

Supplier Relationship Management Practices And Performance Outcomes In The Rubber Industry: Evidence From a Developing Economy

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Abstract

This study explores Supplier Relationship Management (SRM) practices, focusing on their implementation, challenges, and effects on organizational performance in the rubber industry. SRM is essential for optimizing supply chain efficiency, fostering collaboration, and gaining a competitive edge. Using a qualitative approach, data were

gathered through semi-structured interviews with key stakeholders, including supplier officers, warehouse managers, and procurement officers. Ethics clearance and study approvals were obtained for the study. Thematic analysis identified key challenges, including supplier resistance to innovation, limited scalability of IT systems, and ethical compliance concerns. The results also emphasize the positive impact of effective SRM practices on key performance indicators, such as operational efficiency, supplier performance, and competitive positioning. Nevertheless, the study identifies areas for improvement, including supplier training, upgrading IT infrastructure, and aligning SRM objectives with the organization's strategy. Practical recommendations and suggestions for future research directions, such as exploring the effects of emerging technologies and cultural factors on SRM, were provided.

Keywords

Supplier Relationship Management (SRM), Supply Chain Management, Organizational Performance, IT Integration and Ethical Compliance.

1. Introduction

Supplier Relationship Management (SRM) has evolved into a strategic necessity for modern businesses, particularly in sectors with complex, globalized supply chains. SRM refers to the structured approach organizations use to manage their interactions with suppliers, with the primary aim of maximizing the value derived from these relationships through collaboration, communication, and mutual trust (Monczka et al., 2015). It encompasses a range of practices designed to ensure that suppliers contribute effectively to the organization's goals, such as enhancing product quality, fostering innovation, reducing costs, and ensuring timely deliveries (KPMG, 2021). This strategic alignment between companies and their suppliers is crucial in industries where supply chain efficiency directly impacts a company's competitive advantage (World Bank, 2018).

In today's global marketplace, the traditional view of supplier relationships as purely transactional has shifted toward a more collaborative, partnership-based model. This transformation is driven by the recognition that supplier performance is integral to overall business success (Vanpoucke et al., 2014). Companies are no longer solely dependent on their internal capabilities but must leverage external partnerships to ensure resilience and competitive advantage. For example, a report by the World Economic Forum (2020) notes that effective SRM is instrumental in enhancing supply chain resilience, enabling firms to navigate disruptions, optimize operational performance, and remain competitive in dynamic market conditions. The importance of SRM is particularly pronounced in industries reliant on extensive supplier networks, such as manufacturing, automotive, and agriculture (KPMG, 2020). In these sectors, where supply chain disruptions can significantly affect production and profitability, effective SRM practices are essential to maintaining continuity. For instance, the World Bank (2020) emphasizes that companies with advanced SRM frameworks are better positioned to manage risks associated with fluctuating commodity prices, regulatory changes, and operational uncertainties. These companies are also more likely to engage in long-term supplier relationships that foster innovation and drive mutual growth (Ambe & Badenhorst-Weiss, 2012).

Despite the recognized benefits of SRM, there are significant challenges associated with its implementation, especially in emerging markets. These challenges include misalignment between supplier and organizational goals, inadequate communication, lack of transparency, limited focus on performance measurement and lack of continuous improvement (Handfield et al., 2015). In many developing economies, including sub-Saharan Africa, SRM practices are often hindered by underdeveloped infrastructure, insufficient regulatory support, and fluctuating market conditions (World Bank, 2018). For example, several studies indicated that firms in sub-Saharan regions face higher risks due to supply chain disruptions caused by unstable political situations, poor transportation networks, and fluctuating commodity prices (KPMG, 2021). These reasons underscore the need for tailored SRM strategies that address the unique challenges faced by businesses in emerging markets. The influx of the COVID-19 pandemic exposed critical vulnerabilities in global supply chains and further underscored the importance of robust SRM frameworks. Thus, organizations that previously invested in strong supplier relationships were better able to mitigate the impacts of supply chain disruptions by rapidly adapting to changing conditions and leveraging their supplier networks for alternative sourcing (Ivanov & Dolgui, 2020). For instance, companies with effective SRM were able to negotiate flexible terms, diversify supplier bases, and implement digital technologies to enhance supply chain visibility and performance tracking (World Economic Forum, 2020). As a result, the pandemic accelerated the adoption of digital SRM tools, such as cloud-based platforms, artificial intelligence, and blockchain, which were highly utilized to improve transparency, communication, and supplier performance (Gunasekaran et al., 2017).

