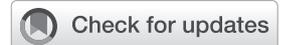


Embedding SMEs in supply chains: Key considerations for business incubators



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Orientation: To help small and medium-sized enterprises (SMEs) overcome challenges that often threaten their survival, many governments have supported the establishment of business incubators. Embedding SMEs into supply chains is widely regarded as an effective strategy to enhance their survival and long-term sustainability.

Research purpose: This study examined the key considerations for business incubators in embedding SMEs into supply chains in Botswana.

Motivation for the study: Despite government support for SMEs through business incubators, the high failure rate of SMEs during their first year persists and remains a significant concern.

Research design, approach and method: The study adopted a qualitative, exploratory research approach. Primary data were collected through semi-structured interviews with 30 participants, including 15 incubator managers, 5 supply chain experts and 10 SME owners and managers. The data were analysed using thematic analysis with the assistance of ATLAS.ti software.

Main findings: The study found that embedding SMEs into supply chains requires a strategic alignment of business incubators. This includes developing SMEs' capabilities in supplier relationship management, creating a post-incubation plan and prioritising the development of supply chain management knowledge for SMEs.

Practical/managerial implications: Incubator managers should design programmes that focus on developing SMEs' capabilities to network effectively with suppliers, customers and other stakeholders, enabling them to survive and thrive beyond the incubation phase.

Contribution/value-add: The study extends the application of social network theory to the context of business incubators and supply chains. It also provides policymakers and incubator managers with key considerations that can guide the effective embedding of SMEs into supply chains.

Keywords: embedding; social network theory; SMEs; supply chains; business incubators.

Introduction

While the contribution of small and medium-sized enterprises (SMEs) to national and global economies is undisputed, their high failure rate remains a major concern, particularly in low- and middle-income economies. For example, whereas in the United States (US) the SME failure rate within the first year of operation is estimated at around 20%, in South Africa the figure stands at about 71% (CODERA Analytics 2024), while in Botswana it is estimated at a staggering 80% (Lamma Financial 2025). In South Africa, the most common reason for this high failure rate is that many SMEs are not yet market-ready and struggle to expand market access by growing their customer base – especially when large clients need to be serviced (FETOLA 2024). The survival and growth of SMEs face significant challenges, limiting their ability to thrive, grow and remain competitive (OECD 2024; World Economic Forum 2022).

Scholars have cited limited access to finance and markets, lack of market knowledge and intense competition arising from globalisation as some of the reasons for the high SME failure rate (Kwan & Watt 2024; Mardikaningsih et al. 2022). The Global Entrepreneurship Monitor Report (GEM 2025:12) reveals that globally, an increasing number of people agree that although it has become easier to start a business, many potential entrepreneurs are deterred

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by the fear of failure. The GEM Report (2025) concludes that there is a need to:

[D]evelop robust support systems, including financial assistance, accessible training, mentorship programmes and simplified regulations, to reduce the risks of starting a business and address fear of failure, enabling more entrepreneurs to thrive. (p. 12)

To help SMEs overcome these challenges, many governments have established and supported business incubators.

Business incubators are designed to grow SMEs by providing the support, connections and knowledge they need to succeed (Phan, Mian & Lamine 2016). In today's interconnected economy, SMEs' survival and success often depend on their ability to integrate into supply chains (Bazile & Su 2024; Kang & Kim 2023). However, compared to larger enterprises, SMEs are often found to have a limited understanding of the role of supply chains (SCs) in their operations (Setyaningsih & Kelle 2021). Some studies even suggest that SMEs' underperformance may be attributable to inadequate collaboration and coordination within and across supply chains (Subburaj, Sriram & Mehrolia 2020). Thus, participation in global value chains is crucial for SMEs' internationalisation, as it enhances their export potential (Arudchelvan & Wignaraja 2015; Nugroho 2022).

Business incubators serve as hubs in entrepreneurial networks, connecting SMEs with investors, partners and industry experts (Gamper 2022; Liu et al. 2017). They also emphasise technological innovation, enabling SMEs to internationalise by leveraging technology deployment initiatives and extensive international networks (Wasdani, Vijaygopal & Manimala 2022). Hence, business incubators can play a critical role in embedding SMEs into supply chains. In this regard, Kang and Kim (2023) propose that, for SMEs to enhance their survival and success, they need to leverage strategic networks within global value chains, foster long-term relationships with lead firms and overcome barriers to upgrading through collaborative partnerships and strong management capabilities. Yet, little is known about the approaches incubators use to embed SMEs into supply chains to improve their survival, scalability and performance (Bone et al. 2019).

