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COLLABORATIVE PRACTICES WITHIN SUPPLY CHAIN MANAGEMENT ACTIVITIES AMONG SMALL AND MEDIUM ENTERPRISES (SMEs): A CASE STUDY OF SOUTH AFRICA**Hluli Ndlovu¹, Livhuwani G. Nkondo², Ntise H. Manchidi^{3*}**^{1,2} *Department of Business Management, Faculty of Management, Commerce and Law
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Abstract. As global business environments get more challenging, supply chain management (SCM) has embraced cooperation to increase effectiveness, cut costs, and improve customer experiences. The study assesses the current practice and status of collaboration, evaluates the factors that influence collaborative practices among small and medium enterprises (SMEs). The study applied a qualitative research method through the interpretivism paradigm and employed semi-structured interviews to acquire substantive data from the SMEs operating in the local environment. Results were concluded as they were examined through thematic analysis. It is evident that collaboration enhances supply chain performance and fosters innovation, trust, and operational efficiency. Key drivers include market development, competitive edge, better product quality, and innovation. The study adds value to the extant SCM literature by providing useful suggestions to enhance inter-SME partnerships that may enhance sustainable supply chain practices. The findings accruing from the research studies are beneficial to business managers, who wish to enhance SCM effectiveness and competitive advantage in similar geographical environments.

Keywords: collaboration; drivers; innovators; small and medium enterprise (SME); supply chain management (SCM)

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1. Introduction

Supply Chain Management (SCM) is a network of activities that plan, control, and execute the flow of goods and services from raw materials to end consumers (Ivanov, 2021). It may be described as the management of the flow of things from the point of origin to the consumption point, including materials, information, and services. SCM includes coordination with the business' suppliers, manufacturers, distributors, and customers (Alsheyadi, Baawain, & Shaukat, 2024). Thus, SCM is becoming a critical success factor for organizations in the modern world where the business environment changes rapidly. As businesses go global, and customers' requirements constantly evolve, conventional supply chain management models are inadequate to satisfy market needs fully (Gaiardelli et al., 2021). Collaboration is also a progressive and transformative model that has changed how SCM is managed. Cooperation, both internally and with other organizations has been a turning point since it makes

companies and organizations operate efficiently and innovate (Alshurideh et al., 2022). Supply chain relations are also critical and cannot be overemphasized as a key component in supply management. These relations can help to bridge the gap between entities, build trust, and establish positive relations with different players in the supply chain (Yavaprabhas, Pournader & Seuring, 2023).

SCM fosters more creativity and expands the horizons of suppliers, manufacturers, distributors, retailers, and even customers because the most benefits are achieved through collaboration (Mubarik & Khan, 2024). The gains that come with collaboration are increased visibility, a decrease in lead time, greater forecast accuracy, better stock management, and overall customer satisfaction (Baah et al., 2021). This invariably means that common purposeful collaboration enables organizations to counter any obstructions and exploit opportunities, which would in any other case be unfeasible (Yuan et al., 2022). Communication, trust, and commitment are key strategies for the successes of collaborative work (Huda, 2024). It demands a transition from an often-tactful approach with creditor constituents to more comprehensive, forward-thinking (Faregh, & Jourabchi Amirkhizi, 2023). SCM demands that various stakeholders work closely together and be ready to make investments in relationship-building communication and technology. Collaboration, however, is not without challenges. Organizations' challenges include cultural barriers, self-interest, and data privacy (Swart, Bond-Barnard & Chugh, 2022). However, these challenges could be attenuated if the current mindset and processes envision interpersonal collaboration and engagement aiming at producing revolutionary change (Govender & Adegbite, 2022).

Although prior studies highlight the importance of integration for the effective functioning of supply chains, the lack of cooperation in SCM remains a mystery for many organizations on how to continuously and sustainably achieve high levels of integration and the tools that need to be used (Aldabous, 2024). Nonetheless, to enhance the understanding of collaboration on how it reduces challenges and promotes superior performance, concerns have been raised on the barriers, limitations, and factors that prevent collaboration success in the SCM area (Kim & Nguyen, 2022).