A report by the World Bank (2021) suggests that companies across various industries are now reevaluating their SRM practices to increase resilience and adaptability. However, a significant gap in the literature remains regarding the implementation of these practices in specific sectors, particularly in emerging economies, of which the rubber manufacturing industry is no exception. While advanced economies have well-documented SRM frameworks, less attention has been paid to how firms in developing countries, facing unique challenges such as regulatory inconsistencies and resource constraints, can effectively implement SRM practices to drive operational efficiency and competitive advantage (Quartey, 2020). Furthermore, there is limited research on the role of digitalization in transforming SRM practices in emerging markets, despite growing evidence that technology can play a critical role in overcoming traditional supply chain challenges (Gunasekaran et al., 2017). Therefore, there is a need for a comprehensive investigation into SRM practices by examining the root causes within the rubber industry. The primary aim of this research is to explore ethical approaches and analyze how Supplier Relationship Management (SRM) practices in the rubber manufacturing industry impact a company's operational performance. The specific objectives are as follows:

- To ascertain how innovation in Supplier Relationship Management (SRM) in the Rubber Industry affects operational performance.
- To determine how ethical approaches in supplier relationships, such as reputation, trust, and sustainability, affect the overall performance.

2. Literature Review

The literature review considers the various constructs and their definitions, significance, and influence on the independent variable. Insights are also drawn from arguments raised by various scholars with regards to supplier relationships in the rubber industry.

2.1 Supplier Relationship Management (SRM)

Supplier Relationship Management (SRM) is defined as a systematic approach to evaluating suppliers' contributions and influence on success, determining tactics to maximize suppliers' performance, and developing the strategic approach to managing suppliers (Cousins et al., 2008). SRM involves both transactional and collaborative relationships with suppliers, focusing on long-term partnerships that enhance the supply chain's efficiency and effectiveness (Chen et al., 2004). SRM is an integral component of supply chain management (SCM), aiming to establish and sustain productive relationships with suppliers. Effective SRM practices contribute to a firm's competitiveness by ensuring consistent quality, timely deliveries, and innovative supply solutions. As Christopher (2016) noted, SRM is critical in managing risks and uncertainties inherent in global supply chains, particularly in industries reliant on multiple and diverse suppliers.

2.2 Components of SRM

SRM encompasses various practices, including supplier selection, performance measurement, supplier development, and strategic collaboration (Leenders et al., 2006).

- **Supplier Selection:** The process of evaluating and choosing suppliers based on their capabilities, quality, cost, and reliability (Kannan & Tan, 2006). This step is crucial in ensuring that suppliers align with the company's strategic objectives.
- **Performance Measurement:** Ongoing assessment of suppliers' performance using key performance indicators (KPIs) such as delivery times, quality levels, and compliance with contractual terms (Gunasekaran et al., 2004). This process helps in identifying areas for improvement and ensuring continuous alignment with organizational goals.
- **Supplier Development:** Involves working closely with suppliers to enhance their capabilities and performance, often through training, resource sharing, and joint development initiatives (Krause et al., 1998). Supplier development is particularly important in developing economies where supplier capabilities may be limited.
- **Strategic Collaboration:** The long-term partnership approach between buyers and suppliers to drive mutual growth and innovation. Strategic collaboration involves joint planning, shared goals, and transparent communication channels (Dyer & Singh, 1998).

2.3 SRM Practices in Developing Economies

In developing economies, SRM faces unique challenges, including limited supplier capabilities, infrastructure constraints, and volatile economic environments (Handfield et al., 2000). These challenges often hinder the effective

implementation of SRM practices, leading to supply chain inefficiencies and increased risks. Companies operating in such contexts must adapt their SRM strategies to local conditions, balancing global best practices with local realities (Trent & Monczka, 2003). In contrast, SRM practices in developing economies are often constrained by limited resources, inadequate infrastructure, and volatile economic conditions. Handfield et al.'s (2000) study found that firms in developing countries face significant challenges in implementing SRM practices due to the lack of reliable suppliers, poor communication infrastructure, and a limited understanding of SRM principles.

A study by Kannan and Tan (2006) in India found that while firms recognize the importance of SRM, they struggle to implement it effectively due to cultural and organizational barriers. The study highlighted the need for firms to adapt SRM practices to the local context, taking into account factors such as supplier capabilities, cultural norms, and economic conditions. In Africa, a study by Lascelles and Dale (2000) indicated that SRM practices are often hindered by the lack of formal supplier selection and performance measurement processes. The study recommended that firms in the region invest in developing their SRM capabilities, particularly in areas such as supplier development and performance measurement, to improve supply chain performance.

2.4 SRM and Organizational Performance

Several studies have explored the relationship between SRM and organizational performance. A study by Cousins et al. (2008) found that effective SRM practices lead to significant improvements in operational performance, including cost reductions, quality improvements, and enhanced flexibility. The study emphasized the importance of strategic collaboration with key suppliers in achieving these performance benefits. Gunasekaran et al.'s (2004) study also found a positive correlation between SRM practices and organizational performance, particularly in terms of innovation and market responsiveness. The study suggested that firms that engage in close collaboration with suppliers are better positioned to respond to market changes and introduce new products and services. However, empirical evidence also suggested that the relationship between SRM and performance is contingent on several factors, including the firm's industry, the nature of its supplier relationships, and the broader economic environment (Dyer & Singh, 1998). This underscores the need for firms to tailor their SRM strategies to their specific context to achieve the desired performance outcomes.