Based on their empirical study, Hewitt and Jansen Van Rensburg (2020) conclude that 'business incubators must clearly conceptualise their own business operating model and articulate their value-add to prospective emerging entrepreneurs'. Such an operating model could revolve around embedding SMEs into supply chains. However, Sohail, Belitski and Christiansenthere (2023) note that there remains a paucity of studies on business incubator mechanisms, contexts and models. They argue that further research is needed to explore and refine what is known about the incubation process in terms of its connectedness to stakeholders. For businesses, supply chains represent the ideal form of stakeholder connectedness.

Despite evidence that supply chain participation enhances SME growth and performance, the deliberate focus of

business incubators on embedding SMEs into supply chains as a strategy to improve survival and growth remains unclear (Dhiman & Arora 2024; Poee & Mahlangu 2017). While business incubators play a pivotal role in nurturing SMEs (Hausberg & Korreck 2020), their strategies for facilitating SMEs' supply chain integration remain under-researched (Dhiman & Arora 2024). There is also limited research on how business incubators prioritise supply chain linkages as part of their SME development programmes, despite their potential to act as key intermediaries in supply chain integration (Dhiman & Arora 2024). Hence, the aim of this article is to explore the following research question: What are the key considerations for business incubators in embedding SMEs into supply chains?

Theoretical framework

This study draws on social network theory and embeddedness theory. Social networks are self-organising, emergent and complex systems in which a globally coherent pattern emerges from the local interactions of the elements that make up the system (Newman, Barabási & Watts 2006). Jacob Moreno, a psychiatrist and anthropologist in the 1930s, is credited with the development of social network theory (Scott 2012). This theory emphasises relationships and inter-firm collaborations (Bazile & Su 2024; Cozzolino et al. 2023; Yang & Ren 2021). Embeddedness theory is a central concept in network-oriented economic sociology, which views social networks as mechanisms for transferring information and building trust between participants (Granovetter 1985). Granovetter (1985) first developed the concept, which posits that 'enterprises can establish trust relationships, strengthen cooperation, and realise resource sharing through connection' (Li & Fei 2023). The dynamic capabilities developed through network relationships enable SMEs to adapt effectively and efficiently to shifts in the supply chain environment, thereby enhancing their innovation potential (Yang & Ren 2021).

By leveraging network relationships, SMEs can better navigate systemic risks and uncertainties, thereby improving their chances of survival and growth. This is particularly advantageous within global supply chains, where SMEs often encounter obstacles because of limited resources and exposure to external shocks. Network collaborations, especially in supply chain finance, allow SMEs to reorganise relationship interfaces and strengthen competitiveness. Such collaboration can improve financial management and resource allocation, both of which are crucial for SMEs' survival (Cozzolino et al. 2023). Embedding SMEs in supply chains also improves supply network visibility and environmental sensing, enabling them to make informed decisions and allocate resources effectively. This reduces uncertainty and enhances resilience (Bazile & Su 2024). Furthermore, Yang and Ren (2021) highlight that network relationships positively influence SME innovation performance by facilitating knowledge sharing and strengthening dynamic capabilities.

Literature review

Business incubation

Despite the lack of a universally accepted definition, scholars generally agree that a business incubator is a supporting institution for nascent ventures (Hausberg & Korreck 2020). Consequently, business incubators have rapidly expanded as a start-up support model (Urbaniec & Žur 2021). Dlamini et al. (2022) describe a business incubator as a strategic tool that helps a country grow its entrepreneurial base and reduce the high failure rate of SMEs. Although some argue that accelerators have a stronger positive impact on start-up SMEs than incubators, both share the common goal of supporting SMEs during the early and vulnerable stages of their growth (Bone et al. 2019).

Business incubators are often classified according to their characteristics and value propositions. In the first generation, incubators primarily provided basic office space and infrastructure, enabling entrepreneurs to initiate business activities more easily (Aerts, Matthyssens & Vandenbempt 2007; McAdam & McAdam 2008). During the second generation, incubators expanded their offerings to include more developed services, such as access to financial resources, business management training and marketing support. They also offered technical assistance, including research and design, technology know-how, intellectual property protection and links to technology transfer (M'chirgui et al. 2018).

