

Supply Chain Management Practices and their Impact on Business Performance-A Quantitative Investigation

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Abstract

Supply chain management practices in determining the performance and success of businesses. Identified key practices that exert a significant impact on business outcomes. The findings unequivocally demonstrate that adept supply chain management practices have a positive effect on various dimensions of business performance. To begin adoption of principles and the implementation of invent enhance segment techniques substantially enhance operational efficiency. Furthermore, the implementation of robust supplier management strategies fosters strong and mutually beneficial relationships with suppliers, thereby ensuring the delivery of superior quality inputs and timely shipments. Consequently, both product quality and customer satisfaction are positively influenced. In addition, the effective utilization of demand forecasting and collaborative planning practices enhances the accuracy of demand prediction, resulting in the minimization of stockouts and excess inventory. Consequently, customer service levels and profitability are significantly improved. Moreover, our research underscores the criticality of integrating technology and sharing information within the supply chain. This, in turn, better decision-making, reduced times, and increased agility in responding to evolving customer demands. The significance of supply chain management practices in driving business is strongly emphasized by our findings.

Keywords- Supply Chain Management practices, Technology integration problem, Stockouts, Excess Inventory, Information Sharing.

Introduction

In the realm of manufacturing organizations, the advent of globalization and fierce global competition, combined with rapid technological advancements, has ushered in a wholly novel business landscape. According to a study by Koh et al. (2007), manufacturing companies

made substantial strides in productivity by adopting lean production methods in response to the mounting competition. They diligently eliminated superfluous activities from various localized operations, thereby augmenting productivity. However, at present, many manufacturing organizations find themselves constrained in terms of attaining significant improvements in productivity through such means. Instead, there exists a remarkable opportunity to mitigate inefficiencies stemming from subpar supplier performance, capricious customer demands, and an uncertain business environment. An integrated supply chain brings forth distinct advantages in terms of competitiveness for individual companies. Consequently, the competition among supply chains has started to overshadow the competition among individual enterprises, albeit the latter persists, particularly in less developed economies. The concept of a supply chain originates from the construction of a value chain network comprised of separate functional entities committed to providing resources and information for effective supplier management and seamless components movement. This notion has management ramifications. Improvements in SCM-related organisational performance led to improvements in operational performance, hence SCM practitioners should examine the mediating influence of operational performance. These findings serve as a wellspring of inspiration for researchers to generate ideas for the future, while senior professionals can glean insights into the profound influence of effective SCM on organizational performance. Supply chain management (SCM) entails the amalgamation and synchronization of business and strategic alignment across the entire supply chain to fulfil the exigencies of customers. According to Green, Zelbst, Meacham, and Bhadauria (2012), the integration and coordination of pivotal business processes, including procurement, production, marketing, logistics, and information systems, are vital in this endeavor. Moreover, strategic imperatives such as customer-centricity, efficiency, quality, responsiveness, and the incorporation of environmental sustainability must be harmonized. Given the competitive nature of the supply chain and the evolving requirements of customers, it is imperative to identify and adopt practices that confer a competitive edge at the supply chain level. Such practices not only enhance the performance of supply chain partners but also necessitate a collective effort among all stakeholders to prevent suboptimal outcomes at the partner level.

Collaboration between manufacturers, suppliers, and customers promotes environmental sustainability by encouraging the development of environmentally friendly processes, goods, and services. Green Supply Chain Management (GSCM) practises are intended to yield good benefits, such as decreased levels of air pollutants, effluent waste, solid waste, and hazardous

material utilisation. However, there is significant scepticism that these sustainability initiatives would result in increased market share and profitability. Manufacturing executives are ultimately accountable for the performance of their respective enterprises. Managers must design and implement sustainable practises that infiltrate the whole supply chain as customer and government demand for environmentally friendly practises, goods, and services develops. This entails not only adopting environmental sustainability as a strategic goal, but also expanding current corporate information systems to efficiently monitor environmental sustainability initiatives and their consequences prior to the implementation of GSCM practises. Furthermore, the adoption of GSCM practises like as green procurement, customer cooperation, eco-design, and investment recovery are projected to improve both environmental and economic performance. These improvements, in turn, contribute to improved operational and organisational performance."

