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Role of Management in Implementation of Sustainable Supply Chain Management

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ABSTRACT

Businesses are increasingly focusing on acquiring and delivering products and services that have the least negative impact on planning, execution, and collaboration. As a result of the above, industry and academia have taken an interest in the concept of sustainable supply chain management, owing to its importance in terms of environmental, social, and corporate responsibility, as well as its e-commerce component. The most important theoretical contribution of this research is that it demonstrates that independent factors have a positive impact on organizational growth. Because of commercial concerns, Sustainable Supply is a major issue in the corporate sector. Supply chain management has gotten increased attention since the 1980s when companies began to illustrate the benefits of reciprocal ties in the workplace. As a result, academics are concentrating their efforts on developing new supply chain theories that benefit businesses. The main goals of this study are to provide a written assessment of possible supply chain management based on publications published from 1990 to the present. The moment provides a conceptually plausible supply chain process model based on the triple foot line premise. The results from the study on cost-effective supply chain management don't add up. Most previous studies have focused on the environmental, social, and economic aspects of one could in the supply chain. The majority of previous inquiries were focused on overwhelming conceptual nature. There is a scarcity of research on long-term supply chain management based on extensive observational evidence. This research focuses on the Pakistan supply chain's triple foot line maintainability, taking into planning, execution, collaboration and coordination factors. This consideration also emphasizes the importance of PhD research in this sector in the future.

Keywords: *Sustainable supply chain, Planning, Execution, Collaboration, Coordination.*

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1. Introduction

There has been an increasing focus in recent years in examining the impact of sustainable supply chain integration capabilities in improving and implementing business performance in organizations. The word "sustainability" has been characterized in the literature as a company duty to persons from various groups, where responsibility refers to the need to eliminate adverse business impacts (Bratt et al., 2021). A holistic approach to a company's planning, execution and environmental components is required for sustainability (Florescu et al., 2019). Environmental stewardship has evolved into a critical component of company operations. Since the early 2000s, sustainable supply chain management has captivated the interest of both industry and academia. Organizations examine their products and activities in order to deliver items and services that are more ecologically friendly. A vast number of publications have been written to keep up with the trend. Sustainable Supply chain management concepts, such as defining Supply Chain Management and building suitable roadmaps and frameworks, are the focus of current Supply Chain Management research (Jia et al., 2018). Sustainable Supply Chain Management is the systematic integration of important business activities that enables businesses and their supply chains to achieve environmental objectives. Increased focus on business sustainability adds to the strain, but it also creates new chances for innovation and competitive advantage. As a result, businesses who embrace it may be able to meet short-term financial objectives while also being proactive in dealing with supply chain activities that have long-term environmental and social effects (Florescu et al., 2019). The necessity to incorporate sustainability thinking into firm actions and advantages is becoming increasingly apparent in the global business sector (Bratt et al., 2021). Sustainability management is becoming a critical component of business continuity, allowing companies to fulfil present societal expectations without jeopardizing their ability to meet future needs (Bastas & Liyanage., 2018).

Despite the fact that sustainable supply chain management benefits from a large amount of research. As a consequence of implementing sustainable supply chain management operations, manufacturing companies have a better awareness of the need to be environmentally conscious as well as the economic implications. Since the United Nation’s Sustainable Development Goals were established, the importance of sustainability has only grown. Improving the commerce operation is also crucial in order to save time and enhance productivity. This may be accomplished by employing the tools provided across the supply chain- Supply Chain Management. Several variables influence the supply chain's viability. We present an implementation process model for sustainable supply chain management in this paper (Bastas & Liyanage., 2018). We do this by combining findings from a survey of the literature on sustainable supply chain management and organizational learning, as well as a case study with a firm wanting to be a worldwide leader in sustainable lighting. By integrating these findings, we discover that effective adoption of sustainable supply chain management necessitates sustainability being embedded in a company's vision and integrated into all processes. We also contend that organizational learning, particularly learning with external stakeholders such as suppliers, an operational definition of socioecological sustainability among stakeholders, and procedural support for the creation of strategic change plans are essential for achieving a truly sustainable supply chain (Mazzucchelli et al., 2020). This definition allows for attention to be directed toward strategic ecological and social practices, along with the joint handling of trade-offs and economic considerations among stakeholders. As we build a foundation for a sustainable supply chain management implementation process model, more action-based research to uncover the complex nature of sustainable supply chain management, as there are unique challenges and dynamic relationships in every supply chain (Fiano et al., 2020). This definition and creation enable stakeholders to focus on strategic ecological and social practices, as well as the cooperative management of tradeoffs and economic concerns. We employ a science-based framework for strategic sustainable development to lay the groundwork for a sustainable supply chain management implementation process model. We advocate for additional action-based research to discover the complex nature of sustainable supply chain management, since each supply

chain has its own set of difficulties and dynamic interactions.

The global business community is rapidly understanding the need of incorporating sustainability thought into its operations and benefits. A "license to operate" is increasingly requiring public legitimacy to demonstrate accountability and society participation (Bratt et al., 2021). Several writers have also identified direct self-benefits for organizations that pursue sustainability, innovation, and market possibilities proactively. With rising globalization and complexity of supplier networks, there is a greater commercial interest in controlling the sustainability performance of these networks. Supply chain management is the integration of important business processes from end user to original suppliers, resulting in goods, services, and information that bring value to consumers and other stakeholders. The few existing studies on the topic focused on supply chain performance improvement through innovation strategies and open innovation programs (Florescu et al., 2019).

