

Enhancing Supply Chain Agility in Modern Business Environment and Humanitarian Organizations

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Abstract: Supply chains are an integral part of modern business environments that are highly dynamic in nature. Agility is a crucial concept in this regard since it determines the ability of a business to adapt its operations in a quick and effective manner to the evolving market conditions along with customer demands. There was a need for finding how agility in the supply chains of both business enterprises and humanitarian organizations can be improved to address the unique challenges and demands of the modern business and humanitarian landscape. Further, there was a scope to study the novel approaches and collaborative strategies can be employed to foster supply chain agility, considering the distinctive requirements of business enterprises and humanitarian organizations in the modern business environment. The present research aimed at exploring strategies for enhancing agility in the supply chains of both business enterprises and humanitarian organizations in the US. The study was secondary in nature and considered qualitative data collection and subsequent thematic analysis. It was found that agility has a pivotal role to play in both business and humanitarian organizations against a constantly changing global economy and political settings. If organizations take an initiative to move beyond conventional business models that focus on costs and speed, they would be able to have responsive supply chain practices. The outcome would be that companies would be uniquely positioned to compete in this highly competitive and challenging marketplace and achieve the set organizational objectives. Recommendations have been provided at the end for modern businesses and organizations to consider and enable agile supply chains.

Keywords: Agility, Supply Chain, Business, Humanitarian Organizations.

INTRODUCTION

In today's interconnected and fast-paced world, businesses must not consider a well-functioning supply chain to be an added advantage. Rather, a robust supply chain is now being perceived as an absolute necessity for businesses to thrive. Modern businesses that already have been successful in securing a good position look up to supply chain processes for enhanced efficiency and cost reduction. A robust supply chain is known to be optimizing the production of goods and provision of services while minimizing waste and redundancies (Hartley and Sawaya, 2019). Further, streamlined processes related to the supply chain are responsible for lowering production costs and reducing inventory holding costs. In addition, it has also been noticed that effective cooperation and coordination among the stakeholders of the supply chain of a business leads to cost savings when trying to achieve smoother operations. Arguably, the supply chain is impacted heavily by the changes in customer demands and the overall market scenario based on a country's socio-economic condition (Nowicka, 2021; Clottey, F. A. 2024).

Supply Chain Agility and Implementation Factors

Power, et al., (2001) reflect upon the critical success factors that play an important role in agile supply chain management. Based on the survey conducted with 962 Australian manufacturing companies the researchers argued that

organizations can be classified as less agile or more agile. The companies that are denoted as more agile were found to be more focused on customers, while considering the application of hard and soft methodologies for meeting changing customer requirements. Such companies also tend to gain a deeper understanding of the involvement of suppliers in the process of attaining a higher level of customer satisfaction. The companies that are denoted as less agile were found to be more internally focused with a bias shown, from time to time, towards internal operational outcomes. Such companies do not acknowledge the association between independent variables and innovation.

Fosso Wamba, (2020) pinpointed that supply chain of humanitarian organizations is drawing enormous attention of academics and researchers because of the role played in reducing natural disasters. Arguably, data-driven decision making remains at the cornerstone of a systemic approach towards supply chain. By utilizing advanced data analytics for tracking availability of resources, organizations are now able to guide allocation of resources in a useful manner. Also, important to note is the fact that predictive modelling is also done by humanitarian organizations for anticipating possible disasters and having a proactive approach for the same. When it comes to technology, humanitarian organizations in the US are not left behind, and they use diverse mobile platforms and drone technology for improving

supply chain agility. Communication tools such as these are essential for facilitating the process of information sharing and coordinating with local partners and beneficiaries. When an organization is able to deliver supplies urgently with the help of drones, agile response abilities are further enhanced.

Challenges of Agile Supply Chain

As mentioned by Villena and Gioia, (2020) the case of Apple Inc. presents an area for studying how big US companies face problems when trying to maintain an agile supply chain. The dependence of the company on manufacturing units overseas, lean inventory management, and standardized production present major challenges to achieving what is perceived as full agility. It is to be noted that the production of the company is geared towards standardized products in high volumes. This actually limits the ability of the company to adapt in a speedy manner to niche customer demands. It is also difficult to scale production in a rapid manner for launching any new line of products. Arguments can also be presented that stockouts are common with the products of this company when there is an unusual surge in demand. The rationale is emphasis on lean inventory management, and the outcome is poor customer satisfaction.