3. Theoretical Review

3.1 Transaction Cost Economics (TCE) and Social Exchange Theory (SET)

Transaction Cost Economics (TCE), introduced by Oliver Williamson (1981), serves as a foundational theory in understanding the costs associated with managing supplier relationships. TCE posits that firms are motivated to minimize the costs of transactions, including the costs related to searching for suppliers, negotiating terms, and enforcing agreements. These transaction costs arise due to uncertainties, the potential for opportunism, and the need to safeguard against risks in supplier relationships (Williamson, 1985). In Supplier Relationship Management (SRM), TCE provides a valuable framework for understanding why firms choose certain organizational structures or relationship types with suppliers.

In the context of SRM, TCE suggests that firms will structure their relationships with suppliers based on the relative costs and risks of managing these interactions. When transaction costs are high, due to factors such as asset specificity, uncertainty, and frequency of interaction. Firms are more likely to develop closer and more integrated relationships with their suppliers (Williamson, 1991). This could manifest as long-term contracts, joint ventures, or even vertical integration, where the buyer takes over certain aspects of the supplier's operations. These integrated relationships allow firms to reduce the costs associated with repeated contract negotiations, mitigate risks of opportunistic behavior, and align incentives between the firm and its suppliers (Clemons et al., 1993). Opportunism refers to the risk that suppliers may act in their own interest at the expense of the buyer, such as by delivering subpar products or raising prices unexpectedly. Firms can manage these risks through robust governance mechanisms, detailed contracts, and performance monitoring, as suggested by Williamson (1985). However, TCE also identifies potential risks and costs associated with close, collaborative supplier relationships. While firms may reduce uncertainty and transaction costs through strong partnerships, these relationships can also lead to a dependency on a single or a limited number of suppliers. This dependency can increase vulnerability to supply chain disruptions and reduce the firm's bargaining power (Kraljic, 1983; Williamson, 1991). In such cases, firms must carefully balance the benefits of closer relationships with the risks of reduced flexibility and exposure to opportunistic behavior. Effective SRM strategies, therefore, often incorporate diversification of supplier bases and performance-based contracts to mitigate these risks (Carter & Easton, 2011).

In emerging markets, including sub-Saharan Africa, the application of TCE principles is particularly important given the higher levels of uncertainty and market volatility. Firms operating in these environments often face higher transaction costs due to poorly developed infrastructure, fluctuating commodity prices, and weaker institutional frameworks (World Bank, 2020). Furthermore, advancements in technology and digitization have transformed how firms manage transaction costs in supplier relationships. Digital tools such as blockchain, cloud-based procurement systems, and artificial intelligence (AI) are increasingly being used to enhance transparency, streamline contract management, and reduce transaction costs in global supply chains (Gunasekaran et al., 2017; Ivanov & Dolgui, 2020) and to optimize its SRM practices to remain competitive in the global rubber industry. Social Exchange Theory (SET), originally developed by Blau (1964), offers a valuable framework for understanding the relational dynamics of Supplier Relationship Management (SRM). SET posits that human interactions and relationships are built on the exchange of resources, whether tangible (e.g., goods, services, and financial transactions) or intangible (e.g., trust, commitment, and information). The theory emphasizes that the quality of a relationship is determined by the perceived balance between the costs and benefits experienced by both parties (Blau, 1964). In SRM, SET suggests that successful supplier relationships are contingent on the ongoing exchange of valuable resources and the establishment of mutual trust, reciprocity, and fairness (Emerson, 1976).

In the context of SRM, SET is particularly relevant for understanding the dynamics of long-term strategic supplier relationships. These relationships are built not just on transactional exchanges, but on the intangible elements of trust, collaboration, and shared goals (Dyer & Singh, 1998). When both the buyer and the supplier perceive the relationship as beneficial, the parties are more likely to invest in maintaining and strengthening it. For example, suppliers may offer more favorable terms, share valuable insights, or provide innovative solutions when they feel appreciated and believe that the benefits they receive from the buyer outweigh the costs (Graca & Camarinha-Matos, 2017). One of the core tenets of SET is reciprocity, where both parties in the relationship expect that their contributions will be met with equivalent or greater returns. This reciprocal exchange is vital in SRM, as it drives suppliers to provide higher-quality products, prioritize delivery timelines, and offer more innovative solutions when they feel that their efforts are recognized and fairly compensated (Lambe, Wittmann, & Spekman, 2001). In the global context, firms that adopt SET in their SRM practices can navigate the complexities of international supplier relationships more effectively. For instance, companies that foster open communication and trust with international suppliers are better positioned to adapt to market fluctuations and supply chain disruptions, as seen during the COVID-19 pandemic (Van Hoek, 2020). The pandemic revealed that organizations with strong, trust-based supplier relationships were able to collaborate with suppliers to find alternative sourcing options, renegotiate contracts, and maintain business continuity despite disruptions (Ivanov & Dolgui, 2020). SET suggests that these collaborative relationships are made possible by the perception of fairness, transparency, and mutual support in the exchange between buyers and suppliers. In sub-Saharan Africa, where many industries are still developing robust supply chains, applying SET in SRM can help firms overcome infrastructural challenges and build stronger partnerships with local and international suppliers. Trust and mutual benefit are especially crucial in regions where formal contractual mechanisms may be less effective or harder to enforce (Amankwah-Amoah, 2020). In these contexts, relational governance, based on SET principles of trust and reciprocity, becomes an important tool for managing supplier relationships and ensuring supply chain resilience (Rodriguez, 2020). For firms in the Rubber industry, applying SET principles in SRM could help address challenges related to inconsistent supplier performance, communication breakdowns, and inefficiencies in the supply chain, as well as beneficial can prevent opportunistic behavior and enhance the sustainability of these relationships over time.

