibility, delivery speed, delivery dependability, and innovation. This definition was created with the intention of making the concept of supply chain responsiveness more actionable. This was done so that the concept of supply chain responsiveness could be operationalized more effectively. This word may be found in the paper that was written by Swafford, Ghosh, and Murthy (2006). In addition to this, they put a large emphasis on "lead time" as a measure of the responsiveness of the supply chain. This is backed by the results of McCutcheon, Raturi, and Meredith (1994), which can be found here. According to Santos Bernardes and Hanna (2009), responsiveness is one of the most basic traits that must be possessed by firms in order to have an advantage over their competitors. This is one of the most fundamental attributes that companies must have in order to have an edge over their competitors. This is one of the most significant features that a company needs possess in order to have an edge over its rivals and this is one of those attributes. According to Bessant, Kaplinsky, and Lamming (2003), the responsiveness of a manufacturing organization may be defined as its capacity to adapt quickly to changing conditions and respond to novel challenges with imaginative problem-solving strategies. Having the capacity to compete on this level is very vital if one wishes to achieve success in the manufacturing industry, which is a highly competitive area. According to Swafford, Ghosh, and Murthy (2006), demand responsiveness may be defined as the propensity of a company to take action based on market data in order to either foresee and/or quickly address changes in the expectations of consumers. More specifically, demand responsiveness refers to the tendency of a company to take action in order to address changes in customer expectations. In other words, demand responsiveness refers to the readiness of a corporation to take action in response to changing market conditions. In addition, demand responsiveness may be seen as a tendency for the conscious and timely modification of behaviour in response to inputs that modulate it. This change in behaviour takes place in reaction to the inputs that regulate it. In 1998, Hiebeler, Kelly, and Kettelman came up with the idea of an agile operation with the intention of empowering it to meet unexpectedly high levels of consumer demand while yet preserving high levels of availability. Their goal was to create a system that could do this.

### **Research Methodology**

In this chapter, we analyse and assess the logic behind the research strategy, the approach to the study design, the research technique, sampling, data collecting, and analysis, as well as the quality of the research. In addition to that, there is a review of the current status of the research in general.

### **Methodology for the Research**

According to Willig and Rogers's (2017) interpretation of the term "qualitative research," this type of investigation is "generally understood as a multidisciplinary field of inquiry used by researchers to gain understanding about various aspects... and analysis of focus group feedback to draw subjective conclusions from relatively small samples." This

study's objective is to analyse the responsiveness of the clothing supply chain with regard to the reshoring challenge in order to provide support for the process of creating strategic choices. Interviews conducted for the purpose of this specific piece of research serve as the major source of data, while scholarly publications are used for the purpose of this study as the secondary source of data. This study comes to a conclusion after assessing the input that was gathered from a focus group, which gives credence to Willig and Rogers' (2017) definition of the word. As a direct result of this, the qualitative research methodology is an appropriate choice for use within the scope of this investigation. In the context of this research, an examination or exploration into the phenomenon of reshoring is being carried out with the goal of improving the responsiveness of supply chains. The most reasonable inference that can be drawn from the data that has been provided in this article is that this investigation ought to make use of an exploratory approach. According to Given (2008), the abductive reasoning approach is the logical process of making observations and finding the hypothesis that would best fit or explain those findings. This process is described as "finding the best explanation for the observations by finding the hypothesis that best fits the observations." It is possible to characterize this process as "finding the hypothesis that would best fit or explain the observations." In order to finish this method, you will need to make observations and look for a hypothesis to support them. Abductive reasoning is the process of being able to deduce conclusions based on previously acquired knowledge, even though such conclusions may not apply to all persons. In other words, it is the process of being able to draw generalizations from specific cases. During the course of this investigation, an abductive method will be used as the tactic that will be applied. Using a framework that is drawn from Reichhart and Holweg (2007) and is detailed in chapter 3, this research collects data from primary and secondary data sources. The framework was developed by Reichhart and Holweg. These writers served as a source for the framework that was used. In order to reach a decision, it is necessary to conduct an examination of the facts that have been provided while keeping in mind the overall structure of reasoning. Because the conclusion is taken from the data that can be accessible by using logic, the kind of reasoning known as abductive reasoning is suitable for this study. This is because the conclusion is drawn from the data. According to Given (2008), thematic analysis is considered to be one of the most prominent approaches of examining qualitative data in order to determine the topic. This is because thematic analysis focuses on identifying patterns within the data. Interviews are being carried out with just a slender adherence to a script that has been established in advance by us in order to collect primary data for this investigation. Due to the fact that both the questions asked and the responses that were provided to those questions are open to interpretation, it may be challenging to get the facts in an unambiguous way from the interview. As a direct consequence of this justification, the research project employs the methodology of theme analysis in order to extract the information that is required from the data.

### **Findings**

This chapter will include a reflection on the study framework, during which both the data obtained from the



interview and the review of secondary data will be taken into account. This chapter's goal is to offer an overall summary of the research that was conducted. Following an introduction that provides an overview of the results, the chapter moves on to provide an analysis of the primary and secondary data with respect to a reference framework. A discussion of the ramifications of the results is included in the last section of this chapter.

