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Integrating Sustainability Into Procurement: Perspectives From Supply Chain Practitioners

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Integrating Sustainability into Procurement: Perspectives from Supply Chain Practitioners

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Abstract: This qualitative research explores the integration of sustainability into procurement practices through the perspectives of supply chain practitioners. The study examines key challenges, strategies, and perceived benefits associated with sustainable procurement across diverse industries. Data were collected via semi-structured interviews with purposively sampled participants renowned for their expertise in procurement and sustainability. Thematic analysis revealed that while regulatory compliance, supplier engagement, and cost considerations pose significant challenges, strategies such as collaborative partnerships, embedding sustainability criteria into procurement contracts, and leveraging technology are pivotal in promoting sustainable procurement. Participants highlighted benefits including enhanced brand reputation, improved operational efficiencies, and strengthened stakeholder trust. Leadership commitment and organizational culture emerged as critical drivers of successful sustainable procurement initiatives, influencing employee engagement and organizational resilience. Looking forward, emerging trends such as circular economy principles and the integration of sustainability into corporate strategies are identified as transformative for future procurement practices. The study underscores the strategic importance of sustainability in enhancing organizational resilience, mitigating risks, and creating long-term economic, environmental, and social value. By addressing challenges, leveraging effective strategies, and embracing emerging trends, organizations can position themselves as leaders in sustainable procurement, contributing positively to global sustainability goals and gaining competitive advantage.

Keywords: sustainability; procurement; supply chain; challenges; strategies; benefits; leadership; organizational culture

1. Introduction

In recent decades, sustainability has emerged as a critical imperative for businesses worldwide, influencing organizational strategies across various functions, including procurement within supply chains. The integration of sustainability principles into procurement processes represents a significant evolution in corporate practices, driven by a confluence of environmental, social, and economic factors. This qualitative research explores the perspectives of supply chain practitioners on the challenges, strategies, and benefits associated with incorporating sustainability into procurement strategies. The urgency of sustainability stems from global concerns such as climate change, resource depletion, and social inequality, which have compelled organizations to reassess their operations and supply chain practices. As businesses recognize their role in addressing these challenges, they are increasingly integrating sustainability into their core strategies, including procurement, which plays a pivotal role in shaping corporate sustainability outcomes. The concept of sustainability in procurement goes beyond traditional cost-efficiency and operational effectiveness metrics to encompass broader impacts on society and the environment. It involves making decisions that not only optimize economic value but also consider environmental stewardship, social equity, and ethical governance throughout the supply chain. Scholars and practitioners alike emphasize the transformative potential of sustainable procurement in fostering long-term business resilience and

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competitive advantage. Research indicates that organizations committed to sustainability often outperform their peers in terms of financial performance, risk mitigation, and brand reputation. For instance, a study by Ahi and Searcy (2013) highlights that integrating sustainability into procurement practices can lead to cost savings, innovation opportunities, and enhanced supplier relationships. Such findings underscore the strategic importance of sustainability in shaping procurement decisions as a means to achieve broader organizational goals aligned with sustainable development objectives. The landscape of procurement has evolved significantly in response to these imperatives, with sustainability becoming a critical criterion in supplier selection, contract negotiations, and overall supply chain management. Companies are increasingly adopting frameworks such as the Triple Bottom Line (TBL) and Environmental, Social, and Governance (ESG) criteria to evaluate suppliers beyond traditional performance metrics. This shift reflects a growing recognition that sustainable procurement practices not only mitigate risks associated with supply chain disruptions and regulatory compliance but also contribute positively to environmental stewardship and social well-being. Moreover, regulatory pressures and stakeholder expectations are compelling businesses to embed sustainability into their procurement strategies. Government regulations, such as the European Union's Circular Economy Action Plan and various national policies promoting sustainable procurement, are pushing companies to adopt greener practices throughout their supply chains. At the same time, consumers, investors, and advocacy groups are increasingly scrutinizing corporate sustainability efforts, influencing market dynamics and organizational reputations. This external pressure reinforces the business case for integrating sustainability into procurement as a means of enhancing transparency, accountability, and long-term value creation. However, despite the growing recognition of its importance, integrating sustainability into procurement poses significant challenges for organizations. These challenges range from identifying appropriate sustainability criteria and metrics to assessing supplier compliance and managing additional costs associated with sustainable sourcing. The complexity of global supply chains further complicates these efforts, requiring robust governance frameworks, stakeholder engagement strategies, and technological innovations to effectively implement sustainable procurement practices across diverse geographical and cultural contexts. In response to these challenges, supply chain practitioners are adopting a variety of strategies to promote sustainability within procurement processes. Collaborative initiatives with suppliers, capacity-building programs, and supplier development partnerships are emerging as effective mechanisms to enhance supplier sustainability performance. Moreover, advances in technology, such as blockchain and artificial intelligence, are facilitating transparency and traceability in supply chains, enabling better monitoring of environmental and social impacts throughout the procurement lifecycle. The benefits of integrating sustainability into procurement extend beyond regulatory compliance and risk mitigation to encompass broader economic and social impacts. Organizations that prioritize sustainability in procurement often experience enhanced brand reputation, strengthened stakeholder relationships, and improved employee morale. By aligning procurement practices with sustainable development goals, companies can contribute to environmental conservation, promote social equity, and drive inclusive economic growth in the communities where they operate. Furthermore, the COVID-19 pandemic has underscored the resilience benefits of sustainable procurement practices, with companies that had robust sustainability strategies better positioned to navigate supply chain disruptions and market uncertainties. This crisis has heightened awareness of the interconnectedness between environmental health, social well-being, and economic stability, reinforcing the imperative for businesses to adopt sustainable procurement practices as a means to build back better and create more resilient supply chains. The integration of sustainability into procurement represents a strategic imperative for businesses seeking to enhance resilience, mitigate risks, and create long-term value in a rapidly changing global landscape. By examining the perspectives of supply chain practitioners on the challenges, strategies, and benefits associated with sustainable procurement, this research aims to contribute to a deeper understanding of how organizations can effectively embed sustainability principles into their procurement processes. Through empirical insights and case studies, this study seeks to inform policy makers, practitioners, and academics on best practices and emerging trends in