The supply chain is a set of operations within an organization's management that focuses on the data, people, actions, and assets of clients and providers. Everything from the manufacturing handle to the distribution of the wrapped items to the most enthusiastic clients falls within this category. Within generation, unrefined materials are handled, and others are transformed into packaged goods. It also raises the value of the things and assurances in a reasonable way. "Supply Chain Organization comprises the planning and administration of all activities connected to sourcing and procurement, transformation, and other coordinating administration responsibilities," according to the Chamber of Supply Chain Administration Experts (Swierczek, 2020; Rashid et al., 2022). The hub of the supply chain is the successful coordination of partners such as mediators, providers, third-party logistics suppliers and others. It focuses on formulating a reasonable request and managing the supply chain. It is in charge of the commerce organization's work coordination (Jambulingam et al., 2020). It communicates with a diverse group of people. With the rise of globalization and the complexity of supplier networks, businesses are becoming more interested in monitoring their long-term success (Bratt et al., 2021). Global conflicts – whether owing to trade or security – or environmental and social governance concerns may cut off supply sources, in addition to COVID-related interruptions. Sanctions are being more widely used, affecting logistics supplies, particularly from China (Hecimovic et al., 2020).

Its main attraction is a high-performance trade show. Several actuates are included in the coordination. It oversees fundraising, showcasing, deals, item planning, funding, and data execution among other facets of the commerce business (Swierczek, 2020). The purpose of this research is to investigate how to deploy Sustainable supply chain management as part of a strategic organizational transformation process. In this research we have discovered that the transformative process improves stakeholders' sustainability, planning and execution (Srivastava et al., 2017). Furthermore, we seek to address a vacuum in the sustainable supply chain management literature by providing a comprehensive view on sustainability as well as procedural assistance for implementing more sustainable management practices. Supply chain management is concerned with the movement of commodities and their administration. It takes into account the raw and wrapped-up item capacity of the company. It has capability from the point of manufacturing to the point of consumption (Del Giudice et al., 2020). Material, information, and capital movements, as well as collaboration among enterprises in the supply chain, are all managed while taking into consideration goals from all three aspects of sustainable development (planning, execution, and logistics management) which are generated from customer and stakeholder needs. The use of sustainable supply chain management may help to mitigate the detrimental effects of operations (Florescu et al., 2019). A sustainability framework should include procedural support for the creation of visions and strategic plans for practical application (Bratt et al., 2021). The operation administration, acquisition, coordination, and data innovation, as well as their successful cooperation across various offices, are the focus of supply chain administration.

1.1. Problem Statement

Organizations have evolved and changed viewpoints in recent years. Every business aspires to be the best. The gatherings are intended to attract customers looking for high-quality items and exceptional service. However, owing to a lack of resources, several organizations do not implement

Sustainable Supply Chain. However, the tendency has altered, and corporations have adopted or applied sustainable supply chain practices to include appropriateness in supply networks (Florescu et al., 2019). In organization supplier selection is very crucial role because if cannot get raw material on time so your overall production is going to downside. It will be effect on your efficiency, quality and also it shows that reluctance to implement performance-based scorecards (Yazdani et al., 2019). Product stewardship improve environmental performance by less use of carbon footprint. Also, a worker safety issue highlight in many areas so it is important to handle wherever it notices in your operational activity (Babu et al., 2018). Usually, logistics problems are occurring in your delivery operations like in the past pandemic that all operations are freeze due to covid-19. If you want to run your logistics operations smoothly so focus on 3PL suppliers' selection and also compare that which logistics supplier is reliable for your product deliveries on time (Aharonovitz et al., 2018). Increase the organization performance planning an important because the if demand increase so you cannot be boosting your production so you have to plan something this happen before (Swierczek, 2020). Sometimes you planned well but the execution is not going well as you think, so handle your orders properly and also check you inventory to fulfill your orders because it can be dangerous at the end of the month to shipped your order the customers (Srivastava et al., 2017). Contact to your supplier on time because due to work load you missed the important email and the deadline as some to an end. So, monitor your performance on daily basis and exchange information each other (Jambulingam et al., 2020). When facing difficulties to fulfill demands so collaboration is required both the organization. Sometime miscommunication is happened, low trust between the organization and also handle difference in culture and values (Panahifar et al., 2017; Rashid & Rasheed, 2022). The existing and future supply-chain management difficulties in Pakistan were the subject of this study. The purpose of this study is to determine the most significant obstacles to building a long-term supply chain. Because effective supply chain management provides various advantages to businesses, overcoming obstacles to keep things operating smoothly is a major responsibility for supply chain specialists.