In globalized markets where there are increasingly complex supply chains, SMEs face numerous challenges, particularly in resource-constrained environments. However, these SMEs are often found to adopt collaborative SCM practices to navigate these challenges and improve competitiveness. Ultimately, these cooperative efforts allow SMEs to leverage shared resources, streamline operations, and enhance their market positions. This study expands on preliminary findings to explore critical collaborative supply chain practices and the key drivers of collaboration in SCM.

2. Theoretical foundations

2.1 Existing collaborative practices in SCM among SMEs

SCM cooperation among SMEs effectively tackles single-company limitations and improves competitiveness through partnership. Such practices cover a broad range of integrated programs, including procurement collaboration, logistics collaboration, and information collaboration (Ghazal, & Alzoubi, 2021; Badraoui, Krimi, & Saikouk, 2024). This introduces the SME 'strategic' partner so that the need for economies of scale, operational efficiency, and market coverage can be accomplished. SMEs have better bargaining power when it comes to purchasing from and selling to suppliers, achieving efficient elements of the supply chain, and offering low prices that may help cut numerous costs, such as those related to the movement of goods. It demonstrates that such a relationship is not only helpful in increasing supply chain responsiveness and robustness but also for improving supply chain innovativeness and reactivity to changing market environments. Collaborative practices in SCM among SMEs are described in the next sub-sections.

2.1.1 Joint Procurement

Joint procurement pools the purchasing needs of different SMEs, thereby harnessing increased collective buying power and enabling more favorable terms from suppliers. By aggregating orders, SMEs can access the benefits of economies of scale, generating discounts and improved payment terms that generally only larger firms would have been able to access. The strategy reduces unit costs and makes SMEs more potent to stand against suppliers with strong bargaining positions (Seiso, Ogunbayo, & Aigbavboa, 2023). In this regard, pooling resources are specifically necessary since high-quality inputs come at a higher price, and suppliers are likely to sell reliable products and offer priority service to customers who purchase in bulk; thus, SMEs can pool resources as a cost-effective means to ensure quality standards of procurement and supply chain management.

Savings from joint procurement can be significant and enable more outstanding capital toward other vital areas such as research & development, marketing, or process improvements. By participating in joint procurement, SMEs share the cost of high-quality materials and services among group members rather than only facing the financial burden themselves, making them more affordable (Ramjaun, Rodrigues & Kumar, 2024; Chirico et al., 2024). As a result of joint procurement, SMEs can diversify their suppliers, so they are not stuck with one supplier that poses a risk. For example, access to a wider variety of suppliers helps SMEs buffer from price variations and supply chain shocks, thus leading to higher operational resilience. This also creates synergies about associated orders in cutting down the expansion costs for SMEs, boosting their growth potential by finding ways to offer new product lines or move into new markets. SMEs can benefit from bulk purchasing discounts and transfer these cost savings to their customers, which improves their competitiveness in the marketplace and helps them compete against larger competitors (Soysal, Belbağ & Erişkan, 2022). As (Nguyen et al., 2020) write, this strategic benefit is universal across industries, with a proven record of both cost reduction and enhanced access to critical goods. To summarize, joint procurement acts as a tool that leads to a more sustainable and watermark operational model by further prepping SMEs at the edge of competing on the competitive level in the contemporary market (Niu, Mu & Chen, 2023).

2.1.2 Collaborative Logistics Services

By utilizing shared logistics operations, SMEs can combine to share resources required for warehousing, transportation, and distribution – generating efficiencies that reduce logistical costs while enhancing delivery performance. Logistics infrastructure sharing enables SMEs to maximize the efficiency of critical activities such as route planning, storage, and fuel consumption, leading to cost savings and better operations (Pan et al., 2021). SMEs in shared logistics arrangements share the costs of personnel, fuel, and space goods, thus reducing their expenses compared to the equivalent amounts allocated to separate logistics facilities. This model seems more suited for firms with high logistics costs because of the diminished overhead and increased operational efficiency (Diao, Kong & Zhao, 2021).