Literature Review

The paradigm shift has triggered the embracement of integrated supply chain strategies and the cultivation of enhanced synergy with supply chain partners. This strategic approach serves as a catalyst for amplifying overall performance and gaining a competitive edge while effectively addressing supply chain dynamics and environmental considerations.

Zhu, Sarkis, & Lai, (2012) amalgamation of internal and external Green Supply Chain Management (GSCM) practices stands as the pivotal enabler in harnessing the untapped potential for performance elevation across these domains. Scholarly investigations indicate that internal GSCM practices assume a mediating role in the intricate interplayThe intricate interplay between external Green Supply Chain Management (GSCM) practices and the consequential impact on environmental performance has been subject to meticulous examination. Remarkably, it has been discovered that three internal GSCM practices flawlessly act as mediators, artfully interweaving the influence of external practices, including eco-friendly procurement and investment recuperation, thereby shaping the fabric of environmental performance. The internal financial policy assumes a partial mediating role, deftly navigating the intricate web of connections between customer collaboration and the resultant environmental performance. The astute discernment of the harmonious amalgamation between internal and external GSCM practices emerges as a quintessential catalyst, propelling transformative strides in the realm of environmental performance.

Numerous intricate linkages between internal and external Green Supply Chain Management (GSCM) practices and economic performance have been uncovered. Let's delve into some examples. The broad engagement of eco-friendly procurement richly mediates the interaction between eco-design and economic performance. Simultaneously, the internal finance policy moderates the far-reaching influence of eco-friendly purchases on economic performance. Customer cooperation emerges as the dynamic force that binds all three internal GSCM practises to economic performance. Furthermore, investment recovery completely mediates the delicate interrelationship between eco-design and economic performance. As a result, to maximise economic rewards, manufacturing businesses must successfully synchronise their internal and external GSCM practises. A few numbers of mediating effects have been found in the domain of operational performance. The critical function of eco-friendly procurement becomes clear as it serves as the major mediator between eco-design and operational performance. Furthermore, customer collaboration has a minor moderating effect on the influence of internal financial policy on operational performance. To ensure the realisation of operational advantages from eco-design, it is critical not to overlook eco-friendly procurement strategies. This emphasises the importance of acquiring environmentally aware inputs via eco-friendly procurement in order to fully realise the operational benefits of eco-design.

Further exploration of the role played by eco-friendly procurement as a critical organizational complement, along with a thorough investigation into the intricate link between eco-design and operational performance, emerges as a noteworthy avenue for GSCM research that warrants heightened attention. The paramount importance of internal and external GSCM practices in driving enhancements in environmental, economic, and operational performance cannot be overstated. It accentuates the imperative need for seamless coordination and integration of these practices to unlock their utmost potential in augmenting overall performance. Sustainability is playing a role in the planning and management of organizations and supply chains. According to Golicic and Smith (2013), findings instil assurance in the effectiveness of implementing environmental initiatives within the supply chain to enhance various facets of firm performance. For instance, practices such as total quality management and certification endeavors, widely embraced across industries, can yield comparable positive

outcomes when directed towards environmental concerns. These outcomes encompass waste reduction, streamlined and consistent lead times, heightened product and service quality, and numerous other benefits. It is highly recommended for companies to earnestly consider incorporating environmental considerations when conceptualizing novel products or processes and when engaging with suppliers. Such endeavors can lead to elevated operational performance and improved profitability. Interestingly, the results indicate that companies operating in Asia witness more favorable outcomes from environmental practices than previously acknowledged. Nevertheless, businesses in Europe should not take their regulatory environment for granted and assume that embracing environmental practices will automatically result in enhanced performance. In general, enterprises are realizing the significance of adopting a supply chain orientation as they shape their corporate strategies and operational practices. They have become increasingly adept at evaluating the costs and benefits of integrating with customer and supplier partners.