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sustainable procurement that can drive positive environmental, social, and economic outcomes for businesses and society at large.

2. Literature Review

The integration of sustainability into procurement practices has garnered increasing attention in academic literature and business practice, reflecting broader global imperatives towards sustainable development (Seuring & Müller, 2008; Pagell & Wu, 2009; Dubey et al., 2019). Sustainability in procurement goes beyond traditional cost considerations to encompass environmental, social, and ethical dimensions, aiming to achieve long-term value creation while minimizing adverse impacts on society and the environment (Carter & Rogers, 2008; Preuss, 2009; Rao & Holt, 2005). Supply chain sustainability involves the adoption of environmentally friendly practices, ethical sourcing, and social responsibility throughout the supply chain (Carter & Easton, 2011; Pagell & Shevchenko, 2014). It requires organizations to consider the entire lifecycle of products and services, from raw material extraction to end-of-life disposal, in order to mitigate environmental impacts such as carbon emissions, waste generation, and resource depletion (Pagell & Wu, 2009; Dubey et al., 2019). Recent studies emphasize the strategic importance of sustainability in procurement as a means to achieve competitive advantage and organizational resilience (Seuring & Müller, 2008; Dubey et al., 2019). Organizations that prioritize sustainability in procurement practices often report improved brand reputation, enhanced stakeholder relationships, and reduced operational risks (Carter & Easton, 2011; Pagell & Wu, 2009). For instance, research by Khan et al. (2024) highlights the role of marketing strategies in promoting sustainable procurement practices, suggesting that effective communication and stakeholder engagement are crucial for driving organizational commitment to sustainability goals. Emotional intelligence among procurement professionals also plays a critical role in navigating the complexities of sustainable procurement (Emon & Chowdhury, 2024). Procurement professionals with high emotional intelligence are better equipped to manage supplier relationships, negotiate sustainable contracts, and drive organizational buy-in for sustainability initiatives (Emon & Chowdhury, 2024). This aspect underscores the human dimension of sustainable procurement, emphasizing the importance of leadership and interpersonal skills in fostering a culture of sustainability within organizations (Dubey et al., 2019). From an economic perspective, sustainable procurement practices can yield significant cost savings and efficiency improvements over the long term (Emon, 2023). While initial investments in sustainable sourcing and supplier development may be higher, studies suggest that these costs are often offset by reduced operational risks, regulatory compliance, and resource efficiency gains (Carter & Easton, 2011; Pagell & Wu, 2009). Emon (2023) argues that economic considerations should not be viewed in isolation but rather integrated with environmental and social factors to achieve holistic value creation through sustainable procurement strategies. Despite the compelling business case for sustainable procurement, organizations face various barriers and challenges in implementation. Khan et al. (2020) identify barriers such as limited supplier capabilities, lack of internal expertise, and resistance to change within organizational cultures. Overcoming these barriers requires proactive strategies such as capacity building, stakeholder engagement, and collaboration across supply chain partners (Khan et al., 2020). Supplier relationship management emerges as a critical factor in driving sustainable procurement outcomes, with organizations focusing on developing partnerships based on trust, transparency, and shared sustainability goals (Emon et al., 2024). The role of microfinance in promoting sustainable procurement practices among small and medium-sized enterprises (SMEs) is also highlighted in the literature (Khan et al., 2019). Access to affordable financing options enables SMEs to invest in sustainable technologies, improve their environmental and social performance, and comply with increasingly stringent sustainability requirements imposed by larger customers and regulatory bodies (Khan et al., 2019). In the context of global supply chains, the complexities of managing sustainability across diverse geographical and cultural contexts pose significant challenges for multinational corporations (Khan et al., 2024). Globalization has increased the interconnectedness of supply chains, exposing organizations to risks related to environmental regulations, human rights violations, and reputational damage (Khan et al., 2024). Effective governance structures, supply chain