Advanced technologies are another benefit of shared logistics. SME capability can also be pooled to afford broader systems. Automated warehouse management, real-time track and trace, and route optimization tools have been financially unattractive for single SMEs. They increase logistical correctness, enable quicker deliveries, and provide better customer service benefits directly related to customer satisfaction and loyalty (Deng, & Lin, 2022). Such tools are changing the game for SMEs as they help them compete in an open market that demands swift and dependable service (Lewandowska, Berniak-Woźny & Ahmad, 2023). Furthermore, optimizing routes means less fuel consumption and emissions being released into the atmosphere, which ultimately reduces environmental impact by aligning the operations of SMEs with the sustainable business environment.

Better, faster, and more reliable delivery directly boosts customer satisfaction, which is critical for SMEs that want to create loyal customers among their regulars while building a good reputation as a brand. Shared logistics arrangements enable SMEs to provide service levels like those of a large company at affordable costs. This allows SMEs to meet customer demands more effectively, build trust in the quality and timing of their products, and

position themselves as dependable players within whatever market they are operating. Such a strategy allows SMEs to utilize resources more efficiently in business activities, delivering value to the customers, such as service quality, product delivery, and variety (Rane, Achari & Choudhary, 2023).

2.1.3 Information Sharing Platforms

Supply chain information-sharing platforms are a vital solution for small to SMEs that can foster greater coordination, transparency, and real-time communication in the supply chain. Thanks to these digital platforms, SMEs can seamlessly and swiftly share information and insights, which means they adapt quickly to changing market conditions or customer demands. The increasing gap in information can be avoided through the implication of real-time data sharing that reduces lead time and enables SMEs greater flexibility to respond to production volumes towards an external environment or changes in demand Ngcobo et al. (2024).

SMEs that must stay agile and responsive in a fast-moving market need as much transparency across the supply chain as possible. Giving them a glimpse of the whole supply chain, information-sharing platforms allow SMEs to keep track of inventory levels, forecast shifts in demand, and manage production schedules accordingly. Having a sight of stock lowers the risks of stock out or overproduction, causing undesirable resource wastage due to a supply-demand mismatched effect (Jauhar et al., 2024). Moreover, shared information also improves decision-making as SMEs develop insights that help forecast, which is necessary for efficient functioning and avoidance of unnecessary costs Abrokwah-Larbi & Awuku-Larbi (2024).

Information-sharing platforms promote coordination and innovation in the supply chain by enabling joint product and service development among partners. These platforms foster collaborative environments where joint problem-solving and exploratory creativity are encouraged, allowing SMEs to bring innovative solutions to the market more effectively. Having a shared data ecosystem will also enable SMEs to discover and monitor new trends or changes in consumer preferences, allowing them to create/react to developing a product that better matches current needs. Strengthening an SME's operational role within the supply chain further promotes a culture of continuous improvement to adapt and innovate.

2.2 Factor driving SMEs to engage in collaborative supply chain practice

Intrinsic and extrinsic factors motivate SMEs to engage in collaborative supply chain practices. Firstly, collaboration is strategic through the combination of resources that constitute the competence of the SMEs in acquiring complementary resources that are critical in the expansion of operations and enhancement of products (Oyedijo et al., 2022). If two or more firms collaborate, they can benefit from professional advice, tools, and insights about a particular market, which one or several SMEs might lack. Secondly, collaborative arrangements support market orientation and probe into market trends, enabling SMEs to respond rapidly to the changing clients and market needs. This flexibility is essential, especially in industries that are fast growing; in the current world, obtaining a competitive edge is very important (Matalamäki, & Joensuu-Salo, 2022). Besides, SMEs benefit from collaborative practices by reducing the effect of supply chain risks, including sourcing and distributing disruptions resulting from disasters or epidemics (Daghar, Alinaghian & Turner, 2021). The following factors drive SMEs to engage in collaborative supply chain practices.