World Central Kitchen is an American charity that had been founded by Jose Andres, a chef, for feeding people who are needy. The humanitarian organization, established in 2010 in Washington DC., has done a great job in helping people amidst the pandemic and this has implications for an agile supply chain. It is learnt from the case study of this humanitarian organization that companies in the US can consider local procurement of resources in place of depending heavily on long-distance imports. When priority is given to buying supplies and ingredients from local vendors and farmers, there are lesser transportation costs as well as risks. Also, partnering with small businesses brings about opportunities for a business in the context of a more resilient as well as adaptable suppliers' network. Also important is that flexible operations leads to supply chain agility, like World Central Kitchen has done. Repurposing resources and using mobile kitchens are the two important points in this regard (Andres and Mook, 2022).

Strategies For Enhancing Agility

As reported by Lee, (2004) companies are uniquely positioned to build agility in their supply chains by taking into account six points. The first

is to provide data on the changes that are taking place in supply and demand to the partners in a continual manner. For example, Cisco has created an e-hub that is responsible for connecting suppliers to the company through the internet. The second is to develop what is called collaborative relationships with customers and suppliers to enable companies to be working together for redesigning processes and products. For example, Lululemon has achieved supply chain agility by building strong relationships with customers and suppliers. The third is to design specific products that have processes and parts in common with only differences in end of the production process. For instance, Xilinx has mastered the art of postponement and there are rare inventory problems faced because customers are able to program the integrated circuits as per their requirements over the internet.

The fourth is to keep a small inventory of non-bulky, inexpensive components which are known to often cause bottlenecks. H&M, which has a strong presence in the US, has maintained a supplies of different accessories like zippers, hooks, decorative buttons, and snaps for catering to the needs of the customers in case supply chains are on the verge of breaking down. The fifth is to build, in a thoughtful manner, a reliable logistics system enabling the company to regroup when met with unprecedented needs. Amazon is a great example in this case because it established a remarkable logistics infrastructure that supports a fast delivery model. The sixth is to engage in putting together a team that has the ability of invoking backup plans. Dell, the American company, has tackled crises time and again in the past by preparing contingency plans with the help of trained managers (Lee, 2004).

Mercy Corps is a notable humanitarian organization in the US that has a strong international presence. The stakeholders are confident that its leadership takes the organizational vision and mission to a higher level with each passing year. The organization is known for an agile supply chain because of which humanitarian crises taking place around the world can be responded to in a swift manner. The strategy that the organization takes is that it maintains strategic caches of supplies such as water purification tablets, food, and medical kits. Further, it avoids heavy reliance on transportation over long distances and focuses on giving immediate responses at the time of disaster. Partnering with local organizations, Mercy Corps

has been able to identify potential risks beforehand and articulate response plan accordingly. More mobilization and cultural sensitivity have been considered by the organization that brings in a positive impact on the supply chain performance (mercycorps.org, 2018).

CONCLUSION

The current research highlights, in an equivocal manner, the vital role played by agility in the context of supply chain of both business and humanitarian organizations in the turbulent world of today. While disruptions and instability present major challenges, it has been identified through this research that there lies ample opportunity for those wanting to embrace agility. When organizations focus on speed and costs, as driven by conventional models, there are poor organizational outcomes. But when organizations give emphasis to the development of aligned and adaptable supply chain practices, responsiveness and success is ensured on a long-term basis. The valuable research findings can be used by companies from across the globe and the US for benchmarking their own performance and also identifying the possible areas requiring immediate improvements. Also, such companies can be making an attempt to stay updated on the latest trends in agile supply chain management following motivation from present research and organizational objectives.

Advanced technologies, that include data analytics, predictive modeling, and mobile platforms, play a crucial role in enhancing agility for both businesses and humanitarian organizations. Small companies have the unique opportunity to look up to big companies and take key lessons for their own improvements. The main findings of the research have disclosed that remarkable success can be achieved in both business and humanitarian sectors when agile practices are implemented. Valid case studies are there that offer prominent strategies worth emulating. In future, collaboration between researchers would remain vital for conducting joint studies and further enriching the knowledge pool on agile supply chains. It is worth saying that researchers must be mindful of local nuances and cultural differences while trying to interpret and apply research findings in countries

other than the US. Focusing on the inherent transferable skills that are deeply integrated into supply chain management must increase the applicability of research in different settings.

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