2. Literature Review

Sustainable Supply Chain Management (SSCM) is an integrated approach to supplier chain management that enables businesses and their supply chains to achieve economic, environmental, and social objectives. A lot of research was done in the early 1990s. The idea of supply chain management has been identified by many scholars. The few studies that have been done on the subject have focused on how to enhance supply chain performance through open innovation initiatives and innovation techniques (Baloch & Rashid, 2022; Florescu et al., 2019; Rasheed, 2022). Companies that use it can meet short-term economic goals while also becoming proactive in fulfilling long-term environmental and social objectives. Operations in the supply chain have evolved from being merely supporting parts of the global enterprises to their most crucial aspects. The firms are compelled by increasing market rivalry to forge stronger, longer-lasting connections with their suppliers (Yazdani et al., 2019; Shaheen, 2022; Anwar, 2022). To develop a coordinated supply chain to efficiently handle the material, information, and capital flows related with the procurement, manufacturing, and distribution, social, economic, and environmental issues are actively linked with the major inter-organizational business systems (Dubey et al., 2016; Amjad, 2022; Victory et al., 2022). The important role of logistics management is a key element of any supply chain organization because if the demand is not meet the market so cannot not survive in the long-term strategy (Dobroszek, 2020; Hunaid et al., 2022). The current research on the subject concentrated on improving supply chain performance through innovation strategies and open innovation initiatives (Azman et al., 2017; Ali, 2022; Alam, 2022).

The few studies that have been done on the subject have focus on open innovation initiatives and innovation methods for supply chain performance improvement. Development of suppliers by management programmers' that can recognize and control the dangers to the environment and society that are present in their operations (Florescu et al., 2019; Asif, 2022). The significance of execution has been emphasized by researchers at every step of the development of strategic management (Srivastava et al., 2017; Uddin, 2022). The supply chain is a fascinating area where social and physical science intersect. The showcase's multi-generational, multi-scale, and multi-dimensional aspects are being examined (Jia et al., 2018; Ayaz, 2022). Demand planning for supply chains requires a managerial

process, but this process has not yet been practiced. Demand planning, which is frequently seen as one of the biggest performance gaps, is similarly misunderstood by supply chain and company leaders (Basson et al., 2019). At each step of the development of strategic management, researchers have emphasized the significance of execution. As a reason, managers have more skill in developing strategy than in carrying it out. This has consistently been one of the most significant causes of corporate failure in many business contexts (Srivastava et al., 2017; Muzammil, 2022).

When partners work together with other parties to make sure that their supply chain can respond to changing market demands, collaboration has a significant potential to improve business performance (Byrne et al., 2018; Basit, 2022). It includes managing connections with suppliers and buyers both upstream and downstream in order to provide better customer value at a lower cost to the supply chain. In general, we suggest that the partnership is motivated to reduce or avoid the transaction costs of their exchange. Transaction costs are simply the expenses incurred when carrying out operations like acquiring data, bargaining, evaluating performance, etc (Jambulingam et al., 2020). To establish the barriers in SCM, future research fields, the structure of this research, literature evaluation, and study techniques are included. Furthermore, enhancing operational performance necessitates an organization's internal operations, which include environmentally friendly activities, green management with a holistic perspective, and employee participation. The areas of inquiry include understudies, inside and outside ventures, and so forth. It takes on the disorderly aspect of the university supply chain (Kazancoglu et al., 2019).

Supplier selection strategy is important for your organization because if they deliver your raw material on time with follow all the SOPs that cannot effect on environment that improve your overall performance and your organization ranking is comparatively high (Yazdani et al., 2019). Product Stewardship strategy is an area that have a very important role for conserving resources and is creating a differentiation advantage for an organization. It involves to manage the hazardous waste also minimize the environmental impact of the products through the life cycle (Ceptureanu et al., 2019). Logistics Management services and expertise are the major elements to provide sustainable solutions for your organization. The development towards logistics from both the supplier to fulfill the market demands with less costing (Aharonovitz et al., 2018). Planning is the process of correctly arranging the course of a material or product from the raw material stage to the ultimate customer. The planning process is very complex and required long term demand, network and distribution planning with large numbers of supplier and customers (Swierczek, 2020). Execution functions are managed orders, raw material, inventories and product delivery as well as they warehouse operations and manage logistics issues. With the help for execution, it can be fulfilling your demands. Efficient execution is heavily reliant on supply chain planning. Both organizations required to cooperate each other and boost productivity both ends (Srivastava et al., 2017). Coordination is required to analysis your orders, try to fulfill your pending orders and optimizing the process of procurement and distribution. Exchange the information is highly recommended to improve the organization performance and also follow the SOPs to sustainability in supply chain management (Jambulingam et al., 2020). Collaboration is major part to develop relationship between both organizations because both have same vision and goals. Your company must exchange crucial information in real time with supply chain partners in order to collaborate effectively. In order to extend your efforts to provide the right product to the right client in the right market at the precise moment they want and need it, you are trying to create a network of collaborators through almost transparent communication (Panahifar et al., 2017).

The researcher conducts a literature evaluation with the goal of increasing knowledge about the use of sustainable processes in supply chain systems in companies. The literature focuses on the adoption of sustainable supply chains to capitalize on the best potential advantages to enterprises, but it clearly fails to clarify how these components are applied in an organization. The researcher was unable to articulate the additional factors that led to the organization's enhanced success.

3. Research Method

A "methodology" is a set of techniques for doing various forms of research. A variety of

interrelated scientific issues exist. Research is classified into two types: qualitative research and quantitative research (Hashmi et al., 2021a; Omer et al., 2018; Rashid et al., 2021). The research consisted of quantitative method of research, which included interviews questionnaire. The paradigm of the research has been selected due to reasons that are very relatable in organization. It is to establish a link that sustainable supply chain effect on organizational performance. The research was cross sectional and used the positivist paradigm and quantitative research methodology (Rashid et al., 2021). Therefore, the conceptual model that was created using supporting evidence from the literature will be validated utilizing information from a real-world setting. the greatest way to study natural problem since they provide the researcher the depth and richness necessary to fully comprehend the what, how, and why questions relevant to a certain scenario (Dubey et al., 2016).

