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# A Review on Increasing Sale, Profit Rate and Productivity Improvement Using Supply Chain Management

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Abstract- Though the tasks of the supply chain of the firm are linked to the vision, supply chain managing leads to a major advantage as it helps the company work faster. This provides more clarity over the process to provide products and services as per the expectations of customers. Leaders in supply chain management know the importance of the process for a business that is more than the movement of raw materials. There are innovations in the supply chain that can help companies offer the best service with collaborative systems. Supply chain management performs by integrating procurement, suppliers, and facilities of manufacturers, distributors, retailers, and customers while they work together by the production, buying, and sales cycles. This supply chain needs active management since it is impacted by several aspects of the control of the business-like environmental conditions, fuel prices, and so on. While a company is more aware of these aspects, it can effectively manage them. With efficient management of supply chain, production, inventory, distribution, vendor, and sale records are in strict control. The SCM shows the management of expenses at each step and offers products to customers in a quick manner.

Keywords: Sale, Profit Rate, Productivity Improvement, Supply Chain Management

## I. INTRODUCTION

The influence of Digital transformation issues implies that the business environment is changing and that all industries are creating ripple effects. Their effects are extremely contextual and vary from event to event (Köhler, et al., 2019). One thing is certain though, the need for companies to embrace digital technology to compete in the world market and to beat rivals is vital (Parida, Sjödin, & Reim, 2019). In addition, companies are important players for society to maintain a successful transition (Vial, 2019). The accurate balance between digitalization of strategies and the capacity to meet sustainable objectives is an emerging but important area (Wu, Guo, Huang, Liu, & Xiang, 2018). This is particularly important if this smart transformation is to be accomplished in a manner that does not make

society and companies overconsumption and unsustainable.

It presents that each product that is available for sale is present due to several members in the supply chain. The supply chain manager is an expert professional who is liable for a major part of the chain like the careful strategy for the supply, the source of goods used to make products for sale, the effective production of the manufacturing process, the delivery system for moving products and the system for management of unwanted products and returns and so on. The manager performs to save shortage and lessened costs by these aspects (Jie & Gengatharen, 2018).

When completed virtually, supply chain managing can help retail companies in the region to have an

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edge over rivals by offering products more time to customers. The SCM lowers the expenses of conducting business by lessening the production and buying costs. For instance, retail companies choose to buy products from farmers directly to prevent costs linked to third-party suppliers. The direct purchase of products from the source can help find the better process and offer the food to customers more effectively and quickly (Herath, 2016).

Due to its creative character digital transformation and additional ICTs are capable of increasing efficiency, promoting dematerialization, facilitating better business strategies. In addition, digitization was posited as one of the most potential perspectives in society (Gouvea et al, 2018) for sustainable development (SD) as well as for transitional business. These ideas are founded on how digitization allows for better efficiency and implementation: resource productivity, proof- based decision-making, environmental social governance, and modified paradigms both for consumers as well as investors (Holst et al., 2017). In addition, digitalization was proposed to help redefine companies' customer connections, workers, and natural resources (Vial, 2019). This kind of synergy is enabled by implementing technologies falling under the 'digitalization' paradigm, including 'Advanced Analytics, Intelligent Systems, Artificial intelligence, Blockchain or Decentralized Computing Techniques, Quantum Computing, etc.' (Ahmad et al, 2020)

The SCM can facilitate the strategic planning for the enterprise and support to make the system for future advancement like international expansion. When a retail store develops strategic relations with farmers, this can help grow business operations because the company is better able to use these partnerships for business advancement. The SCM assists the business to harmonize the supply of products as per the market needs and demands. They use grocery stores as an example, if we are purchasing goods straight from the farmer, this can help to deal with the farmer better in every season. The SCM enables to be more effective and efficient in customer service (Herath, 2016).