4. Conceptual Framework

The conceptual framework for this study is based on the interplay between SRM practices and organizational performance. The framework posits that effective SRM practices, including supplier selection, performance measurement, supplier development, and strategic collaboration, positively influence organizational performance by enhancing supply chain efficiency, reducing costs, and improving product quality (Chen et al., 2004; Cousins et al., 2008).

However, the framework also acknowledges the challenges that firms in developing economies face in implementing these practices. Factors such as limited supplier capabilities, inadequate infrastructure, and volatile economic conditions can hinder the effectiveness of SRM practices and, consequently, organizational performance (Handfield et al., 2000; Kannan & Tan, 2006). The framework also incorporates the theoretical perspectives discussed earlier, including Transaction Cost Economics (TCE), the Resource-Based View (RBV), and Social Exchange Theory (SET).

These theories provide a deeper understanding of the factors that influence SRM practices and their impact on organizational performance (Figure 1).

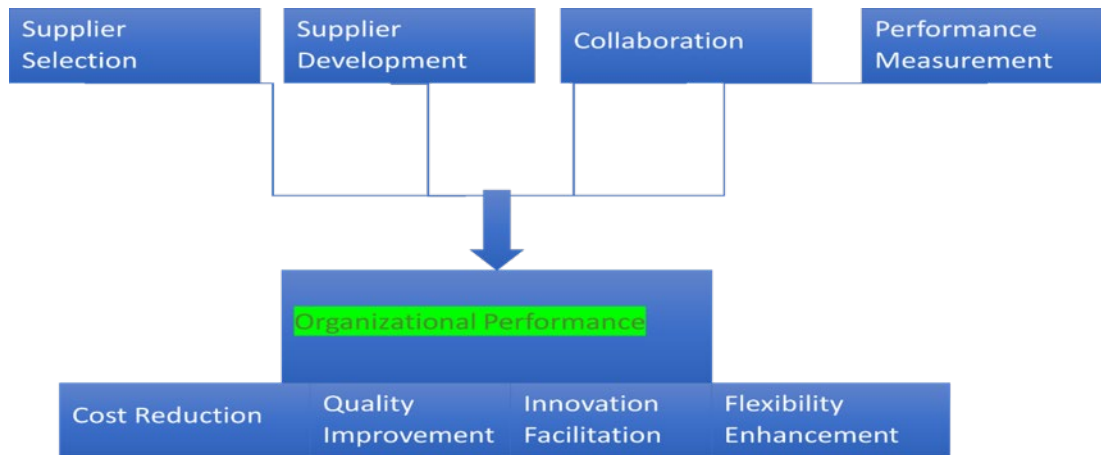


Figure 1. Conceptual Framework

For Supplier Selection, this refers to the process of identifying and evaluating potential suppliers based on factors like product quality, reliability, and cost competitiveness. A well-managed supplier selection process ensures that the most capable suppliers are chosen, aligning with the company's goals and performance expectations (Monczka et al., 2015). With Supplier Development, the focus is on enhancing the capabilities and performance of existing suppliers through training, joint innovation, and collaboration (Cousins et al., 2008). By investing in supplier improvement, organizations can foster long-term relationships that boost efficiency and create competitive advantages. Also, collaboration involves close cooperation between the organization and its suppliers to jointly develop new products or solutions, share market insights, and co-invest in infrastructure (Monczka et al., 2015). Collaborative SRM leads to better alignment of goals and enhanced innovation. Performance measurement involves monitoring and assessing supplier performance through key performance indicators (KPIs) like delivery reliability, cost efficiency, and responsiveness (Cousins et al., 2008). Tracking supplier performance helps identify gaps, optimize processes, and ensure that supplier contributions align with the company's strategic objectives. Additionally, organizational performance are the outputs of these SRM practices collectively contributing to various dimensions of organizational performance, including:

- **Cost Reduction:** By streamlining procurement and fostering collaboration, companies can reduce costs across areas like raw material procurement and inventory management (Narasimhan & Das, 2001).
- **Quality Improvement:** SRM practices help ensure that suppliers maintain high-quality standards, minimizing defects and improving overall product quality (Fawcett & Magnan, 2002).
- **Innovation Facilitation:** Supplier collaboration fosters innovation by leveraging external expertise, leading to product differentiation and market competitiveness (Chen et al., 2018).
- **Flexibility Enhancement:** SRM allows organizations to respond quickly to changes in demand or supply chain disruptions, improving agility and customer service (Narasimhan & Das, 2001). This study seeks to build on the existing literature by examining SRM practices within the context of the Rubber industry and identifying the specific challenges the company faces in managing its supplier relationships. The conceptual framework developed in this chapter will guide the analysis, providing a basis for understanding the relationship between SRM practices and organizational performance, as well as the factors that influence the effectiveness of these practices in developing economies.