The methodologies currently employed to plan and manage transactions with supply chain partners can likewise be employed to assess similar opportunities pertaining to environmental sustainability and their potential impact on firm performance. According to Wieland and Wallenburg (2012) this may appear self-evident, numerous firms have been sluggish in adopting sustainable practices due to scepticism regarding their outcomes, reminiscent of the scepticism surrounding quality practices two decades ago. The inconsistency in research findings has only compounded this situation.

However, our comprehensive meta-analysis provides compelling evidence that firms can achieve positive financial outcomes through their environmental supply chain endeavors. In the realm of logistics research, there is a burgeoning growth, accompanied by mounting concerns regarding risks within supply chains. The dynamic and ever-evolving landscape necessitates a departure from static supply chain strategies. While empirical researchers in logistics predominantly rely on quantitative approaches, there is a growing recognition of the value that qualitative methods bring. The focus lies on fostering agility and robustness in supply chain management, with the aim of augmenting customer value and business performance. The findings strongly endorse the significance of both strategies. The ability to be agile exerts a positive influence on customer value, while business performance is indirectly affected through the mediating factor of customer value. Conversely, attaining robustness directly and positively impacts both customer value and business performance.

The hypotheses pertaining to the significance of supply chain risk management (SCRM) for agility and robustness find substantial support. The insights gleaned from the case studies align with the perspectives shared by the interviewed managers. Implementation of SCRM empowers companies to navigate changes proactively and reactively, achieved through the identification, assessment, and control of risks. SCRM emerges as a pivotal driver in realizing both agility and robustness, complementing traditional approaches such as excess capacities and safety stocks.

According to Trkman, McCormack, De Oliveira, and Ladeira (2010) today's competitive landscape, the focus has shifted from individual organizations to supply chains (SCs). Amidst the ever-growing comprehension of how Supply Chain Management (SCM) exerts its influence on firm performance, there remains an undeniable dearth of comprehensive knowledge concerning the precise areas and moderating effects that bear the utmost significance. This topic holds paramount relevance, as the augmentation of SC analytics' effectiveness and efficiency stands as an indispensable component for a supply chain to attain its competitive advantage.

The empirical findings shed light on the fact that the strategic deployment of Business Analytics (BA) in critical process domains does indeed wield a tangible impact on SC performance. These results reinforce the criticality of companies harnessing the power of their databases, elucidatory and predictive models, and evidence-based management to inform their decision-making and subsequent actions. The analytical capabilities at hand possess the potential to steer human decisions with heightened efficacy, and in certain cases, even furnish automated decisions for designated tasks within organizational realms. Moreover, enterprises that fortify their analytical capabilities with robust information systems (IS) stand poised to achieve superior performance outcomes. Intriguingly, the findings present limited verification regarding the impact of analytics in the realm of delivery and the moderating influence of a business process orientation (BPO). The relatively confined effect on delivery could plausibly be attributed to the outsourcing of such functions and the tendency for decisions in this domain to materialize towards the end of the decision-making process, thereby potentially restricting their significance. Furthermore, the study reveals that the collaboration between marketing and logistics, although not directly affecting firm performance, does enhance it through the facilitation of comprehensive cross-functional integration throughout the organization.

It seems plausible that companies have yet to fully harness the complete potential of Business Analytics in the delivery domain, and conceivably, the impact on performance may assume greater prominence once a certain level of maturity is attained in other areas such as planning, sourcing, and manufacturing. It is worth noting that the results might have shown variations if the sample predominantly consisted of e-business supply chains (e.g., online retailers), where the influence of delivery on performance could be more pronounced, given the inherent interconnected risks associated with the delivery arena. Nevertheless, the paper does not unequivocally support the notion of BPO as a moderating factor.