Customers attain their products rapidly as per their expectations. For instance, in case the farmer offers the food straight to the grocery store, then the product will be of better quality and less damaged because it has taken limited traveling time. The end goals of the efficient supply chain are increased profits by better customer satisfaction and low expenses of conducting business. Profits are better while expenses are controlled and lessened to the maximum range. Working costs lessen while the expenses of purchasing raw materials reduce (Herath, 2016). The technology is linked to digital service that is helpful in improving process (Singh et al, 2020). The practical problem is linked to obstacles that might change the adjustment to the newest technology and ways several variables impact the adoption of technology in the manufacturing segment of Bhopal. The present study considers issues that are forcing the manufacturing segment of Bhopal to shift to technological advancement in terms of supply chain management. There is an aim to investigate the range to which several technologies like the internet of things, multiple distribution channels, and globalization impacting the supply chain in the manufacturing segment of Bhopal. There is an aim to identify gaps between traditional and digitalized supply chains. there is consideration of both primary and secondary data to assess challenges of traditional supply chain and examine the effectiveness of digitalized supply chain. there is an aim to determine areas for infrastructure that need improvement. Present flaws in the supply chain are identified to identify corrections. There is consideration of different points in the supply chain that need more attention to take further steps. The research intends to assess how digitalized and centralized solutions can make sure the information is accurate and accessible.

# II. NEED FOR MANAGING SUPPLY CHAIN

The next important issue is why the firms should consciously manage the supply chain. Supply chain involves the cost to convey the information, produce components, store them, transport them, and transfer funds and so on. The total cost of supply chain tends to increase due to many parameters like

huge capital cost required for running global businesses, mounting real estate costs and fright charges (Koch, 2006). However the perfect planning in SCM regarding material arrival, production schedule and distribution not only reduces the inventory and inventory cost but also reduces the wasted time and energy (Verma et al., 2006). Supply chain management drastically alters inventory investment across a range of industries, and helps to tackle economic fluctuations (Heng et al., 2005).

# III. ISSUE OF SUPPLY CHAIN DESIGN

Manufacturing firm's supply chain design is based on effective integration. Braganza (2002) and Power (2005)examined different perspectives integration and suggested that integration of several functions at different organizational levels achieve above average financial and performance results. It is observed that current static approaches and theoretical models are ineffective in considering all variables and constraints for designing supply chain. Manson- Jones et al. (2000) demonstrated how the "lean" and "agile" paradigms might be integrated. They designed a total performance metric and developed a route map for integration of lean production and agile supply in the total chain. Lalwani et al. (2006) suggested that one of the reasons for this might be the difficulty of grasping the full dynamic complexity of the processes and systems encountered. Authors proposed that current developments in systems thinking and continuous system simulation, when applied within the context of an operations management framework, may offer the good design of SC and improve in supply chain performance.

#### IV. LITERATURE REVIEW

Supply chain risk management (SCRM) is a systematic and phased approach for recognizing, evaluating, ranking, mitigating, and monitoring potential disruptions in supply chains (Aqlan and Lam 2016). SCRM is an important area due to an incident's cascading effects on logistics networks (Cigolini and Rossi 2010). Some examples of such events include September 11, the Gulf War, the outbreak of a pandemic (e.g., bovine spongiform

encephalopathy, and coronavirus disease 2019, COVID-19), the millennium bug. These disruptive events have compelled practitioners to explore the vulnerabilities in supply chains and evaluate risks. Vulnerabilities in a supply chain depend on the supply chain (Caniato and Rice 2003; Chapman et al. 2002). Moreover, the COVID-19 pandemic has resulted in disruption to the mechanics of most economies, irrespective of their size and phase of development.