### Discussion

The results of this research will be discussed in this chapter, and we will compare and contrast them with one another. This debate will centre mostly on the connection between the flexibility of the supply chain to new demand and the reshoring of garment manufacture as the primary topic of discussion. In addition to that, the main emphasis of this piece is going to be on the ways in which these two occurrences are boosting one another by working together as a force that is complimentary to one another. In the second half, we will talk about the issues that were uncovered as a result of the investigation.

### Limitation

In this study, we utilized real data gathered from individuals whose names were categorized as "Brand." Some businesses, however, are present across the whole supply chain. The adaptability of the supply chain to meet varying levels of consumer demand. Exhibit results from your master's thesis study, for them may be distinct from "Brand," a variable that was ignored throughout data collection due to its lack of applicability to the study's main objectives. This limits the applicability of the data obtained from SCDR variables to the "Brand" category. The first limitation this investigation imposes is the one just indicated. In addition, interviews have shown discrepancies in the management styles of fashion houses and more practical enterprises like sportswear labels. There is hard data to support this claim. The study hasn't taken this distinction between them into consideration. This additional limitation is necessary for the current investigation. Researchers will need to take a new tack in the future as a consequence of the study's flaws. The results of this study point to two avenues for further investigation. Additional studies might begin by examining SCDR concerns from the vantage point of many stakeholders positioned at different points in the supply chain. These events might happen at any point in the supply chain. Suppliers of raw materials and manufacturers of completed clothes are both potential members of this group. The succeeding procedure is used in the context of the prior procedure. To better understand the factors affecting the responsiveness of the supply chain to demand throughout the whole supply chain, the variables may be determined independently for each member in the apparel supply chain. This is crucial if we are to arrive at our goal of a complete comprehension of the variables affecting the supply chain's reaction to changes in demand. This helps to round out our understanding of the elements influencing the responsiveness of the garment industry's supply chain to consumer demand. This study's findings that fashion and functional brands use different methods to reshoring highlight the need of drawing a distinction between the reshoring phenomenon affecting the two types of companies. Consequently, reshoring's decision-making processes may vary considerably, making it an issue worthy

of further study both now and in the future.

### Conclusion

In this last chapter, we outline the guidelines for conducting a similar inquiry in the future, laying the groundwork for future probes. This chapter's discussion of a research limitation is one possible origin of the recommendation for more investigation. This chapter also discusses the ways in which this research may be applied to the real world. Defining the supply chain strategy to be adopted is the first stage in increasing the supply chain's responsiveness to changes in consumer demand. Christopher (2000) <sup>[24]</sup> and Gunasekaran, Lai, and Cheng (2008) argue that supply chains need to be more agile so that they can respond quickly to changes in customer demand. To increase the responsiveness of the supply chain, this is necessary. Doing so is crucial for increasing the supply chain's responsiveness as a whole. According to Lee (2003), a brand may better weather market volatility by adopting an agile supply chain approach that allows the supply chain to swiftly adjust to the short-term changes as per customer demand. To rephrase, it is possible for the supply chain to cope with market volatility if it has a plan that allows for some degree of flexibility. According to the findings of this research, the responsiveness of supply chains depends on 61 different data-based components. At various stages of the distribution network, the variables' effects manifest in substantially varied ways. Those places are dispersed all across the chain. Therefore, it is especially challenging to appreciate, from a single vantage point, the state of a wide and complex supply chain, such as the one including the garments and clothing supply chain. This is due to the fact that the supply chain involves several parties. Furthermore, secondary data analysis has shown 61 reshoring factors that have the potential to affect the reshoring process's performance. There have been 35 positives factors that have aided the supply chain in its efforts to meet consumer needs thus far. One logical inference drawn from this is that the 35 beneficial features associated with reshoring may help the 61 components of supply chain demand responsiveness be fulfilled more effectively. The following discussion provides supporting evidence for this claim. As a direct consequence, one might argue that garment manufacture that has been relocated back to the nation of origin is more competitive in terms of the supply chain's responsiveness to consumer needs. The drawbacks of reshoring, which are discussed in chapter 1.2, are balanced out by the reshored manufacturing unit's increased flexibility and agility. In addition, it facilitates the growth of improvisational abilities, which in turn strengthens the supply chain and ensures that the needs of a responsive supply chain are met. Relocating manufacturing back inside a country's boundaries benefits both the company's domestic market and the environment. This is achieved by measures like as cutting down on the number of steps in the supply chain, utilising fewer vehicles, recycling resources, and reusing scraps, among others. Using the factors discussed in this paragraph, it also helps the firm improve its long-term financial viability. Therefore, it can be claimed, in a nutshell, that establishing an agile supply chain may enable increased supply chain demand responsiveness, which is necessary to meet the ever-changing demands of consumers. In this way, the supply chain can better satisfy the needs of its customers.