5. Methodology

5.1 Research Approach

The research approach adopted was qualitative, aligning with the exploratory nature of this research and the need for an in-depth understanding of Supplier Relationship Management (SRM) practices within the rubber industry. The qualitative research method was suitable to navigate the complex phenomenon and generate context-specific insights (Creswell & Poth 2018) as it allowed holistic exploration of SRM practices, such as supplier selection, collaboration,

and performance measurement. By conducting semi-structured interviews, the study sought to capture the motivations, challenges, and opportunities that influenced SRM processes (Patton 2015). The method also allowed for the contextualization of findings for a unique organizational and cultural environment (Yin 2017). Data collection primarily involved semi-structured interviews and document analysis. Respondents were 15 purposely sampled to include supply chain practitioners. Through their responses, the study aimed to explore the challenges, innovations, and strategic alignments in SRM and their impact on organizational performance.

5.2 Data Analysis

The data analysis followed Braun and Clarke's (2006) thematic analysis approach. This involved identifying, analyzing, and reporting themes or patterns within the qualitative data. Data collected through interviews and document analysis were compared to enhance the validity of the findings and interpreted in relation to the research questions, supported by the literature. Confidentiality was acknowledged to ensure that all participants were provided with informed consent, and ethical clearance was approved by the institution.

6. Data Analysis

6.1 Grouping of Codes and Themes

Table 1 below categorizes the codes into overarching themes for analysis and discussion.

Table 1: Themes, Codes and Quotes of Respondents

Themes	Codes	Respondent Quotes
1. Supplier Relationship Challenges	Resistance to innovation, communication gaps, lack of ethical compliance, and supplier inefficiencies	"Some suppliers resist the new systems we implement, making it hard to innovate effectively."
2. IT Systems and Integration Issues	Scalability challenges, lack of real-time tracking, and outdated systems	"Our IT systems are not scalable enough to handle increased supplier data."
3. Workforce and Training Limitations	Insufficient staff training, lack of awareness, and high turnover	"Many employees lack training in supplier relationship management." (HR Officer)
4. Performance Impacts of SRM Practices	Improved efficiency, better supplier quality, enhanced competitive edge	"Our SRM practices have improved supplier quality significantly."
5. Areas for SRM Improvement	Better supplier training, IT upgrades, ethical compliance programs, and enhanced collaboration	"We need to provide more training to suppliers to align with our objectives."

6.2 Thematic Analysis and Discussion

6.2.1 Theme 1: Supplier Relationship Challenges

The analysis of the interviews revealed significant challenges in managing supplier relationships. One of the most notable challenges was resistance to innovation, which was mentioned by several respondents. The Supplier Officer stated:

"Some suppliers resist the new systems we implement, making it hard to innovate effectively."

This resistance to change was seen as a major barrier to improving the supply chain and achieving operational efficiency. Additionally, communication gaps were cited as another critical issue that hindered supplier performance. The Human Relations Officer highlighted the impact of communication breakdowns:

"Miscommunication often leads to delays and missed targets in supplier performance."

Ethical compliance also emerged as an underlying issue, with suppliers not always adhering to agreed standards, impacting overall supplier performance. Resistance to innovation suggests that suppliers may feel uncertain or insecure about the changes being implemented, whether due to a lack of understanding or perceived risks. This resistance can limit the adoption of modern technologies or processes that are essential for enhancing efficiency and streamlining the supply chain. The communication gaps further exacerbate the problem by creating misunderstandings that lead to delays, errors, and inefficiencies in the supplier management process. The challenge of supplier resistance is not unique to the rubber industry; it has been observed in various supply chains where new systems or technologies

are introduced. As Cousins et al. (2021) argue, supplier resistance is often the result of insufficient engagement or a lack of clear communication about the benefits and risks of the changes. A supplier's reluctance to embrace change may stem from fear of disruption to their existing processes or skepticism about the return on investment. Therefore, fostering a collaborative environment where both parties understand and align with their goals, enhancing supplier engagement and education, establishing clear communication channels, and ethical compliance monitoring are crucial for overcoming this resistance.

6.2.2 Theme 2: IT Systems and Integration Issues

This theme pertains to significant challenges associated with IT systems and their integration into the supplier relationship management (SRM) processes. The Systems Manager noted the following critical issue:

"Our IT systems are not scalable enough to handle increased supplier data."

This statement underscores a limitation in the current IT infrastructure, which impacts the firm's ability to effectively manage and analyze supplier data. Additionally, the lack of real-time tracking was mentioned as a major hindrance:

"We cannot track supplier performance in real-time, which makes it difficult to make data-driven decisions."