Globalization, shorter lifecycles, product multifaceted networks of trade partners located in many countries, uncertainty in market demands, cost pressures, outsourcing, and offshoring are a few risks in SCM (Hachicha and Elmsalmi 2014). The complexities of SCM are rising, and the networks are becoming more complex, resulting in more uncertainty in the business environment (Sofyalıo glu and Kartal 2012). These represent risk events in supply chains that impact the entire supply chain network (Cagliano et al. 2012). A risk event is an indicator of a threat that disrupts a supply chain (Fernandes et al. 2011). Global supply chains have many challenges and greater risks (Tang 2007). The dependence on an organization for parts has changed to a supply chain (Christopher 1992). This requires greater transparency and sharing of information among supply chain players. Global production practices have changed due to globalization and nations' economic engagements with partner countries. These have increased complexities and various forms of risks in supply chains. Organizations have created warehouse facilities, production plants, and fulfillment centers across countries to achieve cost benefits, access to cheaper raw material sources, or specialist skills and capabilities (Choi et al. 2012). The distribution centers in the modern era of global supply chains are also known as fulfillment centers. A fulfillment center is where customer demands are fulfilled. Therefore, these centers must be efficient because these centers' efficiency affects the entire SCM value.

Significant emphasis is to be employed on the impact of disasters distressing the supply chain and ensuring effects on operational performance (Prasad et al. 2016; Wang et al. 2014). Craighead et al. (2007)

suggested that, "supply chain interruptions and the associated operational and financial risks represent the most pressing concern facing firms that compete in today's worldwide marketplace." Risk in a supply chain is "the likelihood of an adverse and unexpected event that can occur, and either directly or indirectly result in a supply chain disruption" (Garvey et al. 2015). However, there is a difference between disruption and risk. Disruption is an indicator of risk in supply chains. Nonetheless, risks exist without disruption. The 2011 tsunami in Japan affected the auto industry globally for months. Furthermore, floods in Thailand later in the same year affected the supply chains of semiconductors and auto manufacturing plants in Thailand (Chopra and Sodhi 2014).

Risks cause disruption, which ripples through the network of the supply chains. SCRM ensures the smooth functioning of supply chains (Christopher and Lee 2004). Risk can be termed as vulnerability, uncertainty, disruption, disaster, peril, or hazard. A lack of foresight about a likely disruption in a supply 5. chain and its causes makes a supply chain vulnerable, and the SCM leaders less effective (Vorst et al. 1998). Uncertainty and risk have been used interchangeably in SCM. Uncertainty has more than one possibility and, therefore, is difficult to calculate (Knight 1921). Risk comes from uncertainty, which has a few possibilities (Hubbard 2007, 2020). However, risks can be quantified. SCRM is a strategic view of supply chains in an organization, and SCRM includes supply chain security (Williams et al. 2008).

#### V. CONCLUSION

The SCM can facilitate the strategic planning for the enterprise and support to make the system for future advancement like international expansion. When a retail store develops strategic relations with farmers, this can help grow business operations because the company is better able to use these partnerships for 8. business advancement. The SCM assists the business to harmonize the supply of products as per the market needs and demands. They use grocery stores as an example, if we are purchasing goods straight from the farmer, this can help to deal with the farmer