We used a quantitative survey as a method of data collection in our study (Agha et al., 2021; Das et al., 2021; Haque et al., 2021; Alrazehi et al., 2021; Khan et al., 2021; Khan et al., 2022a, b, c). Consequently, the structure of the interview questionnaire corresponds to the goal of the paper and enables to test the postulated hypotheses (Swierczek, 2020; Hashmi & Mohd, 2020). An online survey of 121 responses from different firms' employees was conducted and the resulting data were analyzed to investigate the role of management to implement sustainable supply chain in organization (Byrne et al., 2018; Hashmi et al., 2020a). This research was sought to uncover supply chain management issues in order to ensure the sector's long-term survival in Pakistan. The goal of this research is to give an explanation. The expectations and experiences of the supply chain was being examined. This research was addressing the key issue of supply chain challenges. As a result of this example, the supply chain of this distribution system was be transformed (Chierici et al., 2020). In this situation, several speculative judgments were made. As part of this investigation, several options were being tested. The study's purpose is to explore further into this phenomenon using a quantitative method in order to gain a better understanding of how key green supply chain practices impact overall organizational sustainability efficiency.

Further, a sampling process in which each sample has an equal probability of being chosen is known as random sampling. A survey conducted at random is meant to be unbiased and representative of the entire population (Ktikan et al., 2017; Hashmi et al., 2020b). This test was aid us in finding the links and dependencies between variables; in the future these approaches will aid in explaining our explanatory variables. SPSS has investigated statistics and is also used to translate data acquired from questionnaires and surveys into comprehensible statistics and information. In order to investigate the data, the multiple regression approach was applied (Azman et al., 2017).

4. Results and Findings

4.1. Demographic Analysis

Various approaches are used to analyses the descriptive profile of data at this phase. First, the responders' profiles are assessed and the results are illustrated in table 1. Males account for 76.9 percent of respondents, while females account for 23.1 percent. 30.6% of respondents are between the ages of 20 to 30, 24.8 percent are between the ages of 31 to 40, 19 percent are between the ages of 41 to 50, 25.6 percent are between the ages of 51 to 60. Respondents' educational backgrounds are classified as follows: 26.4 percent have a matric student, 26.4 percent have an intermediate student, 19.8 percent have a graduate degree and 27.3 percent have a postgraduate degree. Respondents' professional experience is divided into four categories: 31.4 percent have 0 to 5 years of experience, 19.8 percent have 6 to 10 years of experience, 22.3 percent have 11 to 15 years and 26.4 percent have 16 years and above of professional experience.

Table 1: Demographics

Demography	Group	(n=121) Frequency	Percentage
Gender	Male	93	76.9
	Female	28	23.1
Age (years)	20 - 30	37	30.6
	31 - 40	30	24.8
	41 - 50	23	19.0
	51 - 60	31	25.6
Level of Education	Matric	32	26.4
	Intermediate	32	26.4
	Graduate	24	19.8
	Postgraduate	33	27.3
Professional Experience	0 - 5 years	38	31.4
	6 - 10 years	24	19.8
	11 - 15 years	27	22.3
	16 years and above	32	26.4

Each variable was subjected to reliability testing to ensure that the model was consistent. According to (Straub, 1989; Rashid et al., 2019; Rashid et al., 2020), the Cronbach's alpha value should be greater than 0.60. The reliability test results are illustrated in table 2 and demonstrating that all the variables are reliable enough (> 0.60) (Rashid, 20216; Rashid & Amirah, 2017; Hashmi et al., 2021b).

Table 2: Reliability analysis

		Cronbach's Alpha	N of Items
Independent Variable	Supplier Selection	.856	4
	Product Stewardship	.912	4
	Logistics Management	.746	4
	Planning	.772	4
	Execution	.676	4
	Coordination	.785	4
	Collaboration	.924	4
Dependent Variable	Sustainable Supply Chain Management	.729	4

Table 3 shows the model summary for study hypothesis. The values led to the adoption of the following Hypothesis between Depended Variable-DV (Sustainability in Supply Chain Management) and In-Depended Variable -IV (Collaboration, Execution, Supplier Selection, Logistics Management, Product Stewardship, Coordination, planning to have impact of Sustainable Supply Chain Management). As all the hypotheses are significant; therefore, have been accepted.

Table 3: Model summary

Variable	Mean (*n=121)*	Standard Deviation	Model Summary		ANOVA	Coefficients		
			R	Adjusted R Square	F	St. Coefficient Beta	t	Sig.
Supplier Selection	9.4917	3.67366				2.418	6.616	.000
Product Stewardship	9.4380	3.30739				.261	3.206	.002
Logistics Management	8.9525	2.99936	.960[a]	.921	187.562	-.248	-4.089	.000
Planning	8.9360	3.25841				.248	2.415	.017
Execution	11.0103	2.55734				.767	13.035	.000
Coordination	10.1612	2.83888				.375	3.500	.001
Collaboration	9.2583	3.79170				-2.993	-8.420	.000

a. Predictors: (Constant), Collaboration, Execution, Supplier Selection, Logistics Management, Product Stewardship, Coordination, Planning, b. Dependent Variable: Sustainable Supply Chain Management