This lack of integration and scalability is preventing the firm from optimizing its supply chain operations and streamlining SRM processes. The findings indicate that the existing IT infrastructure is insufficient for managing the growing volume of supplier data, which directly impacts the efficiency and effectiveness of the SRM processes. The inability to scale IT systems hampers the capacity to handle increasing data loads, which may include product specifications, orders, and performance metrics, among others. Without scalable systems, firms cannot manage the supply chain as effectively as needed, making it difficult to keep track of supplier activities and performance over time. Furthermore, the lack of real-time tracking exacerbates the problem, as it limits the ability to make quick, informed decisions based on up-to-date supplier performance data. Real-time tracking allows companies to monitor supply chain activities continuously and identify any issues or inefficiencies as they arise. Without this capability, rubber firms may face delays in responding to issues, leading to supply chain disruptions, performance bottlenecks, and missed opportunities for improvement. Hence, system upgrade, real-time tracking, and an integrated IT system will be significant.

6.2.3 Theme 3: Workforce and Training Limitations

This theme focuses on workforce and training limitations. Several respondents highlighted the lack of adequate training as a significant challenge to effective Supplier Relationship Management (SRM). The HR Officer pointed out:

"Many employees lack training in supplier relationship management."

This lack of training limits the workforce's ability to understand and effectively engage with suppliers, which impacts the quality of SRM. Moreover, the issue of high staff turnover was also noted as a significant factor hindering long-term SRM improvements. The Warehouse Manager explained:

"The constant turnover means we are always training new people instead of focusing on building long-term strategies."

This high turnover leads to a loss of continuity, which is crucial for maintaining stable and efficient relationships with suppliers. A lack of specialized training in SRM is a critical gap, as employees may not fully understand the strategic importance of SRM or the skills needed to manage supplier relationships effectively. As a result, employees may struggle with tasks such as negotiating contracts, managing supplier performance, or resolving conflicts, which can directly affect the quality of supplier relationships and the overall supply chain performance. High employee turnover exacerbates this problem by preventing the development of a consistent and experienced workforce. When staff leave, they take with them valuable knowledge about supplier relationships and processes, and new employees require time and resources to be trained. This constant cycle of training new staff diverts attention from building and improving supplier relationships, creating inefficiencies in SRM practices. Patton (2015) emphasizes the importance of continuous training and development for enhancing employee competencies, particularly in complex areas like SRM. Hence, a conscious, continuous improvement framework will suffice while creating a continuous learning culture in the work environment.

6.2.4 Theme 4: Performance Impacts of SRM Practices

This theme revolves around the positive impacts of Supplier Relationship Management (SRM) practices on operational performance and supplier effectiveness. Several respondents noted and affirmed the resultant effect of supplier performance as a result of effective SRM. An Officer highlighted that:

"Our SRM practices have improved supplier quality significantly."

This observation aligns with a noticeable improvement in overall service delivery, as mentioned by another Officer:

"When suppliers perform better, it reflects positively on our overall service delivery."

The improved supplier quality and performance have contributed to better customer satisfaction and operational efficiency, emphasizing the correlation between strong SRM practices and organizational performance. The findings indicate that SRM practices have had a direct and positive impact on supplier performance, which, in turn, has improved overall operational efficiency and customer satisfaction. The enhancement of supplier quality, as noted by the Procurement Officer, suggests that SRM practices are effectively fostering more reliable and high-quality suppliers, which positively influences the firm's ability to meet its operational goals.

The statement from the Officers underscores the wider impact of supplier performance on service delivery. Suppliers that perform well contribute to better product quality, fewer delays, and improved delivery times, which enhances the company's ability to meet customer expectations. As a result, improved SRM not only leads to better supplier relationships but also supports the firm's broader business objectives, such as increasing competitiveness and customer loyalty. In this case, it's imperative to focus on collaborative supplier development programs and supplier performance metrics while leveraging technology for supplier optimization.

6.2.5 Theme 5: Areas for SRM Improvement

This theme addresses the areas identified for improving Supplier Relationship Management (SRM) practices. Respondents highlighted several key areas for improvement, including enhanced supplier training and IT system upgrades. The Officer noted:

"We need to provide more training to suppliers to align with our objectives."

This sentiment was echoed by a manager, who remarked:

"Better systems would help us track supplier performance in real time."

These responses point to the need for better alignment with suppliers and the need for more advanced technological solutions to monitor and optimize SRM practices.

The findings underscore that while current SRM practices have shown positive results, there are still areas requiring improvement. Supplier training is essential for ensuring that suppliers are fully aligned with expectations and objectives. As the Customer Care Officer indicated, providing more training to suppliers can enhance their understanding of goals, which in turn would help improve performance and collaboration. Moreover, the comment from the Systems Manager highlights the importance of technological upgrades to better monitor supplier performance in real time. The lack of real-time tracking and efficient IT systems limits the ability to make data-driven decisions, which could hinder improvements in SRM practices. The integration of more advanced IT systems would enable rubber industry players to have better control over their supply chain and gain insights into supplier performance, ultimately leading to more efficient supplier management and stronger relationships. Therefore, an upgrade of the IT tools and real-time tracking to offer the needed visibility will be relevant (Table 2).