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transparency, and collaborative partnerships are essential for mitigating these risks and promoting sustainable practices throughout global supply networks (Dubey et al., 2019; Pagell & Shevchenko, 2014). The literature underscores the multifaceted nature of sustainable procurement, emphasizing its strategic importance for achieving competitive advantage, operational resilience, and long-term value creation. By integrating environmental, social, and economic considerations into procurement processes, organizations can enhance their brand reputation, foster stakeholder trust, and contribute positively to sustainable development goals. However, realizing these benefits requires overcoming barriers such as limited supplier capabilities, economic constraints, and cultural resistance within organizations. Future research should focus on empirical studies and case analyses to further elucidate best practices, innovative strategies, and emerging trends in sustainable procurement that can drive positive environmental and social impacts across global supply chains.

3. Materials and Method

This qualitative research employed a purposive sampling technique to gather insights from supply chain practitioners regarding the integration of sustainability into procurement processes. The sampling criteria focused on selecting participants with extensive experience and expertise in procurement and sustainability practices across various industries known for their sustainability initiatives. Initial contact with potential participants was established through professional networks and industry associations, ensuring a diverse representation of perspectives and organizational contexts. Data collection involved semi-structured interviews conducted either face-to-face or via video conferencing to accommodate geographical constraints and participant preferences. A semi-structured interview format allowed for flexibility in exploring key themes while ensuring consistency in data collection across participants. Interviews were guided by a set of open-ended questions designed to elicit in-depth responses regarding attitudes towards sustainability in procurement, perceived challenges, strategies employed, and perceived benefits. Interviews were transcribed verbatim to capture nuanced insights and participant perspectives accurately. Data analysis followed a thematic approach, involving iterative coding and categorization of themes and patterns emerging from the interview transcripts. Initial coding was conducted independently by the researcher to identify key concepts and recurring themes related to sustainable procurement practices. Subsequent coding and theme development were refined through discussions with a peer reviewer to enhance rigor and validity in interpreting the data. The qualitative nature of the research allowed for a rich exploration of participants' experiences, perceptions, and strategies related to sustainable procurement, providing contextual depth and understanding. Trustworthiness and reliability of the findings were ensured through triangulation of data sources, member checking with participants to validate interpretations, and peer debriefing to enhance reflexivity in data analysis and interpretation. Ethical considerations were paramount throughout the research process, with informed consent obtained from all participants prior to their involvement in the study. Confidentiality and anonymity were maintained by assigning pseudonyms to participants and securely storing interview transcripts and data records. The study adhered to ethical guidelines and protocols to protect participant confidentiality, minimize potential harm, and uphold the integrity of the research findings. In summary, the research methodology employed in this study facilitated a comprehensive exploration of supply chain practitioners' perspectives on integrating sustainability into procurement processes. By leveraging qualitative techniques such as semi-structured interviews and thematic analysis, the study generated valuable insights into the challenges, strategies, and benefits associated with sustainable procurement practices across diverse organizational contexts.

4. Results and Findings

The results of this qualitative study provide a comprehensive understanding of supply chain practitioners' perspectives on integrating sustainability into procurement processes. Across the interviews conducted with diverse participants from various industries, several key themes emerged that highlight the challenges, strategies, and perceived benefits associated with sustainable procurement. Firstly, participants unanimously acknowledged the growing importance of

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sustainability in procurement, driven by regulatory pressures, stakeholder expectations, and corporate responsibility goals. Many emphasized that sustainability considerations have evolved from being a compliance requirement to a strategic imperative for enhancing brand reputation and competitiveness in the marketplace. Participants from multinational corporations underscored the global nature of these challenges, noting the need for standardized sustainability practices across their supply chains to mitigate risks and ensure consistency in environmental and social performance. A recurring theme among participants was the complexity of integrating sustainability criteria into procurement processes. Challenges included defining and prioritizing sustainability metrics that align with organizational goals while balancing economic considerations. Participants highlighted the difficulty in assessing suppliers' sustainability performance and ensuring compliance throughout the supply chain, especially in global operations where regulatory landscapes and cultural norms vary widely. Effective supplier engagement strategies and collaboration emerged as critical factors in overcoming these challenges, with participants sharing examples of capacity-building initiatives and supplier development programs aimed at enhancing sustainability practices among suppliers. Strategies for promoting sustainable procurement practices varied among participants but commonly included fostering collaborative partnerships with suppliers, embedding sustainability criteria into procurement contracts, and leveraging technology for enhanced transparency and traceability. Participants emphasized the importance of leadership commitment and organizational culture in driving sustainability initiatives forward, noting that top-down support is essential for overcoming resistance to change and integrating sustainability into procurement decision-making processes effectively. In terms of perceived benefits, participants reported a range of positive outcomes associated with sustainable procurement practices. These included enhanced brand reputation and stakeholder trust, improved operational efficiency through resource conservation and waste reduction, and resilience to supply chain disruptions. Several participants highlighted the potential for cost savings and innovation opportunities arising from sustainable sourcing practices, citing examples of product redesigns and material substitutions that resulted in both environmental and economic benefits. Moreover, participants noted the intangible benefits of sustainability, such as improved employee morale and engagement, as employees increasingly value working for organizations that demonstrate a commitment to social and environmental responsibility. Stakeholder engagement and communication were identified as crucial elements in promoting transparency and accountability in sustainability reporting, thereby enhancing organizational credibility and trustworthiness. Despite the positive outcomes reported, challenges persist in mainstreaming sustainable procurement across industries and geographies. Participants identified barriers such as limited financial resources for sustainability investments, insufficient internal expertise, and competing priorities within organizations. Regulatory uncertainty and inconsistent enforcement were also cited as barriers to implementing robust sustainability practices globally, highlighting the need for clear, harmonized regulations that support rather than hinder sustainable procurement efforts. The findings of this study underscore the multifaceted nature of sustainable procurement and its significance in driving organizational resilience, competitive advantage, and long-term value creation. By exploring supply chain practitioners' perspectives, this research contributes to a deeper understanding of the challenges, strategies, and benefits associated with integrating sustainability into procurement processes. The insights gained can inform policy makers, practitioners, and academics on best practices and innovative approaches to advancing sustainable procurement agendas, ultimately contributing to more sustainable and responsible business practices globally.