Business incubators are meant to develop SMEs which are capable of operating independently upon graduating from the incubation programme. Such graduates have the potential to create jobs, revitalise neighbourhoods, commercialise new technologies, and strengthen both local and national economies (National Business Incubation Association [NBIA] 2012). Incubation improves the survival rate of new businesses and, in turn, contributes to social and economic development (Martins, Abreu & Calado 2019).

Beyond infrastructure and training, business incubators also provide networking services, including preferential access to prospective clients, manufacturers, technological partners and venture capitalists (Apa, Grandinetti & Sedita 2017; Kiran & Bose 2020; Shepard 2013). Modern third-generation business incubators bring together multiple businesses not only under one roof but also in virtual spaces. By offering start-ups a one-stop-shop model, incubators help reduce overheads through shared costs and streamlined services (Indiran et al. 2021; Kiran & Bose 2020).

Small-and medium-sized enterprises and supply chains

Previous studies have confirmed the importance of strong upward linkages between start-up SMEs and larger firms for SMEs' survival. Such linkages are also critical for fostering innovation. Booyens (2011), in his study of small businesses, found that the failure of SMEs to form strong upward linkages with larger firms – many of which are innovation-

oriented because of their investment in research and design – limits innovation and, in the long run, undermines survival. Innovation and technology diffusion are more likely when small businesses establish ties with larger, knowledge-intensive firms (Bureau for Economic Research 2016). According to Quak (2019), SMEs can build these linkages through industrial clusters and networks, such as production networks. These include supply chains, where SMEs frequently serve as suppliers to larger companies. Supply chains can therefore be understood as collaborative networks where SMEs and larger firms interact (SAPICS 2024). Effective collaboration within supply chains requires robust supply chain management (SCM).

Supply chain management refers to the management of the flow of goods and services from the production of raw materials through to consumption by the end-user (CIPS 2020). At its core, SCM involves the coordination of activities both within a firm and among members of the supply chain. Effective SCM promotes strong supplier and customer relationships, enhances information sharing and enables firms to achieve competitive advantage through lower costs, better product quality and improved innovation (Mukhsin & Suryanto 2022). In a globalised environment, SMEs face numerous survival challenges; to remain competitive, they must produce at lower costs, increase output, ensure minimal defects and deliver products in shorter timeframes. To meet these demands, SMEs need to adopt SCM practices (Kerekes & Felföldi 2020).

Chin et al. (2012) observed that while larger enterprises tend to recognise and capitalise on the advantages of supply chain integration, SMEs often lack an understanding of how embedded supply chains can improve their business processes. This knowledge gap prevents SMEs from fully realising the benefits of SCM, such as improved service quality, cost reduction and greater operational efficiency. Many SMEs underestimate the value of SCM and lack sufficient expertise in its implementation. Yet, given their role as engines of growth, SMEs can strengthen their chances of survival and expansion by adopting effective SCM practices (Chin et al. 2012).

The role of supply chains in enhancing SMEs' access to the latest technologies, materials, processes and methods of innovation cannot be overstated (Chin et al. 2012; Tukamuhabwa, Mutebi & Kyomuhendo 2021). Furthermore, SMEs must adopt cost-effective SCM approaches to ensure long-term survival (Chin et al. 2012; Kerekes & Felföldi 2020). Research has shown that the benefits of SCM for SMEs include improved customer service and responsiveness, cost savings, better communication, increased flexibility, risk reduction, shorter product development cycles, reduced duplication in inter-organisational processes, lower inventory costs and greater efficiency in electronic trading (Chin et al. 2012; Koh et al. 2007; Meehan & Muir 2008). By adopting SCM practices, SMEs are better positioned to respond to market changes and uncertainties. Consequently, integrating SCM is strongly advisable for SMEs seeking to enhance performance and competitiveness.

Research methodology

This study employed a qualitative approach with a phenomenological design, as it aimed to gain insights into participants' experiences and perspectives on the role of business incubators in embedding SMEs into supply chains (Oranga & Matere 2023). To address the research question, the study gathered insights from SME owners and managers, supply chain experts and incubator managers regarding the key considerations for embedding SMEs into supply chains. Participants were purposively selected to align with the objectives of the study (Bougie & Sekaran 2020; Kaur, Kumar & Joshi 2023). In total, 30 participants comprising SME owners, managers, incubator managers, and supply chain experts were chosen for their expertise and experience to ensure a diverse range of perspectives.