## References

1. Altenburg T, Chen X, Lütkenhorst W, Staritz C, Whitfield L. Exporting out of China or out of Africa? Automation versus relocation in the global clothing industry. Discussion Paper, 2020.
2. Alvesson M, Sandberg J. Generating Research Questions Through Problematization. *Academy of Management Review*. 2011; 36 (2):247-271.
3. Ancarani A, Di Mauro C. Reshoring and Industry 4.0: How Often Do They Go Together? *IEEE Engineering Management Review*. 2018; 46 (2):87-96.
4. Anderson NH. Contributions to information integration theory. *Cognition*. Psychology Press. 2014; 1.
5. Azzone G, Masella C, Bertelè U. Design of Performance Measures for Time-based Companies. *International Journal of Operations & Production Management*. 1991; 11(3):77-85.
6. Bagchi PK, Skjoett-Larsen T. Organizational Integration in Supply Chains: A Contingency Approach. *Global Journal of Flexible Systems Management*. 2002; 3(1):1-10.
7. Bárçia De Mattos F, Eisenbraun J, Kucera D, Rossi A. Disruption in the apparel industry? Automation, employment and reshoring. *International Labour Review*. 2021; 160(4):519-536.
8. Barclay I, Poolton J, Dann Z. Improving competitive responsiveness via the virtual environment. In: *IEMC 96 Proceedings. International Conference on Engineering and Technology Management. Managing Virtual Enterprises: A Convergence of Communications, Computing, and Energy Technologies*. IEEE, 1996, 52-62.
9. Barki H, Pinsonneault A. A Model of Organizational Integration, Implementation Effort, and Performance. *Organization Science*. 2005; 16(2):165-179.
10. Barnes E, Dai J, Deng S, Down D, Goh M, Lau HC, Moosa S. On the Strategy of Supply Hubs for Cost Reduction and Responsiveness. *Research Collection School of Computing and Information Systems*, 2003, 1-27.
11. Benstead AV, Stevenson M, Hendry LC. Why and how do firms reshore? A contingency-based conceptual framework. *Operations Management Research*. 2017; 10(3-4):85-103.
12. Berry WL, Cooper MC. Manufacturing flexibility: Methods for measuring the impact of product variety on performance in process industries. *Journal of Operations Management*. 1999; 17(2):163-178.
13. Bessant J, Kaplinsky R, Lamming R. Putting supply chain learning into practice. *International Journal of Operations & Production Management*. 2003; 23(2):167-184.
14. Bhardwaj P. Types of sampling in research. *Journal of the Practice of Cardiovascular Sciences*. 2019; 5 (3):p157.
15. Bian J, Zhao X. Competitive environmental sourcing strategies in supply chains. *International Journal of Production Economics*. 2020; 230: p.107891.
16. Blackhurst J, Dunn KS, Craighead CW. An empirically derived framework of global supply resiliency. *Journal of business logistics*. 2011; 32(4):374-391.
17. Bower JL, Hout T. Fast-Cycle Capability for Competitive Power. *Harvard Business Review* [Internet], 1st November, 1988. Available from <https://hbr.org/1988/11/fast-cycle-capability-for-competitive-power>.
18. Brandon-Jones E, Dutordoir M, Frota Neto JQ, Squire B. The impact of reshoring decisions on shareholder wealth. *Journal of Operations Management*, 2017, 49-51(1), 31-36.
19. Bruce M, Daly L, Towers N. Lean or agile: A solution for supply chain management in the garmentss and clothing industry? *International Journal of Operations & Production Management*. 2004; 24(2):151-170.
20. Bryman A. Mission accomplished? Research methods in the first five years of Leadership. *Leadership*. 2011; 7(1):73-83.
21. Catalan M, Kotzab H. Assessing the responsiveness in the Danish mobile phone supply chain. *International Journal of Physical Distribution & Logistics Management*, 2003, 25-43.
22. Chandrasekaran A, Linderman K, Schroeder R. Antecedents to ambidexterity competency in high technology organizations. *Journal of Operations Management*. 2012; 30(1-2):134-151.
23. Chen H, Hsu CW, Shih YY, Caskey D. The reshoring decision under uncertainty in the post-COVID-19 era. *Journal of Business & Industrial Marketing* [Post-print], ahead-of-print (ahead-of-print), 2022. Available from. Doi: <https://doi.org/10.1108/JBIM-01-2021-0066>
24. Christopher M. The Agile Supply Chain. *Industrial Marketing Management*. 2000; 29(1):37-44.
25. Christopher M, Holweg M. Supply Chain 2.0. Managing supply chains in the era of turbulence. *International Journal of Physical Distribution & Logistics Management*. 2011; 41(1):63-82.
26. Christopher M, Lowson R, Peck H. Creating agile supply chains in the fashion industry. *International Journal of Retail & Distribution Management*. 2004; 32(8):367-376.
27. Christopher M, Peck H. Building the Resilient Supply Chain. *The International Journal of Logistics Management*. 2004; 15(2):1-14.
28. Čiarnienė R, Vienažindienė M. Agility and Responsiveness Managing Fashion Supply Chain. *Procedia - Social and Behavioral Sciences*. 2014; 150:1012-1019.