Table 2: Summary of Results for each theme and with supported literature

Theme	Findings	Interpretation	Supported Literature
Theme 1: Supplier Relationship Challenges	Challenges related to supplier resistance to innovation, communication gaps, and ethical compliance. Interviewees noted that some suppliers resist new systems, hindering innovation and operational efficiency.	Resistance to innovation suggests the need for trust-building and goal alignment with suppliers. Communication gaps exacerbate inefficiencies, which hinder smooth	Cousins et al. (2021) suggest that supplier resistance often stems from misunderstanding or perceived risks, calling for improved communication and engagement. Monczka et al. (2020) emphasize that open

	Communication gaps result in delays and missing targets.	supplier performance and collaboration.	communication fosters trust and better supplier performance.
Theme 2: IT Systems and Integration Issues	The Systems Manager identified scalability and real-time tracking as major challenges in IT systems. Current systems are inadequate to handle increasing supplier data, which affects data-driven decision-making and SRM processes.	The lack of scalable, integrated IT systems limits ability to optimize SRM practices. Efficient IT systems are essential for real-time tracking, data flow, and better supplier collaboration.	Christopher (2016) highlights that robust IT systems improve information flow, supply chain visibility, and support real-time tracking. Implementing scalable systems enhances operational efficiency and supplier management.
Theme 3: Workforce and Training Limitations	Rubber industry faces significant training gaps, with employees lacking SRM-specific training. High turnover further disrupts continuity, requiring repeated training for new hires, impacting SRM outcomes.	Training is crucial for building competencies in SRM. High turnover disrupts continuity, making it difficult to establish long-term supplier relationships. Continuous training is needed to improve SRM performance.	Patton (2015) emphasizes that ongoing training enhances employee capabilities and fosters better supplier collaboration. Workforce continuity is also vital for strong, long-term supplier relationships.
Theme 4: Performance Impacts of SRM Practices	SRM practices have led to improved supplier quality, operational efficiency, and customer satisfaction. Interviewees noted that better supplier performance positively affects overall service delivery and competitive advantage.	Effective SRM leads to measurable improvements in performance metrics, including supplier quality and customer satisfaction, enhancing competitive advantage and operational efficiency.	Cousins et al. (2021) show that SRM positively impacts performance metrics, such as cost reduction and customer satisfaction. Strong supplier relationships contribute to improved operational outcomes.
Theme 5: Areas for SRM Improvement	Respondents suggested that firms need to provide more training to suppliers and upgrade its IT systems for real-time performance tracking. These improvements would enhance SRM outcomes and operational efficiency.	Investing in supplier training and IT upgrades will align suppliers with the objectives of improving real-time monitoring of supplier performance, leading to better SRM practices.	Christopher (2016) and Monczka et al. (2020) emphasize that continuous improvements in supplier training and technological advancements are necessary to optimize SRM and supply chain performance.

7. Conclusion

This study examined Supplier Relationship Management (SRM) practices in the rubber industry, highlighting the challenges faced and also how it impacts organizational performance. The findings revealed that innovation through the use of digital tools, joint innovation programs, and collaborative development with suppliers plays a significant role in assuring operational efficiency and ultimately enhancing organizational performance. Additionally, with resistance to innovation, particularly among suppliers with limited technological capabilities, that truly hinders their ability to fully capitalize on innovation in their supply chain, thereby negatively affecting their quest to advance in effectiveness and performance.

7.1 Recommendation

To enhance innovation, focus could be on strengthening supplier engagement through training and capacity-building initiatives. Additionally, ethical SRM practices, including transparency, fairness, and regular audits, have a positive impact on the company's reputation and trust with suppliers and must be maintained and continuously improved through engagement in developmental programs. Though challenges in maintaining consistent ethical standards across a broad supplier base have emerged, especially in compliance with regulations and societal expectations. Again, more resources for monitoring will ensure consistent ethical compliance across all supplier relationships. With the

integration of IT systems, including ERP tools and supplier portals, to streamline procurement processes and improve communication with suppliers. However, challenges related to the scalability of these systems were identified.

7.2 Future Research Directions

Future studies should examine the impact of emerging technologies, such as artificial intelligence and blockchain, on SRM processes. These technologies have the potential to revolutionize supply chain management by enhancing transparency and efficiency. Conducting longitudinal studies to track the evolution of SRM practices and their impact on organizational performance over time will yield valuable insights. Given the global nature of supply chains, future research should explore how cultural and regional factors influence SRM practices and outcomes.