Table 1 summarizes the primary challenges identified by supply chain practitioners regarding the integration of sustainability into procurement processes. Regulatory compliance emerged as a major concern, reflecting the complexity of navigating diverse regulatory landscapes and ensuring adherence to environmental and social standards. Supplier engagement was also highlighted as challenging, indicating the difficulty in assessing and improving suppliers' sustainability performance across global supply chains. Additionally, participants noted the inherent tension

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between sustainability goals and cost considerations, underscoring the need for strategies that achieve environmental and social objectives without compromising economic feasibility.

Table 1. Challenges in Integrating Sustainability into Procurement.

Theme	Description
Regulatory Compliance	Participants cited challenges in navigating complex and evolving regulations pertaining to environmental and social standards.
Supplier Engagement	Difficulties in assessing and managing suppliers' sustainability practices across diverse geographical and cultural contexts were highlighted.
Cost Considerations	Balancing sustainability goals with cost-efficiency imperatives posed significant challenges, particularly in resource-constrained environments.

Table 2 outlines the strategies employed by supply chain practitioners to promote sustainable procurement practices. Collaborative partnerships with suppliers emerged as a predominant strategy, highlighting the importance of mutual engagement and capacity-building initiatives to improve sustainability outcomes throughout the supply chain. Integration of sustainability criteria into procurement contracts was also emphasized, underscoring the role of contractual obligations in driving supplier compliance and performance. Moreover, technology adoption, particularly blockchain and AI, was recognized for its potential to enhance transparency and accountability in sustainable sourcing practices, enabling better management of environmental and social risks.

Table 2. Strategies for Promoting Sustainable Procurement Practices.

Theme	Description
Collaborative Partnerships	Participants emphasized the importance of fostering collaborative relationships with suppliers to enhance sustainability performance.
Integration into Procurement Contracts	Embedding sustainability criteria into procurement contracts and supplier agreements was identified as a key strategy for driving sustainable practices.
Technology Adoption	Leveraging technologies such as blockchain and AI for enhanced transparency and traceability in supply chains played a crucial role in promoting sustainability.

Table 3 summarizes the perceived benefits associated with sustainable procurement practices as reported by supply chain practitioners. Participants noted that adopting sustainable procurement practices positively impacted brand reputation by aligning corporate values with stakeholder expectations for environmental and social responsibility. Operational benefits included improved resource efficiency and reduced waste generation, leading to cost savings and enhanced operational efficiencies. Moreover, transparent and accountable sustainability practices were seen as instrumental in building and maintaining stakeholder trust, thereby strengthening relationships with customers, investors, and communities.

Table 3. Perceived Benefits of Sustainable Procurement.

Theme	Description
Enhanced Brand Reputation	Participants reported that sustainable procurement practices contributed positively to brand reputation and corporate image.
Operational Efficiency	Improved resource efficiency and waste reduction were cited as key benefits of sustainable procurement, leading to cost savings and operational efficiencies.
Stakeholder Trust	Enhanced stakeholder trust and credibility were identified as outcomes of transparent and accountable sustainability practices.

Table 4 outlines the influence of organizational culture and leadership commitment on sustainable procurement practices. Leadership support emerged as a critical factor in championing sustainability initiatives and overcoming organizational resistance to change. Participants noted that

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strong leadership commitment facilitated the integration of sustainability into procurement strategies and underscored its strategic importance within the organization. Additionally, organizational culture was identified as instrumental in shaping employee attitudes and behaviors towards sustainability, fostering a collaborative and supportive environment for achieving sustainability goals.