5. Discussion

In literature review, Organizational performance is influenced by a number of things. In this study, seven of such elements were chosen to focus on better organizational performance: to incorporate sustainable supply chain experience within the organization. Factors that have been shown to have a

significant impact are referred to as experience. Discussions on how to perform better are a regular focus for organizations; they want to know how we can perform better. Each factor, in accordance with this study, enhances organizational performance. Businesses aim to create sustainability in order to secure the upstream. Organizations have a wide range of options for implementing long-term business strategy. If one wants to optimize the efficiency of the supply chain, green supply chain practices must be used. guaranteed. Calculation inputs from the suppliers must be used by the management of the suppliers. It's necessary to use less energy and water. So, there won't be as much overproduction. Improvement of supply chain metrics must be given top priority. For enterprises and organizations, sustainable supply-chain management is becoming extremely important. They may now compete globally because to it. Traditional supply chain barriers will be used in the management paradigm. Benefits will flow across the corporation's whole commercial business. To maximize value, several companies participate in the supply chain. Many businesses are becoming more interconnected as a result of information technology, globalization, and outsourcing. There are various important business actions. Organizational supply chain management helps the firm remain effective over the long run. At many stages, the various supply chain participants must cooperate. The structure of the supply chain is influenced by several different types of networks. There are numerous firms now thanks to information technology, globalization, and outsourcing.

A number of important strategic decisions must be taken. Supply chain management inside an organization increases a business's long-term viability. The supply chain's numerous actors must cooperate with one another on multiple levels. Numerous different networks have an influence on the supply chain's structure. The corporate world is evolving in the 21st century. Collaboration throughout the supply chain is necessary for globalization to be successful. These have contributed to supply chain management's development. These activities are impacted differently by agile manufacturing, the Just-in-Time (JIT) technique, and Lean manufacturing. Various technical advancements have significantly lowered costs. In the twenty-first century, there are changes in the corporate environment. The globalization process needs supply chain cooperation for a better output. These have benefited in supply chain management's progress. In the business environment, the twenty-first century has brought major changes. Collaboration in the supply chain is needed to optimize the globalization process. The growth of supply chain management has been aided by these. These activities are affected differently by the Just-in-Time (JIT) production method. Multiple technical advancements have allowed for significant cost reductions. A major factor in outstanding performance is the sustainable supply chain approach. Utilizing data and analysis, it is a highly helpful tool for improving corporate performance. The organizational performance of the business will be excellent. By implementing a sustainable supply chain strategy, organizations may enhance their overall performance. Because, based on the results, improved organizational performance has a significant positive impact.

5.1. Conclusion

The supply chain has to be well managed for a company to grow successfully and sustainably. Businesses promote cost-cutting initiatives because they have a direct impact on their bottom line. Unfortunately, they did not give much thought to preserving the sustainability of their supply networks in the long run. Companies have come under pressure from environmental activists over the past 10 years to consider how their supply chain operations affect the environment and society. Some companies have increased the sustainability of their supply chains, making them some of the most sustainable companies in the world and improving their standing with customers. Businesses may be able to pay the higher expenses involved in developing sustainable supply chains with the support of stronger brand loyalty. In the long term, activist and regulatory scrutiny will make non-sustainable supply networks ineffective. Businesses' sustainability would be challenged if such supply networks were unable to fulfil demand. Supply chains may be made more effective and sustainable by implementing modern software and cooperating with other supply chain participants.

5.2. Recommendations and Limitations

After detail analysis of given research our analysis of the findings, We highly recommend

implementing standards, standard operating procedure, waste elimination, and resource efficiency in order to develop a sustainable supply chain process. It is a fantastic instrument for boosting organizational performance. A corporation will achieve organizational strategic goals over the long run when it adopts a sustainable supply chain strategy. We could improve the supply chain process to help the business operate more effectively. Because our research demonstrates that improved organizational performance achieved via the application of information technology has a significant positive impact. If we adopt a sustainable supply chain and actively reduce impending threats to our current businesses, we can address and solve many issues.

Because of environmental factors (the Covid-19 pandemic), which continued throughout the study, this research had to be conducted apart from its participants and from their educational resources. The availability of suitable analytical tools, effective communication, technique selection, and literature access thereafter become problems. The present study's authors are still learning how to do quantitative data analysis using statistical tools and publish academic publications. Additional skills and knowledge of statistical testing may enhance the research. The choice to conduct this research in a particular country and region was addressed as another constraint. This issue can be resolved by doing the survey again in other geographic areas to corroborate the results. In the future, the researcher may include more sectors and international corporations in the supply chain, improving the chance of a successful conclusion. They can also offer their challenges, implementation, aims, advantages, and disadvantages.

References

Agha, A. A., Rashid, A., Rasheed, R., Khan, S., & Khan, U. (2021). Antecedents of Customer Loyalty at Telecomm Sector. *Turkish Online Journal of Qualitative Inquiry, 12*(9), 1352-1374.

Aharonovitz, M. C. S., Vieira, J. G. V., & Suyama, S. S. (2018). How logistics performance is affected by supply chain relationships. *The international journal of logistics management, 29*(1), 284-307.

Alam, M. (2022). Supply Chain Management Practices and Organizational Performance in Manufacturing Industry. *South Asian Journal of Social Review, 1*(1), 42-52.