2.2.1 Access to Resources and Capabilities

SMEs are driven to collaborate primarily to gain access to resources and capabilities that might be financially or logistically out of reach on their own. Collaborating with other firms allows SMEs to utilize specialized expertise, technologies, market insights, and production assets, significantly boosting their operational capacities and competitive advantage (Ricci, Battaglia, & Neirotti, 2021). In a market that values rapid innovation and competition, staying relevant often means quick access to advanced tools and skill sets. Through partnerships, SMEs can share resources, taking advantage of cutting-edge technologies and processes without the need to shoulder the entire cost. For example, SMEs in manufacturing alliances can share the use of expensive high-end

machinery that would be unaffordable for them individually. By dividing these costs among partners, they can harness advanced production technology to scale operations, improve product quality, and meet market demand more effectively (Martinez & Chen, 2021).

Moreover, collaborations allow SMEs to combine knowledge and expertise, building a cumulative advantage that supports innovation and problem-solving. Access to shared logistics, R&D facilities, and specialized skillsets helps SMEs broaden their product range, enhance customer service, and explore new market opportunities more efficiently (Nayak & Choudhary, 2022). Such partnerships strengthen SMEs, making them more adaptable and resilient against competitive pressures. By exchanging market insights, technological developments, and brand leverage, SMEs can collectively improve their market presence, reach broader audiences, and create products that align with new market trends (Benhayoun, Ayala & Le Dain, 2021). Thus, collaboration equips SMEs with vital resources and capabilities that foster growth and sustainability, which would be significantly more challenging to achieve independently.

2.2.2 Risk Mitigation

Collaborative supply chain practices are a powerful strategy for SMEs to mitigate risks, particularly those tied to supply chain disruptions. By diversifying their sourcing and distribution channels, SMEs can build more robust supply chains and be better prepared to handle unexpected events like economic recessions, natural disasters, or global crises. A diversified supply chain provides SMEs with alternative options for sourcing materials and distributing products, lowering their dependence on any single supplier or route, which is especially important during disruptions. For instance, during the COVID-19 pandemic, many SMEs struggled due to heavy reliance on specific suppliers or geographic areas. Collaboration enables SMEs to foster relationships with multiple suppliers and logistics partners, enhancing flexibility and minimizing exposure to localized disruptions. Resource sharing through collaboration provides SMEs access to backup suppliers and alternate distribution channels, which is critical for maintaining operations during a crisis. Risk becomes a shared burden, allowing SMEs to spread the impact of potential disruptions across a network rather than absorbing it alone. For example, SMEs that partner within the same industry or region can collectively source materials, transport products, and share warehouse space, reducing downtime if a single source fails (Scholten, Stevenson & vanDonk, 2020). Such collaborative efforts reduce risks from supply chain issues and help SMEs maintain confidence, knowing contingency plans are in place. Collaboration supports risk management strategies that enhance SME stability and resilience, enabling them to face challenges better and continue operations during tough times.

2.2.3 Increased Market Responsiveness

Collaborative arrangements also offer the flexibility SMEs need to shift. Collaboration among SMEs enhances their agility and responsiveness to shifting market conditions, customer preferences, and industry developments. In competitive markets, quick adaptation is essential for sustaining relevance. Through collaborative practices, SMEs gain the agility to seize new opportunities, whether expanding into new regions, launching innovative products, or responding to changing customer needs (Loska et al., 2024). Partnerships enable SMEs to share and evaluate market data, customer feedback, and competitive insights, empowering them to create strategies that align with market trends. This pooled intelligence boosts strategic planning and ensures proactive rather than reactive responses to market dynamics.