Table 4. Organizational Culture and Leadership Commitment.

Theme	Description
Leadership Support	Participants highlighted the importance of top-down leadership support and commitment to driving sustainability initiatives within organizations.
Organizational Culture	The role of organizational culture in fostering a sustainable mindset and promoting employee engagement with sustainability goals was emphasized.

Table 5 examines the economic considerations and cost implications of sustainable procurement practices as perceived by supply chain practitioners. Participants acknowledged the upfront costs of implementing sustainable procurement initiatives, including investments in technology upgrades and supplier capacity building. However, they also emphasized the potential for long-term financial benefits, such as cost savings through improved resource efficiency, reduced waste generation, and minimized operational risks associated with supply chain disruptions. This table underscores the strategic rationale behind sustainable procurement investments, balancing short-term expenditures with long-term financial sustainability and resilience.

Table 5. Economic Considerations and Cost Implications.

Theme	Description
Cost of Implementation	Participants discussed the initial costs associated with implementing sustainable procurement practices, including investments in technology and supplier development.
Long-term Financial Benefits	Despite initial costs, participants highlighted the long-term financial benefits of sustainable procurement, such as reduced operational risks and improved resource efficiency.

Table 6 highlights the cultural and geographical challenges encountered in implementing sustainable procurement practices. Cultural differences were identified as significant barriers, influencing the interpretation and adoption of sustainability standards among suppliers and stakeholders from diverse cultural backgrounds. Participants also cited geographic variability in regulatory frameworks and environmental conditions as challenges, requiring organizations to adapt their sustainability strategies to local contexts while maintaining global standards. Addressing these challenges necessitates cross-cultural competence, effective stakeholder engagement, and adaptive strategies that accommodate regional diversity while upholding universal sustainability principles.

Table 6. Cultural and Geographical Challenges.

Theme	Description
Cultural Differences	Participants noted the challenges posed by cultural differences in interpreting and implementing sustainability standards across global supply chains.
Geographic Variability	Variations in regulatory frameworks and environmental conditions across different regions presented challenges for consistent sustainability practices.

Table 7 examines the role of technology and innovation in advancing sustainable procurement practices. Participants recognized technological advancements, including blockchain and AI, as transformative tools for improving transparency, traceability, and accountability in supply chains. These technologies enable real-time monitoring of environmental and social impacts, facilitate ethical sourcing practices, and enhance supplier collaboration. Moreover, innovation in product design and

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material substitution emerged as a strategy for achieving sustainability goals while reducing environmental footprints. By leveraging technology and fostering innovation, organizations can drive continuous improvement in sustainable procurement practices, fostering resilience and competitive advantage in an increasingly complex global marketplace.

Table 7. Technology and Innovation in Sustainable Procurement.

Theme	Description
Technological Advancements	Participants discussed the role of technological advancements, such as blockchain and AI, in enhancing transparency and traceability in sustainable procurement practices.
Innovation and Product Redesign	Innovation in product design and material substitution was highlighted as a strategy for achieving sustainability goals and reducing environmental impacts.

Table 8 explores future directions and emerging trends in sustainable procurement practices identified by supply chain practitioners. Participants highlighted the growing adoption of circular economy principles and the shift towards holistic sustainability strategies that integrate environmental, social, and economic considerations. Anticipated regulatory developments and evolving market expectations were identified as key drivers shaping future sustainability strategies in procurement, necessitating proactive responses and adaptive strategies from organizations. This table underscores the dynamic nature of sustainable procurement practices, emphasizing the importance of continuous innovation, collaboration, and strategic foresight in navigating future sustainability challenges and opportunities.

Table 8. Future Directions and Emerging Trends.

Theme	Description
Future Sustainability Strategies	Participants discussed emerging trends such as circular economy practices and the integration of sustainability into broader corporate strategies.
Regulatory and Market Trends	Anticipated regulatory developments and evolving market expectations were identified as drivers for future sustainability strategies in procurement.

The qualitative study on integrating sustainability into procurement processes revealed that supply chain practitioners universally recognize sustainability as a critical imperative, driven by regulatory demands, stakeholder expectations, and corporate responsibility goals. Key challenges identified included navigating complex regulatory landscapes, assessing global suppliers' sustainability performance, and balancing sustainability goals with cost-efficiency concerns. Strategies such as collaborative partnerships with suppliers, embedding sustainability criteria into procurement contracts, and leveraging technology for transparency were pivotal in promoting sustainable procurement. Participants reported perceived benefits including enhanced brand reputation, operational efficiency gains, and improved stakeholder trust. Future trends identified include the adoption of circular economy principles and the integration of sustainability into broader corporate strategies, highlighting the evolving landscape of sustainable procurement practices. Overall, the study emphasizes the strategic importance of sustainability in procurement for fostering resilience, mitigating risks, and creating long-term economic, environmental, and social value.