Ali, S. B. (2022). Industrial Revolution 4.0 and Supply Chain Digitization. *South Asian Journal of Social Review, 1*(1), 21-41.

Alrazehi, H. A. A. W., Amirah, N. A., Emam, A. S., & Hashmi, A. R. (2021). Proposed model for entrepreneurship, organizational culture and job satisfaction towards organizational performance in International Bank of Yemen. *International Journal of Management and Human Science, 5*(1), 1-9.

Amjad, S. (2022). Role of Logistical Practices in Quality Service Delivery at Supermarkets: A Case Study from Pakistan. *South Asian Journal of Operations and Logistics, 1*(1), 39-56.

Anwar, M. F. A. (2022). The Influence of Inter-Organizational System Use and Supply Chain Capabilities on Supply Chain Performance. *South Asian Journal of Operations and Logistics, 1*(1), 20-38

Asif, K. (2022). The Impact of Procurement Strategies on Supply Chain Sustainability in the Pharmaceutical Industry. *South Asian Journal of Social Review, 1*(1), 53-64.

Ayaz, J. (2022). Relationship between Green Supply Chain Management, Supply Chain Quality Integration, and Environmental Performance. *South Asian Management Review, 1*(1), 22-38.

Babu, D. E., Kaur, A., & Rajendran, C. (2018). Sustainability practices in tourism supply chain: Importance performance analysis. *Benchmarking: An International Journal, 25*(4), 1148-1170. https://doi.org/10.1108/BIJ-06-2016-0084

Baloch, N. & Rashid, A. (2022). Supply Chain Networks, Complexity, and Optimization in Developing Economies: A Systematic Literature Review and Meta-Analysis. *South Asian Journal of Operations and Logistics, 1*(1), 1-13.

Basit, A. (2022). The Influence of Green Supply Chain Management on Sustainable Performance. *South Asian Management Review, 1*(1), 49-66.

Basson, L. M., Kilbourn, P. J., & Walters, J. (2019). Forecast accuracy in demand planning: A fast-moving consumer goods case study. *Journal of Transport and Supply Chain Management, 13*(1), 1-9.

Bastas, A., & Liyanage, K. (2018). Sustainable supply chain quality management: A systematic review. *Journal of cleaner production, 181*, 726-744.

Bratt, C., Sroufe, R., & Broman, G. (2021). Implementing strategic sustainable supply chain management. *Sustainability, 13*(15), 8132.

Das, S., Ghani, M., Rashid, A., Rasheed, R., Manthar, S., & Ahmed, S. (2021). How customer satisfaction and loyalty can be affected by employee's perceived emotional competence: The mediating role of rapport. *International Journal of Management, 12*(3), 1268-1277. doi: 10.34218/IJM.12.3.2021.119.

Del Giudice, M., Chierici, R., Mazzucchelli, A., & Fiano, F. (2020). Supply chain management in the era of circular economy: the moderating effect of big data. *The International Journal of Logistics Management, 32(2),* 337-356. https://doi.org/10.1108/ijlm-03-2020-0119

Dobroszek, J. (2020). Supply chain and logistics controller–two promising professions for supporting transparency in supply chain management. *Supply Chain Management: An International Journal, 25*(5), 505-519. https://doi.org/10.1108/scm-04-2019-0169

Dubey, R., Gunasekaran, A., Papadopoulos, T., Childe, S. J., Shibin, K. T., & Wamba, S. F. (2017). Sustainable supply chain management: framework and further research directions. *Journal of Cleaner Production, 142,* 1119-1130. http://dx.doi.org/10.1016/j.jclepro.2016.03.117

Etikan, I., & Bala, K. (2017). Sampling and sampling methods. *Biometrics & Biostatistics International Journal, 5*(6), 00149. https://doi.org/10.15406/bbij.2017.05.00149

Florescu, M. S., Ceptureanu, E. G., Cruceru, A. F., & Ceptureanu, S. I. (2019). Sustainable supply chain management strategy influence on supply chain management functions in the oil and gas distribution industry. *Energies, 12*(9), 1632. https://doi.org/ 10.3390/en12091632

Haque, I., Rashid, A., & Ahmed, S. Z. (2021). The Role of Automobile Sector in Global Business: Case of Pakistan. *Pakistan Journal of International Affairs*. *4*(2), 363-383.

Hashmi, A. R., & Mohd, A. T. (2020). The effect of disruptive factors on inventory control as a mediator and organizational performance in Health Department of Punjab, Pakistan. *International Journal of Sustainable Development & World Policy, 9*(2), 122-134. doi: 10.18488/journal.26.2020.92.122.134.

Hashmi, A. R., Amirah, N. A., & Yusof, Y. (2020a). Mediating effect of integrated systems on the relationship between supply chain management practices and public healthcare performance: Structural Equation Modeling. *International Journal of Management and Sustainability, 9*(3), 148-160. doi: 10.18488/journal.11.2020.93.148.160.

Hashmi, A. R., Amirah, N. A., & Yusof, Y. (2021a). Organizational performance with disruptive factors and inventory control as a mediator in public healthcare of Punjab, Pakistan. *Management Science Letters, 11*(1), 77-86. doi: 10.5267/j.msl.2020.8.028.