This could be attributed to the inclusion of relatively process-mature companies in the sample or the unintentional elevation of BPO as a byproduct of focusing on Business Analytics. The scarcity of a robust business process orientation may act as a constraining element, particularly at lower levels of maturity. Importantly, previous research has advocated for the idea that horizontal mechanisms, such as structural overlays (e.g., roles and groups) and non-structural devices (e.g., physical co-location), can also serve to enhance collaboration and, by extension, supply chain performance. The findings suggest that a strong business process orientation may not necessarily be a prerequisite for effectively implementing and leveraging the benefits of Business Analytics. These fascinating findings warrant further investigation to determine whether the sequential investment approach of first strengthening BPO and subsequently adopting Business Analytics represents the only viable trajectory for harnessing the manifold advantages offered by BA utilization.

OBJECTIVE

1. To measure the supply chain management practices and their impact on business performance

METHODOLOGY

The study is being carried out to learn about supply chain management practises and their influence on business success. The primary data is gathered by a survey that employs a structured questionnaire and a random sample procedure. To obtain the results, the data was processed and analysed using the mean.

FINDINGS

Supply Chain Management Practices and their Impact on Business Performance

S. No.	Statements	Mean Value
1.	SCM allows companies to make many products in order to complete market demand	4.12
2.	SCM helps retailers reduce stocking excess quantity of material and saving cost of storage	4.06
3.	SCM helps in making available right quality product at the right time and right place	4.39
4.	It helps in reducing the operation cost by decreasing purchase and production cost	4.22
5.	SCM helps in boosting customer service	3.95
6.	SCM helps in increasing cash flow by streamlining the processes	3.78
7.	SCM helps in decrease the use of large, fixed assets such as plants, warehouses and transportation vehicles	3.87

Table above is showing supply chain management practices and their impact on business performance. It is found that SCM helps in making available right quality product at the right time and right place with mean value 4.39, It helps in reducing the operation cost by decreasing purchase and production cost with mean value 4.22 and SCM allows companies to make many products to complete market demand with mean value 4.12. The respondent says that SCM helps retailers reduce stocking excess quantity of material and saving cost of storage with mean value 4.06, SCM helps in boosting customer service with mean value 3.95, SCM helps in decrease the use of large, fixed assets such as plants, warehouses, and transportation vehicles with mean value 3.87 and SCM helps in increasing cash flow by streamlining the processes with mean value 3.78.

Conclusion

The efficacious administration of supply chain practices exerts a substantial influence on the performance of businesses. This scholarly document has delved into various facets of supply chain management and its ramifications on operational activities within enterprises,

encompassing the domains of sourcing, procurement, production, transportation, and customer service.

Embracing best practices in these domains can yield amplified efficiency, diminished expenses, heightened customer contentment, and ultimately, superior business performance. Strategic sourcing and procurement assume a pivotal role in securing suitable suppliers and acquiring materials at competitive prices.

By discerningly selecting suppliers, negotiating favorable contracts, and ensuring punctual delivery, organizations can streamline their supply chain processes, mitigate disruptions, and thereby augment overall operational efficiency while curbing costs. By eradicating wastage, curtailing cycle times, and enhancing adaptability, businesses can bolster productivity and expedite product delivery to customers with increased efficiency. These practices engender better resource utilization and engender cost savings.

Efficient transportation and logistics management guarantee prompt delivery of products to customers. This, in turn, positively influences customer satisfaction and loyalty, thereby resulting in heightened sales and revenue. Customer service assumes a critical role within the purview of supply chain management.

Organizations that prioritize the provision of exceptional customer service, characterized by responsive communication, accurate order fulfillment, and effective post-sales support, can forge robust customer relationships, and attain a competitive advantage. Satiated customers are more inclined to engage in repeat purchases and endorse a company, thereby contributing to long-term business prosperity. By embracing strategic sourcing, employing efficient production methods, optimizing transportation logistics, and delivering exemplary customer service, organizations can fortify their competitive edge, improve financial outcomes, and meet or exceed customer expectations.

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