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### **REFERENCES**

- Vegter, D., van Hillegersberg, J., & Olthaar, M. (2023). Performance measurement system for circular supply chain management. Sustainable Production and Consumption, 36, 171- 183.
- Golrizgashti, S., Hosseini, S., Zhu, Q., & Sarkis, J. (2023). Evaluating supply chain dynamics in the presence of product deletion. International Journal of Production Economics, 255, 108722.
- Jiang, Y., Zhao, X., & Zhai, L. (2023). Digital empowerment to improve the operational profitability in e-commerce supply chain. Electronic Commerce Research and Applications, 58, 101253.
- 4. Shen, Z. M., & Sun, Y. (2023). Strengthening supply chain resilience during COVID-19: A case study of JD. com. Journal of Operations Management, 69(3), 359-383.
- Cahyono, Y., Purwoko, D., Koho, I., Setiani, A., Supendi, S., Setyoko, P., ... & Wijoyo, H. (2023). The role of supply chain management practices on competitive advantage and performance of halal agroindustry SMEs. Uncertain Supply Chain Management, 11(1), 153-160.
- Gurbuz, M. C., Yurt, O., Ozdemir, S., Sena, V., & Yu, W. (2023). Global supply chains risks and COVID-19: Supply chain structure as a mitigating strategy for small and medium- sized enterprises. Journal of Business Research, 155, 113407.
- Jahanbakhsh Javid, N., & Amini, M. (2023). Evaluating the effect of supply chain management practice on implementation of halal agroindustry and competitive advantage for small and medium enterprises. International Journal of Computer Science and Information Technology, 15(2023), 8997-9008.
- 8. Seif, M., Yaghoubi, S., & Khodoomi, M. R. (2023). Optimization of food-energy-water- waste nexus in a sustainable food supply chain under the COVID-19 pandemic: a case study in Iran. Environment, Development and Sustainability, 1-35.

- Transforming supply chains for a new competitive market alignment-a case study of Chinese fashion apparel companies. International Journal of Logistics Research and Applications, 26(3), 365-397.
- 10. Jauhar, S. K., Jani, S. M., Kamble, S. S., Pratap, S., Belhadi, A., & Gupta, S. (2023). How to use nocode artificial intelligence to predict and minimize the inventory distortions for resilient supply chains. International Journal Production Research, 1-25.
- Servitization and performance: the moderating effect of supply chain integration. Production Planning & Control, 34(3), 242-259.
- 12. Zhang, A., Tay, H. L., Alvi, M. F., Wang, J. X., & Gong, Y. (2023). Carbon neutrality drivers and implications for firm performance and supply chain management. Business Strategy and the Environment, 32(4), 1966-1980.
- 13. Ghozatfar, A., & Yaghoubi, S. (2023). A cooperation approach for nexus among biofuel, compost, and water in waste supply chain under risk aversion: A case study. Computers & Chemical Engineering, 108334.
- 14. Moraux, F., Phan, D. A., & Vo, T. L. H. (2023). Collaborative financing and supply chain coordination for corporate social responsibility. Economic Modelling, 121, 106198.
- 15. Rajabzadeh, H., Altmann, J., & Rasti-Barzoki, M. (2023). A game-theoretic approach for pricing in a closed-loop supply chain considering product exchange program and a full- refund return policy: a case study of Iran. Environmental Science and Pollution Research, 30(4), 10390-10413.
- 16. Hyndman, K. B., & Menezes, M. B. (2023). Behavioral pitfalls of product proliferation in supply chains: An experimental study. Decision Sciences, 54(2), 131-153.
- 17. Vali-Siar, M. M., Roghanian, E., & Jabbarzadeh, A. (2022). Resilient mixed open and closed-loop supply chain network design under operational and disruption risks considering competition: A case study. Computers & Industrial Engineering, 172, 108513.

- 9. Ye, Y., Hung Lau, K., & Teo, L. (2023). 18. Cahyono, Y., Purwoko, D., Koho, I., Setiani, A., Supendi, S., Setyoko, P., ... & Wijoyo, H. (2023). The role of supply chain management practices on competitive advantage and performance of halal agroindustry SMEs. Uncertain Supply Chain Management, 11(1), 153-160.
  - 19. Lee, K., Azmi, N., Hanaysha, J., Alzoubi, H., & Alshurideh, M. (2022). The effect of digital supply chain on organizational performance: An empirical study in Malaysia manufacturing industry. Uncertain Supply Chain Management, 10(2), 495-510.
- 11. Li, H., Yang, Y., Singh, P., Sun, H., & Tian, Y. (2023). 20. Rasheed, T. (2022). Supply Chain sustainability through green practices in manufacturing: A case study from Pakistan: Supply chain sustainability. South Asian Journal of Operations and Logistics (ISSN: 2958-2504), 1(1), 57-71.