Hashmi, A. R., Amirah, N. A., Yusof, Y., & Zaliha, T. N. (2020b). Exploring the dimensions using exploratory factor analysis of disruptive factors and inventory control. *The Economics and Finance Letters, 7*(2), 247-254. doi: 10.18488/journal.29.2020.72.247.254.

Hashmi, A. R., Amirah, N. A., Yusof, Y., & Zaliha, T. N. (2021b). Mediation of inventory control practices in proficiency and organizational performance: State-funded hospital perspective. *Uncertain Supply Chain Management*. *9*(1), 89-98. doi: 10.5267/j.uscm.2020.11.006.

Hecimovic, A.; Free, C. Global supply chains after COVID-19: the end of the road for neoliberal globalization. *Accounting, Auditing & Accountability Journal.* 2020. https://doi.org/10.1108/aaaj-06-2020-4634

Hunaid, M., Bhurgri, A. A., & Shaikh, A. (2022). Supply Chain Visibility in Leading Organizations of the Shipping Industry. *South Asian Journal of Social Review, 1*(1), 8-20.

Jambulingam, T., & Kathuria, R. (2020). Antecedents to buyer-supplier coordination in the pharmaceutical supply chain. *International Journal of Pharmaceutical and Healthcare Marketing, 14*(2), 289-303. https://doi.org/10.1108/ijphm-08-2019-0058

Jia, F., Gong, Y., & Brown, S. (2019). Multi-tier sustainable supply chain management: The role of supply chain leadership. *International Journal of Production Economics, 217*, 44-63. https://doi.org/ 10.1016/j.ijpe.2018.07.022

Jubaer, S. M. O. F., Hoque, L., Oyes, I. B., Chowdhury, T. R., & Miah, M. S. (2021). Research methodology and methods: theory and practice. *Innovative Technologica: Methodical Research Journal, 2*(05), 202-227. https://doi.org/10.17605/osf.io/q4dua

Kazancoglu, Y., Sagnak, M., Kayikci, Y., & Kumar Mangla, S. (2020). Operational excellence in a green supply chain for environmental management: A case study. *Business Strategy and the Environment, 29*(3), 1532-1547. https://doi.org/10.1002/bse.2451

Khan, S. K., Ahmed, S., & Rashid, A. (2021). Influence of social media on purchase intention and customer loyalty of generation Y with the mediating effect of conviction: a case of Pakistan. *Pakistan Journal of International Affairs*. *4*(2), 526-548.

Khan, S., Benhamed, A., Rashid, A., Rasheed, R., & Huma, Z. (2022c). Effect of leadership styles on employees' performance by considering psychological capital as mediator: evidence from airlines industry in emerging economy. *World Journal of Entrepreneurship, Management and Sustainable Development, 18*(8). https://wasdlibrary.org/publications/journals/wjemsd/

Khan, S., Rasheed., R., & Rashid, A., Abbas, Q., & Mahboob, F. (2022b). The Effect of Demographic Characteristics on Job Performance: An Empirical Study from Pakistan. *Journal of Asian Finance, Economics and Business, 9*(2), 283-294. https://doi.org/10.13106/jafeb.2022.vol9.no2.0283

Khan, S., Rashid, A., Rasheed, R., & Amirah, N. A. (2022a). Designing a knowledge-based system (KBS) to study consumer purchase intention: the impact of digital influencers in Pakistan. *Kybernetes, 51*(1). https://doi.org/10.1108/K-06-2021-0497

Muzammil, M. (2022). Evaluating the Factors to Improve the Organizational Performance. *South Asian Management Review, 1*(1), 39-48.

Ong, M. H. A., & Puteh, F. (2017). Quantitative data analysis: Choosing between SPSS, PLS, and AMOS in social science research. *International Interdisciplinary Journal of Scientific Research, 3*(1), 14-25.

Panahifar, F., Byrne, P. J., Salam, M. A., & Heavey, C. (2018). Supply chain collaboration and firm's performance: the critical role of information sharing and trust. *Journal of Enterprise Information Management, 31*(3), 358-379. https://doi.org/10.1108/jeim-08-2017-0114

Rasheed, T. (2022). Supply Chain Sustainability Through Green Practices in Manufacturing: A Case Study from Pakistan. *South Asian Journal of Operations and Logistics, 1*(1), 57-71

Rashid, A. & Rasheed, R. (2022). A Paradigm for Measuring Sustainable Performance Through Big Data Analytics–Artificial Intelligence in Manufacturing Firms. *Available at SSRN 4087758*.

Rashid, A. (2016). Impact of inventory management in downstream chains on customer satisfaction at manufacturing firms. *International Journal of Management, IT and Engineering*, *6*(6), 1-19.

Rashid, A., & Amirah, N. A. (2017). Relationship between poor documentation and efficient inventory control at Provincial Ministry of Health, Lahore. *American Journal of Innovative Research and Applied Sciences, 5*(6), 420-423.

Rashid, A., Ali, S. B., Rasheed, R., Amirah, N. A. & Ngah, A. H. (2022). A paradigm of blockchain and supply chain performance: a mediated model using structural equation modeling. *Kybernetes, Vol. ahead-of-print No. ahead-of-print*. https://doi.org/10.1108/K-04-2022-0543

Rashid, A., Amirah, N. A., & Yusof, Y. (2019). Statistical approach in exploring factors of documentation process and hospital performance: a preliminary study. *American Journal of Innovative Research and Applied Sciences, 9*(4), 306-310.