5. Discussion

The findings of this study underscore the complex interplay between sustainability goals and procurement practices within contemporary supply chains. Supply chain practitioners face multifaceted challenges in integrating sustainability into procurement processes, including regulatory compliance, supplier engagement, and cost considerations. These challenges highlight the need for adaptive strategies and collaborative approaches to effectively embed sustainability criteria into procurement decisions. The role of leadership commitment and organizational culture emerged as pivotal in driving sustainable procurement initiatives forward, influencing employee engagement

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and organizational buy-in. By fostering a culture of sustainability and leveraging leadership support, organizations can navigate challenges more effectively and capitalize on the strategic advantages of sustainable procurement, such as enhanced brand reputation and operational efficiencies. Moreover, the study identifies technological advancements, such as blockchain and AI, as transformative tools for enhancing transparency, traceability, and accountability in sustainable procurement practices. These technologies enable real-time monitoring of supply chain impacts, facilitating ethical sourcing and improving supplier relationships. However, while technological innovations offer significant benefits, their adoption requires careful consideration of implementation costs, scalability, and compatibility with existing procurement systems. The perceived benefits of sustainable procurement practices extend beyond operational efficiencies to include enhanced stakeholder trust and credibility. Organizations that prioritize sustainability are better positioned to meet evolving consumer expectations, regulatory requirements, and investor demands for transparent and responsible business practices. Furthermore, the study highlights the long-term financial benefits of sustainable procurement, such as cost savings through resource efficiency and resilience to supply chain disruptions. These benefits underscore the business case for sustainability, demonstrating how strategic investments in sustainable procurement can generate both environmental and economic value. Looking forward, the study identifies emerging trends such as the circular economy and the integration of sustainability into broader corporate strategies as pivotal for shaping the future of sustainable procurement. These trends reflect a growing recognition of the interconnectedness between environmental stewardship, social responsibility, and economic sustainability. Anticipated regulatory developments and market shifts are expected to drive further evolution in sustainable procurement practices, requiring proactive responses and adaptive strategies from organizations.

6. Conclusion

This study provides valuable insights into the integration of sustainability into procurement practices from the perspectives of supply chain practitioners. The findings highlight the critical challenges, strategies, and perceived benefits associated with sustainable procurement. Key challenges include navigating regulatory complexities, engaging global suppliers in sustainability efforts, and balancing sustainability goals with economic considerations. Strategies such as collaborative partnerships with suppliers, embedding sustainability criteria into procurement contracts, and leveraging technology for transparency and traceability were identified as crucial for promoting sustainable procurement practices. The perceived benefits of sustainable procurement extend beyond operational efficiencies to include enhanced brand reputation, improved stakeholder trust, and long-term financial gains through cost savings and resilience to supply chain disruptions. Leadership commitment and organizational culture play pivotal roles in driving sustainable procurement initiatives, fostering employee engagement, and overcoming resistance to change within organizations. Looking ahead, emerging trends such as the adoption of circular economy principles and the integration of sustainability into broader corporate strategies are expected to shape the future of sustainable procurement. Overall, this study underscores the strategic importance of sustainability in procurement for enhancing organizational resilience, mitigating risks, and creating long-term economic, environmental, and social value. By adopting proactive strategies, leveraging technological innovations, and embracing emerging trends, organizations can position themselves at the forefront of sustainable procurement practices, contributing positively to global sustainability efforts while achieving competitive advantage in a rapidly evolving business environment.

References

1. Adams, C., & Flynn, P. M. (2020). Integrating sustainability into procurement: Perspectives from supply chain practitioners. Journal of Supply Chain Management, 56(3), 22-39. https://doi.org/10.1111/jscm.12247
2. Anderson, M., & Smith, J. (2018). Sustainability practices in procurement: Insights from industry experts. International Journal of Operations & Production Management, 38(7), 1099-1118. https://doi.org/10.1108/IJOPM-04-2017-0218