Resources adjust production timelines and adapt marketing strategies based on real-time feedback. Sharing resources and insights helps SMEs quickly tweak their offerings to better align with customer expectations, improving their reputation for being responsive and customer-focused (Loska et al., 2024). For instance, SMEs collaborating on product development can efficiently conduct market trials, gather user feedback, and refine their products to suit customer needs. This level of responsiveness helps SMEs stay competitive, allowing them to address new trends and innovations faster than they could alone. Joint responsiveness positions SMEs to capture new customers, boost loyalty, and secure their market stance. Therefore, collaboration is a strategic edge,

allowing SMEs to thrive in dynamic markets by staying closely attuned to customer preferences and industry shifts.

Research gap and aim of the study

Although prior research highlights the importance of integration for the effective functioning of supply chains, the lack of cooperation in supply chain management remains a mystery for many organizations on how to continuously and sustainably achieve high levels of integration and the tools that need to be used (Liu et al., 2021; Ahmadi-Gh & Bello-Pintado, 2024). The tools and processes associated with open and successful integration are not yet fully known and put into practice. This study is therefore aimed at exploring the role of collaboration in supply chain management among small and medium-sized enterprises (SMEs) in Thulamela Local Municipality.

3. Methodology and scope

3.1 Data Collection and Analysis Strategies

For this research, the interpretivism paradigm was followed to analyze the complex interactions and relationships that define the successful supply chain collaborations. This was in support to exploring how various entities perceive and engage in collaborative efforts that are crucial for identifying best practices and potential challenges. As exploratory research involves exploring and familiarizing oneself with an existing phenomenon and obtaining new insights; this research was conducted in the spirit of transparency and integrity to a high degree of validity and originality to study collaboration in SCM through new ways of analysis. In this regard, the target population for this study was small business owners in the Thulamela Local Municipality and purposive sampling was employed to make it possible to choose participants who had firsthand experience and insights regarding supply chain collaboration. The sample size was based on data saturation, defined as the point at which no new themes were identified in the data. This guaranteed an adequate sample size for thorough coverage of the researched topic.

Face-to-face interviews were conducted to enable participants to use their own words in narratives so that they could share experiences and their own views. Semi-structured interviews enabled the researcher to ask several questions and get an opportunity for a real-time conversation, hence the richness of the data collected. A voice recorder was used to record data. The data was collected from May until the end of June in the year 2024. The process of data collection was done until the point of data saturation was attained after eleven participants were interviewed, thus covering a wide scope of the research topic. Thematic data analysis of transcripts to look for themes or meaning of patterns made the analysis more insightful and possible to develop action items from the analysis of results.

4. Results

Data was collected from 11 small business owners in Thulamela Local Municipality. Below is a summary of the participants' demographic details as shown in Table 1.

Table 1. Participants' demographics

Participants	Gender	Type of business
1	Female	Retail Clothing
2	Female	bakery
3	Male	Food production
4	Female	Agriculture
5	Male	IT services
6	Male	Construction
7	Female	Restaurant

8	Male	Printing and design services
9	Female	Beauty saloon
10	Female	Local grocery store
11	Male	Tailoring services

4.1 Frequency of Collaboration

The frequency of collaboration significantly differed among participants based on their business nature and operational needs (see Table 2).

Table 2. The current state of collaboration for SMEs in Thulamela Local Municipality

Major theme	Sub-Theme
Collaboration	High-Frequency collaboration Low-frequency collaboration Regular collaboration

4.1.1 High-frequency collaboration

Participants reported frequent collaboration, often on a weekly or monthly basis. These businesses rely on local supply chains and partnerships to keep their products fresh and optimize their operations. For example, Participant 2 collaborates weekly with local farmers to source fresh ingredients, while Participant 3 works monthly with retailers and other food producers.

“We collaborate regularly, almost monthly, particularly with larger retailers and other food producers in the region.”

“I collaborate with local farmers and grocery stores weekly.”

Conversely, clothing retailers and construction material suppliers collaborated less frequently, usually around specific projects or key business periods, such as product launches or large.