Rashid, A., Amirah, N. A., Yusof, Y., & Mohd, A. T. (2020). Analysis of demographic factors on perceptions of inventory managers towards healthcare performance. *The Economics and Finance Letters, 7*(2), 289-294. doi: 10.18488/journal.29.2020.72.289.294

Rashid, A., Rasheed, R., Amirah, N. A., Yusof, Y., Khan, S., & Agha, A., A. (2021). A Quantitative Perspective of Systematic Research: Easy and Step-by-Step Initial Guidelines. *Turkish Online Journal of Qualitative Inquiry, 12*(9), 2874-2883.

Shaheen, S. (2022). Quality management and operational performance: a case study from Pakistan. *South Asian Journal of Operations and Logistics, 1*(1), 14-19.

Srivastava, A. K. (2017). Alignment: the foundation of effective strategy execution. *International Journal of Productivity and Performance Management, 8(2), 127-138.* https://doi.org/10.1108/ijppm-11-2015-0172

Swierczek, A. (2020). Investigating the role of demand planning as a higher-order construct in mitigating disruptions in the European supply chains. *The International Journal of Logistics Management, 31*(3), 665-696. https://doi.org/10.1108/ijlm-08-2019-0218

Uddin, S. Q. (2022). Supply Chain Integration, Flexibility, and Operational Performance. *South Asian Management Review, 1*(1), 1-21.

Victory, G. O., Lizzie, O. A. & Olaitan, A. A. (2022). Climate-Smart Agricultural Practices at Oyo State-Nigeria. *South Asian Journal of Social Review, 1*(1), 1-7.

Yazdani, M., Chatterjee, P., Pamucar, D., & Abad, M. D. (2019). A risk-based integrated decision-making model for green supplier selection: A case study of a construction company in Spain. *Kybernetes, 49*(4), 1229-1252. https://doi.org/10.1108/K-09-2018-0509

Appendix: Questionnaire

Section A: Demographic Data

No. of respondent:

Name:

Question #01: Please specify gender?

A. Male
B. Female

Question #02: Please specify your Age?

A. 20 - 30
B. 31 - 40
C. 41 - 50
D. 51 - 60

Question #03: Education level?

A. Matric

B. Intermediate
C. Graduate
D. Postgraduate

Question #04: What is your professional experience?

A. 0 – 5 years
B. 6 – 10 years
C. 11 – 15 years
D. 16 years and above

Section B: Questionnaire

Please rate strongly agrees or strongly disagrees on the basis of options mentioned below of the dependent and independent variables related to Adoption of blockchain in global supply chain management by placing a check mark in the suitable box.

1) Strongly disagree
2) Disagree
3) Neutral
4) Agree
5) Strongly agree

1) Supplier Selection Strategy	
1.1)	When selecting a supplier, the organization considers the supplier's capacity to satisfy sustainability standards.
1.2)	When selecting a supplier, the firm considers environmental certification.
1.3)	When selecting a supplier, the organization considers the potential of a long-term connection.
1.4)	When selecting a supplier, the business considers the provider's reputation.
2) Product Stewardship Strategy	
2.1)	The business considers eco-friendly and secure packaging when selecting a provider.
2.2)	When picking a supplier, the business considers the insurer's history and respect for safety rules.
2.3)	When choosing a manufacturer, the business considers the supplier's participation in the creation of new products and services.
2.4)	The firm thinks about the fact that its products include product safety warnings to comply with current standards when picking a supplier.
3) Logistics Management	
3.1)	The business promotes the use of recyclable packaging by suppliers.
3.2)	The business is in favor of using fuel-efficient automobiles.
3.3)	The business favors environmentally sustainable ways of transportation.
3.4)	The business does car repair and inspection in a responsible manner.
4) Planning	
4.1)	When deciding on transportation options, the organization takes into account sustainability.
4.2)	The company is planning locations for warehouses by considering sustainability.
4.3)	Utilizing sustainable resources for materials and energy is taken into account by the firm.
4.4)	The business is dedicated to achieving long-term competitive advantages.
5) Execution	
5.1)	The business views fulfilling internal and external customers' expectations as crucial.
5.2)	When carrying out supply chain activities, the company takes punctuality and accuracy into account.
5.3)	The business keeps track of accident rates and takes precautions to prevent them.
5.4)	The business uses supply chain sustainability performance monitoring tools.
6) Coordination	
6.1)	The organization thinks about the advantages for the areas where activities are taking place.
6.2)	The company is considering about stakeholders' assistance and training.
6.3)	Company is allocating resources for negative environmental impacts of its supply chain.
6.4)	The firm is figuring concerning how to distribute costs for supply chain activities.
7) Collaboration	
7.1)	The order to improve the business regular communication and information exchange among its supply chain members.
7.2)	Company is evaluating sustainability for outside stakeholders.
7.3)	The company is promoting among its supply chain participants a greater understanding of sustainable supply chain management values and objectives.
7.4)	The organization is evaluating sustainability for internal stakeholders.

8) Sustainable Supply Chain Management	
8.1)	Developing a Sustainable supply chain management requires a focus on the supply chain and the active participation of supply.
8.2)	Sustainable supply chain management implementation may reduce the negative impacts of operations
8.3)	Become proactive in addressing supply chain activities' long term environmental and social expectations.
8.4)	Sustainable supply chain management represents the systemic integration of critical business.