Fifteen incubator, sector innovation, and market access managers from five LEA incubators participated in the study and were pseudonymised as IM-1 to IM-15. All managers had over two years of experience in SME incubation management. Five supply chain experts participated and were pseudonymised as SCE-1 to SCE-5. Ten SME owners and managers also participated and were pseudonymised as SME-1 to SME-10. LEA has 5 incubators: Gaborone Leather Industries Incubator (GLII), Pilane Multipurpose Incubator (PMI), Glen Valley Horticulture Incubator (GVHI), Kutla Incubation Centre (KIC), and Francistown Business Incubator (FBI).

Data collection and analysis

Data were collected through semi-structured interviews, which combined predetermined questions with the flexibility to explore topics in greater depth, allowing participants to provide rich, detailed insights. To code and develop themes systematically, the researcher used ATLAS.ti following these phases: creating the project, adding documents, identifying relevant data segments, coding, writing memos and comments, analysing and querying data, developing models, visualising findings and generating the final report. The qualitative analysis and interpretation were conducted once all data had been organised and coded.

Data analysis

Thematic analysis was employed in this study. This involved transcribing interviews and conducting reflexive or independent coding to ensure reliability (O'Neill et al. 2023). ATLAS.ti software was used to assist in organising and coding data, enhancing the rigour and efficiency of the analysis process (Pombo & Franco 2023). The study adhered to measures of trustworthiness, including credibility, dependability, transferability and confirmability. Credibility ensured that the identified themes accurately reflected participants' experiences. Dependability involved providing a clear description of the analytic process. Transferability ensured that the study offered rich descriptions of findings, allowing others to judge their applicability in different contexts. Confirmability was achieved by documenting the

research process in detail to enable potential external audits (Lincoln & Guba 2005; Nowell et al. 2017).

Ethical considerations

Ethical standards were strictly followed. An application for full ethical approval was made to the Department of Business Management Research Ethics Committee and ethics consent was received on 19 June 2023. The ethics approval number is 23SOM/BM17. Participants were assured of the confidentiality and anonymity of their personal information and other data collected. They were also informed of their right to withdraw from the study at any point if they felt uncomfortable during the interview process.

Research findings

The primary data collected through semi-structured interviews required systematic analysis. Following thematic analysis, the study identified the following key themes: supplier relationship management, cultural insight, post-incubation planning, support for regulatory compliance, supply chain knowledge, experience and skills, and financial management skills. These themes are summarised and are discussed in detail in Table 1.

Theme 1: Supplier relationship management

Asked about SCM practices that help them survive and grow, one SME founder responded:

'We do not change suppliers. We are consistent with them and have a consistent relationship. We are sure that our suppliers in turn will always give us good prices and deliver whenever we want products.' (SME/6/GVH)

Another participant affirmed:

'SMEs must strive to have long-term collaborative relationships with their key suppliers. They must value good relationships with their suppliers because through such relationships SMEs can secure good prices, and access new ideas and innovations. They can enjoy guaranteed security and continuity of supply. This helps SMEs to maintain consistent product delivery and quality, fostering customer satisfaction and supporting SME long term growth.' (SCE/D/10)

'Sharing proprietary information within the supply chain can raise concerns about intellectual property protection. As incubators we advise SMEs on appropriate contractual agreements and strategies for safeguarding their IPs.' (SCE/D/5)

These views align with current research, which highlights that strong relationships with strategic suppliers are vital (Almohtaseb et al. 2024). These observations suggest that

TABLE 1: Summary of themes.

Theme	Description
1	Supplier relationship management
2	Need for cultural insight
3	Post-incubation plan
4	Support for regulatory compliance
5	Supply chain knowledge, experience, and skills
6	Need for financial management skills

SMEs can enhance their survival and support long-term growth by building and maintaining collaborative relationships with suppliers. By cultivating trust and cooperation, SMEs can secure favourable terms and gain early access to new and innovative ideas. Stable supplier relationships also enable SMEs to consistently deliver high-quality products on time, thereby fostering customer satisfaction and loyalty.