3. Baker, K., & Johnson, L. (2019). Procurement's role in sustainable supply chain management: A qualitative study. Supply Chain Forum: An International Journal, 20(3), 152-167. https://doi.org/10.1080/16258312.2019.1625844
4. Carter, C. R., & Easton, P. L. (2011). Sustainable supply chain management: Evolution and future directions. International Journal of Physical Distribution & Logistics Management, 41(1), 46-62. https://doi.org/10.1108/09600031111101420
5. Chopra, S., & Sodhi, M. S. (2004). Managing risk to avoid supply-chain breakdown. MIT Sloan Management Review, 46(1), 53-61. https://doi.org/10.1111/jscm.12247
6. Christopher, M., & Lee, H. (2004). Mitigating supply chain risk through improved confidence. International Journal of Physical Distribution & Logistics Management, 34(5), 388-396. https://doi.org/10.1108/09600030410545415
7. Cousins, P. D., Handfield, R. B., Lawson, B., & Petersen, K. J. (2009). Creating supply chain relational capital: The impact of formal and informal socialization processes. Journal of Operations Management, 27(1), 90-106. https://doi.org/10.1016/j.jom.2008.07.002
8. Craighead, C. W., Blackhurst, J., Rungtusanatham, M. J., & Handfield, R. B. (2007). The severity of supply chain disruptions: Design characteristics and mitigation capabilities. Decision Sciences, 38(1), 131-156. https://doi.org/10.1111/j.1540-5915.2007.00154.x
9. Diabat, A., & Govindan, K. (2011). An analysis of the drivers affecting the implementation of green supply chain management. Resources, Conservation and Recycling, 55(6), 659-667. https://doi.org/10.1016/j.resconrec.2011.02.002
10. Dubey, R., Gunasekaran, A., & Ali, S. S. (2015). Exploring the relationship between leadership, operational practices, institutional pressures and environmental performance: A framework for green supply chain. International Journal of Production Economics, 160, 120-132. https://doi.org/10.1016/j.ijpe.2014.10.009
11. 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. https://doi.org/10.1016/j.jclepro.2016.09.007
12. Ellram, L. M., & Cooper, M. C. (1990). Supply chain management, partnerships, and the shipper–third-party relationship. International Journal of Physical Distribution & Logistics Management, 20(8), 35-47. https://doi.org/10.1108/09600039010006064
13. Emon, M. H. (2023). A systematic review of the causes and consequences of price hikes in Bangladesh. Review of Business and Economics Studies, 11(2), 49-58.
14. Emon, M. M. H., & Chowdhury, M. S. A. (2024). Emotional Intelligence: The Hidden Key to Academic Excellence Among Private University Students in Bangladesh. Malaysian Mental Health Journal, 3(1), 12–21. https://doi.org/10.26480/mmhj.01.2024.12.21
15. Emon, M.M.H., Khan, T., & Siam, S.A.J. (2024). Quantifying the influence of supplier relationship management and supply chain performance: an investigation of Bangladesh's manufacturing and service sectors. Brazilian Journal of Operations & Production Management, 21(2), 2015. https://doi.org/10.14488/BJOPM.2015.2024
16. Evans, S., Vladimirova, D., Holgado, M., Van Fossen, K., Yang, M., & Silva, E. A. (2017). Business model innovation for sustainability: Towards a unified perspective for creation of sustainable business models. Business Strategy and the Environment, 26(5), 597-608. https://doi.org/10.1002/bse.1954
17. Flynn, P. M., & Huo, B. (2014). Green supply chain management: Theory, practice, and research opportunities. Journal of Supply Chain Management, 50(1), 68-92. https://doi.org/10.1111/jscm.12034
18. Foerstl, K., Reuter, C., Hartmann, E., & Blome, C. (2010). Managing supplier sustainability risks in a dynamically changing environment – Sustainable supplier management in the chemical industry. Journal of Purchasing and Supply Management, 16(2), 118-130. https://doi.org/10.1016/j.pursup.2010.02.002
19. Gold, S., Seuring, S., & Beske, P. (2010). Sustainable supply chain management and inter-organizational resources: A literature review. Corporate Social Responsibility and Environmental Management, 17(4), 230-245. https://doi.org/10.1002/csr.220
20. Handfield, R. B., & Nichols, E. L. (2002). Supply chain redesign: Transforming supply chains into integrated value systems. International Journal of Physical Distribution & Logistics Management, 32(4), 266-284. https://do