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Biographies

Mr. Joseph Boateng Arhin is a results-driven Procurement Officer with over a decade of experience in supply chain management, procurement strategy, and risk assessment. I currently serve at Ghana Rubber Estates Limited in Takoradi, Ghana as a Procurement Officer, where I have consistently demonstrated expertise in supplier relationship management, cost optimization, and aligning procurement activities with production needs to enhance operational efficiency. I have a strong track record in developing and implementing procurement policies that streamline processes and reduce costs. My ability to analyze market trends and manage inventory effectively has contributed to improved supply chain performance and minimized operational disruptions. Before my current role, I worked as an Internal Auditor (Inventorist), where I strengthened inventory controls, conducted audits, and ensured data accuracy to support informed decision-making. I hold a Master of Science in Supply Chain Management from Coventry University in the United Kingdom and at the final level (level 3) of the Institute of Chartered Accountancy-Ghana. My academic background is complemented by certifications in Kaizen methodology and advanced Excel.

Dr. Nana Agyeman-Prempeh is an accomplished project and supply chain expert with over 20 years of experience spanning industry and academia. He has worked extensively in the pharmaceutical sector in Ghana at Vicdorix Pharma Ltd, Sinopharm Ghana Ltd, and CSPC Medsolutions Ltd. Whilst in the UK, he played diverse roles at Lidl and T.K. Maxx. Currently, he is a full-time lecturer at Ghana Communication Technology University, where he teaches undergraduate and postgraduate courses in Supply Chain Management, Project Management, and Global Distribution Networks, also supporting programs with international partners such as Coventry University and Anhalt University of Applied Sciences. He leads the P-Learn Centre for Industrial Research and Innovation, focusing research on sustainability, innovation and climate change. Nana contributed to the establishment of the Ghana Innovation Hub under a World Bank initiative. He holds a PhD from the University of the Western Cape and has received professional training from globally recognized institutions, demonstrating strong commitment to academic and professional excellence.

Mr. Felix Anim is a dedicated Procurement Officer in the Supply Chain Department at Asante Gold Chirano Limited. In his role, he is responsible for managing procurement processes, ensuring the timely acquisition of goods and services, and supporting efficient supply chain operations within the organization. He plays a key role in supplier evaluation, contract management, and cost optimization, contributing to operational efficiency and value creation. Felix has over a decade of experience in the mining industry, equipping him with extensive practical knowledge of procurement systems, supplier management, and logistics coordination in complex operational environments. He is currently pursuing a Master's degree in Procurement and Supply Chain Management at Ghana Communication

Technology University, further strengthening his academic and professional expertise. He remains committed to continuous improvement and excellence in supply chain management, contributing to organizational competitiveness and sustainability.

Mr. Martin Puwurayire is a results-driven project management and digital transformation professional with extensive experience in public sector operations and systems implementation. He currently serves as a Supervisor at the Transformation Office of the Ghana Revenue Authority (GRA), where he leads initiatives to improve operational efficiency and service delivery. Martin holds a master's degree in engineering project management from Coventry University (affiliate: Ghana Communication Technology University) and a BSc in Computer Science from the Catholic University College of Ghana. He has further strengthened his expertise through certifications in Project Management from the International Monetary Fund (IMF), GIMPA, and Logos School of Graduates, as well as training in Graphic and Web Design from IPMC. With a career spanning role in IT support, taxpayer accounting, and project coordination, he has successfully implemented digital transformation projects that improved operational efficiency by 30%. He also trained 46 GRA offices nationwide on the TRIPS system, enhancing compliance and revenue collection. Additionally, he serves as a WIDU Project Coach (GIZ), supporting SMEs in optimizing business processes.

Mr. Bernard Orraca-Tetteh is an experienced Electrical Engineer with over 15 years of professional experience in the mining industry. He currently works with Asante Gold Chirano Ltd, where he serves as a Senior Infrastructure Maintenance Supervisor. In this role, he is responsible for overseeing infrastructure systems, ensuring reliability, and implementing effective maintenance strategies to support operational efficiency. Bernard has developed strong expertise in fixed asset maintenance planning, supported by specialized training in maintenance planning from Data Management Consult, as well as certification in Lightning and Earthing from NHP Africa Solutions, South Africa. His technical competence is further grounded in his academic qualifications, including a Higher National Diploma (HND) from Takoradi Technical University (TTU) and a professional certification from the University of Professional Studies, Accra (UPSA). Committed to continuous professional development, Bernard is currently pursuing an MSc in Engineering Project Management at Ghana Communication Technology University (GCTU). His academic and industry experience position him as a skilled professional with a strong interest in infrastructure reliability, project management, and sustainable engineering solutions.

Mr. Daniel Osei is a results-driven accounting professional with over 13 years of experience at Phoenix Insurance Company, where he works within the Treasury Department. He has developed strong expertise in cash flow management, investment monitoring, account reconciliation, and regulatory compliance. Daniel is known for his analytical skills and attention to detail, which enable him to support effective financial decision-making. He has a proven track record of improving financial processes and strengthening internal controls. His contributions have consistently supported organizational stability, operational efficiency, and sustainable growth within the company's financial management framework. Daniel is a chartered accountant and also pursues an MBA in International Trade from Anhalt University of Applied Science (Germany).