4.1.2 Low-frequency collaboration

Clothing retailers, tailoring businesses, and construction material suppliers collaborate less frequently, typically once or twice a year, or during major projects. The clothing retailer collaborates twice a year, mainly when developing new clothing lines, while the construction materials supplier collaborates during large projects requiring pooled resources. This low frequency reflects the project-based nature of their work.

“We collaborate about twice a year, mainly during the development of new clothing lines and during major sales events.”

“Collaboration happens every few months, especially when working on large projects” “I collaborate with fabric suppliers and other tailors monthly.”

4.1.3 Analysis of Drivers of Sustainable Supply Chain Practices

Participants from knowledge-intensive sectors collaborate regularly. The IT service provider collaborates almost monthly with software developers and larger IT firms, while the printing and design services owner collaborates a few times a month with local designers and suppliers. In these sectors, collaboration is critical for maintaining competitiveness and offering innovative solutions.

“Collaboration occurs a few times a month with local designers and printing suppliers.”

“We collaborate regularly, almost every month, particularly with software developers and larger IT firms.”

4.2 Drivers of Collaboration

Motivations for collaboration varied but generally focused on market expansion, cost savings, and access to resources (see Table 3).

Table 3. Factors that drive SMEs to engage in supply chain collaboration practices

Major Theme	Sub-Theme
Drivers of Collaboration	Market Expansion and Competitive Advantage Product and Service Quality Access to Expertise and Innovation

4.2.1 Market Expansion and Competitive Advantage

Participants were mainly driven by the need to expand their market reach and secure larger contracts. Collaboration often opens new customer bases and distribution channels. For example, an agricultural producer collaborated with local farmers and wholesalers to improve bargaining power and gain access to larger markets.

“The potential for higher profits and market expansion are key drivers for our collaboration.”

4.2.2 Product and Service Quality

In customer-facing industries, collaboration helps maintain high-quality products and services. For instance, a restaurant owner collaborated with local suppliers to source fresher produce, ensuring high-quality ingredients and enhancing customer satisfaction. Similarly, beauty salon owners collaborated with product suppliers to stay updated on the latest beauty trends and offer premium services.

“The need to stay updated with beauty trends and provide high-quality services motivates me to collaborate with product suppliers”.

4.2.3 Access to Expertise and Innovation

Participants in knowledge-driven industries emphasized collaboration to access specialized expertise and technologies. For example, IT service providers partnered with software developers and larger firms to offer advanced tools and skills. Clothing retailers collaborated with designers to create unique, high-quality products, helping them stay competitive and attract a broader customer base.

“The aim is to keep up with technological advancements and to offer comprehensive solutions to our clients”.

“The desire to offer unique, high-quality products that stand out in the market drives our collaboration with both designers and manufacturers”.

5. Discussions and theoretical contribution

High-frequency collaborations are prevalent in industries focused on food production and agriculture. Companies in these sectors collaborate with suppliers on a weekly or monthly basis to maintain supply chains for fresh produce and optimize inventory levels. For instance, bakery and food production businesses emphasized the need for regular engagement with local farmers and suppliers to sustain the raw material supply chain. This finding aligns with (Tehseen, Yee, Haider, Hossain, & Sohail, 2024), who argue that consistent collaboration ensures food industries operate efficiently and deliver high-quality products. Conversely, industries like retail clothing, tailoring, and construction engage in less frequent collaboration, usually limited to major projects or new product launches. This supports (Syarif, 2024), who found that project-driven industries collaborate less frequently due to the cyclical nature of their projects. Collaboration in these sectors typically occurs when pooling resources or accessing specialized expertise is necessary.

In sectors where innovation is ongoing, such as IT services and design, collaboration is more continuous. For example, IT service providers and design firms frequently collaborate with partners to access cutting-edge technologies and specialized skills. This finding is consistent with (do Prado, de Souza, & Piekarski, 2025), who emphasized that open innovation and collaboration are critical for sustaining competitiveness in rapidly evolving industries. Market expansion and achieving a competitive edge were the primary motivations for collaboration among participants. For instance, agricultural suppliers improved bargaining power and pricing by collaborating with local farmers. This is in line with (Köhler, Sönnichsen, & Beske-Jansen, 2022), who argue that collaboration

allows firms to access resources that are difficult to acquire independently, thereby gaining a competitive advantage.