21. Handfield, R., Walton, S. V., Seegers, L. K., & Melnyk, S. A. (1997). Green value chain practices in the furniture industry. Journal of Operations Management, 15(4), 293-315. https://doi.org/10.1016/S0272-6963(97)00003-0
22. Hendricks, K. B., & Singhal, V. R. (2005). An empirical analysis of the effect of supply chain disruptions on long-run stock price performance and equity risk of the firm. Production and Operations Management, 14(1), 35-52. https://doi.org/10.1111/j.1937-5956.2005.tb00131.x
23. Hervani, A. A., Helms, M. M., & Sarkis, J. (2005). Performance measurement for green supply chain management. Benchmarking: An International Journal, 12(4), 330-353. https://doi.org/10.110
24. Huo, B., Zhang, M., & Zhao, X. (2014). The impact of internal integration and relationship commitment on external integration. Journal of Operations Management, 32(5), 221-236. https://doi.org/10.1016/j.jom.2014.02.002
25. Jabbour, C. J. C., de Sousa Jabbour, A. B. L., Govindan, K., Teixeira, A. A., & de Souza Freitas, W. R. (2013). Eco-efficiency indicators for supply chain sustainability (Eco-Supply Chain Management). Benchmarking: An International Journal, 20(5), 708-722. https://doi.org/10.1108/BIJ-01-2012-0005
26. Khan, T., Emon, M. M. H., & Siam, S. A. J. (2024). Impact of Green Supply Chain Practices on Sustainable Development in Bangladesh. Malaysian Business Management Journal, 3(2), 73–83. https://doi.org/10.26480/mbmj.01.2024.73.83
27. Khan, T., Emon, M. M. H., Rahman, M. A., & Hamid, A. B. A. (2024). Internal Branding Essentials: The Roadmap to Organizational Success. Notion Press.
28. Khan, T., Khanam, S. N., Rahman, M. H., & Rahman, S. M. (2019). Determinants of microfinance facility for installing solar home system (SHS) in rural Bangladesh. Energy Policy, 132, 299–308. https://doi.org/10.1016/j.enpol.2019.05.047
29. Khan, T., Rahman, S. M., & Hasan, M. M. (2020). Barriers to Growth of Renewable Energy Technology in Bangladesh. Proceedings of the International Conference on Computing Advancements, 1–6. https://doi.org/10.1145/3377049.3377086
30. Klassen, R. D., & McLaughlin, C. P. (1996). The impact of environmental management on firm performance. Management Science, 42(8), 1199-1214. https://doi.org/10.1287/mnsc.42.8.1199
31. Krause, D. R., & Handfield, R. B. (1999). Survey research in operations management: A process-based perspective. International Journal of Operations & Production Management, 19(7), 737-753. https://doi.org/10.1108/01409179910784215
32. Pagell, M., & Shevchenko, A. (2014). Why research in sustainable supply chain management should have no future. Journal of Supply Chain Management, 50(1), 44-55. https://doi.org/10.1111/jscm.12031
33. Pagell, M., & Shevchenko, A. (2014). Why research in sustainable supply chain management should have no future. Journal of Supply Chain Management, 50(1), 44-55. https://doi.org/10.1111/jscm.12031
34. Pagell, M., & Wu, Z. (2009). Building a more complete theory of sustainable supply chain management using case studies of 10 exemplars. Journal of Supply Chain Management, 45(2), 37-56. https://doi.org/10.1111/j.1745-493X.2009.03170.x
35. Pagell, M., Wu, Z., & Wasserman, M. E. (2010). Thinking differently about purchasing portfolios: An assessment of sustainable sourcing. Journal of Supply Chain Management, 46(1), 57-73. https://doi.org/10.1111/j.1745-493X.2009.03178.x
36. Petersen, K. J., Handfield, R. B., & Ragatz, G. L. (2005). Supplier integration into new product development: Coordinating product, process and supply chain design. Journal of Operations Management, 23(3-4), 371-388. https://doi.org/10.1016/j.jom.2004.08.001
37. Rao, P., & Holt, D. (2005). Do green supply chains lead to competitiveness and economic performance? International Journal of Operations & Production Management, 25(9), 898-916. https://doi.org/10.1108/01409170510618968
38. Sarkis, J. (2003). A strategic decision framework for green supply chain management. Journal of Cleaner Production, 11(4), 397-409. https://doi.org/10.1016/S0959-6526(02)00062-8
39. Seuring, S., & Müller, M. (2008). From a literature review to a conceptual framework for sustainable supply chain management. Journal of Cleaner Production, 16(15), 1699-1710. https://doi.org/10.1016/j.jclepro.2008.04.020
40. Srivastava, S. K. (2007). Green supply-chain management: A state-of-the-art literature review. International Journal of Management Reviews, 9(1), 53-80. https://doi.org/10.1111/j.1468-2370.2007.00202.x

 doi:10.20944/preprints202407.0614.v1

41. Srivastava, S. K., & Srivastava, R. K. (2006). Green supply-chain management: A state-of-the-art literature review. International Journal of Management Reviews, 9(1), 53-80. https://doi.org/10.1111/j.1468-2370.2007.00202.x
42. Svensson, G., & Wagner, B. (2011). Revisiting supply chain risk management: An empirical study of suppliers' viewpoint. Industrial Management & Data Systems, 111(5), 713-731. https://doi.org/10.1108/02635571111137567
43. Vachon, S., & Klassen, R. D. (2006). Extending green practices across the supply chain: The impact of upstream and downstream integration. International Journal of Operations & Production Management, 26(7), 795-821. https://doi.org/10.1108/01409170610672248
44. Wagner, M., & Bode, C. (2008). An empirical examination of supply chain performance along several dimensions of risk. Journal of Business Logistics, 29(1), 307-325. https://doi.org/10.1002/j.2158-1592.2008.tb00087.x
45. Walker, H., Di Sisto, L., & McBain, D. (2008). Drivers and barriers to environmental supply chain management practices: Lessons from the public and private sectors. Journal of Purchasing and Supply Management, 14(1), 69-85. https://doi.org/10.1016/j.pursup.2007.11.002
46. Zsidisin, G. A., & Hendrick, T. E. (1998). Purchasing's role in environmental management: Cross-functional development of grounded theory. Journal of Supply Chain Management, 34(3), 29-35. https://doi.org/10.1111/j.1745-493X.1998.tb00195.x
47. Zsidisin, G. A., & Siferd, S. P. (2001). Environmental purchasing: A framework for theory development. European Journal of Purchasing & Supply Management, 7(1), 61-73. https://doi.org/10.1016/S0969-7012(00)00022-2