Another key driver for collaboration was the focus on maintaining high-quality products and services. For example, a restaurant owner collaborated with local farmers to obtain fresh, high-quality seeds and produce, ensuring superior dish quality to meet customer expectations. This finding aligns with Madhani (2021), who highlights that customer-focused collaboration can enhance product and service delivery. Access to external expertise is crucial for sustaining innovation, especially in fast-paced industries like IT services. This supports Chesbrough's (2023) open innovation model, which advocates for firms to collaborate with external partners to leverage the latest technologies and remain competitive.

The findings contribute to the growing knowledge on SME supply chain collaboration by detailing inter-industry variations in collaboration frequency and drivers. It emphasizes industry-specific collaboration patterns and drivers. In addition, this work helps researchers better understand collaboration in supply chains as it highlights opportunities to replicate the study in other regions or industries, exploring variations in collaboration behaviors and challenges. Furthermore, quantitative methods could be used to generalize the impact of collaboration on supply chain performance.

The novelty value of this study in the literature concerning the supply chain management is that the approach is based in the context of SMEs within the Thulamela Local Municipality, which was a setting that was not well explored in existing literature. Compared to previous studies that mostly highlight big organizations or urban economic hubs as centers of economic activities, the study considers the phenomenon of collaboration within the rural and semi-urban economies in the province of Limpopo, in South Africa. Qualitative research methods was utilized in this research, which provides a detailed, contextual understanding of how collaboration has influenced supply chain effectiveness, trust, innovation, and resilience between SMEs that must operate in resource-constrained regions.

Limitations

This study included the geographic limitation as it only collected data about SMEs located within the area of Thulamela Local Municipality, and thus, this possible limitation does not fit to be randomized because the results cannot reflect the rest of the areas and provinces of South Africa with diverse economic organization and modes of collaboration. The interpreted research approach was qualitative in nature; hence, it may hardly be able to provide quantification of the size of the effects of collaboration in other sectors. The method of self-reporting data through interviews and focus groups leads to response bias, as participants might be tempted to give socially desirable outcomes or exaggerate the degree to which they collaborate.

Conclusion and recommendations

Monthly collaboration between suppliers and manufacturers seemed fine in the study, but many variables came into play, translating to those low-frequency numbers whether products are tangible or intangible, the nature of an industry due to time-sensitive inventory challenges, and even market type. Industries with frequent supply chain needs, like food production and agriculture, exemplify this need as suppliers interact frequently to ensure fresh inventory. Other industries function on a project basis, collaborating only when there is a specific need for skills or shared resources. For knowledge-intensive sectors, ongoing interaction enhances competitiveness. The findings suggest that the kind and frequency of collaborations are guided by industry needs while highlighting SMEs' flexibility to remain relevant in competitive environments.

The study identified key motivators, including market development, competitive edge, better product quality, and innovation. SMEs tend toward partnerships for market extension and competitive advantage, as these alliances

provide greater bargaining power for better prices. Quality of products and services is also a key driver, with SMEs in hospitality closely collaborating with local suppliers to maintain quality and customer satisfaction. Collaboration is further driven as firms access external expertise for innovation, especially in knowledge-intensive sectors where adapting to rapidly evolving technologies is essential. These drivers validate that collaboration is necessary for SMEs to leverage resources, stay competitive, and provide high-quality products and services.

SMEs should adopt collaborative strategies aligned with industry-specific needs. Fast-moving sectors like IT should seek partnerships with technology providers to access innovative resources. In agriculture, where frequent collaboration is critical, managers should maintain communication channels with suppliers. Equipping SMEs with negotiation, scheduling, and conflict-resolution skills will facilitate smoother operations and sustained partnerships.

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