Theme 2: Need for cultural insight

The findings of this study indicate that SMEs' cultural ingenuity contributes to their survival, growth and success by leveraging unique cultural strengths and internal knowledge to solve problems creatively and adapt effectively to challenges. Three participants elucidated that:

'Cultural ingenuity allows SMEs to differentiate themselves in the market, build stronger connections with partners, and customers, and find innovative solutions that drive growth. SMEs can remain competitive, sustain long term success and navigate uncertainties through building and sustaining relevant organisational culture whether it is an agility, quality, financial, or risk management culture.' (SCE/D/20)

'Aligning the culture of an SME with that of its SC partners is crucial for embedding well within the SC network and achieving success. Alignment builds trust, improves collaboration, enhances communication, and reduces conflict, ultimately leading to SME long term success.' (SCE/M/12)

'Effective relationship management is vital for SME survival. Strong relationships with customers, suppliers, and other stakeholders enables SMEs to secure support, mitigate risks, and get constructive feedback which ensures SME resilience, continued operation and improvement.' (SCE/D/5)

The sentiments expressed above align with the view that an SME's sustainability is significantly influenced by its organisational culture and the founder's personality. Organisational culture plays a decisive role in determining the fate of a business (Leso, Cortimiglia & Ghezzi 2023). This suggests that SMEs should regularly evaluate and adjust their approaches to remain effective (Agbodza 2024). The findings also support the notion that cultural compatibility fosters stability, builds trust and reduces conflicts with other supply chain partners. Understanding the culture of supply chain partners is crucial (Benhayoun et al. 2020). By aligning their culture with that of network partners, SMEs can enhance cooperation and communication, thereby gaining trust, confidence and collaborative support from their partners.

Theme 3: Post-incubation plan

This study found that post-incubation challenges faced by SMEs include difficulties in transitioning to independence and a lack of operational space. In this regard, one manager highlighted the challenges SMEs encounter in becoming self-sufficient after incubation as follows:

'When SMEs' incubation time is up, many still want to continue to stay with the incubator. They struggle to transition to

independence. This is detrimental to the SME as it tends to hinder their ability to operate independently and stunts their growth. We have seen many struggling to survive on their own and many having difficulty embedding in supply chains without the incubator resources.' (IM/9/GLII)

Another responded as follows:

'We offer post-incubation support. We continue to assist graduated SMEs in accessing even bigger markets by offering guidance on scaling operations, expanding networks, and meeting industry standards. This ensures they are well-prepared and thrive in bigger markets.' (IM/15/GVH)

Yet another participant said:

'After leaving the incubator many SMEs struggle to find suitable operating spaces of their own, often ending up working from their home garages. This lack of proper facilities makes it difficult to meet regulatory standards, leading to failed audits. As a result, they end up closing, unable to sustain operations without the right infrastructure.' (IM/14/PMI)

This conclusion aligns with the view that SMEs require support even after graduating from incubation and that incubators should provide continued, long-term assistance (Interreg Europe 2024). Follow-ups and ongoing engagement are essential. Effective incubation and acceleration programmes foster a community of alumni, which is vital for supporting SMEs post-incubation and enhancing their survival and scaling potential (Polo, De Pablos-Heredero & Jiménez 2021; Schutte & Barbeau 2022). This underscores the importance of post-incubation acceleration to ensure that SMEs not only survive but also grow. Active participation, collaboration and cooperation across domestic and global markets enable SMEs to embed successfully in both local and global supply chains.

This finding also raises questions about the strength of incubation and acceleration programmes and the business mindset of SME founders. The inability of some SMEs to operate independently post-incubation may indicate weaknesses in the incubation programme itself. For SME founders, it may reflect an over-reliance on external support rather than fostering a mindset of self-sufficiency, adaptability and resilience – qualities essential for long-term growth and success.

Theme 4: Support for regulatory compliance

This study further found that SMEs often lack industry-specific compliance guidance. Without a clear understanding of complex regulatory requirements, SMEs face difficulties embedding effectively within industry-specific supply chains. This challenge was highlighted by one participant, who stated:

'SMEs often struggle to navigate the complex regulatory frameworks, so we offer comprehensive guidance to help them through the process. We also connect them with legal experts who specialise in their specific industries, ensuring they receive tailored support to meet regulatory requirements.' (IM-8)

One participant noted:

'Yes, it is not just about funding, we also help SMEs navigate the necessary documentation, licensing, and related processes. We support them in acquiring these essential approvals, which enables them to start production smoothly.' (IM/11/KIC)

The results highlight how the lack of proper SME documentation, such as licenses and other relevant certifications, remains a significant barrier to integrating into supply chains (Gandhi, Nurcahyo & Gabriel 2021; Mushtaq & Iqbal 2024). This barrier is largely absent from existing literature on the challenges SMEs face in supply chain integration. The study further reveals that insufficient licenses, certifications and accreditations not only hinder supply chain integration but also limit SMEs' access to funding.

For incubators and accelerators, this implies a critical role in ensuring that SMEs obtain the necessary documentation to facilitate supply chain embedding. The findings underscore the importance of helping SMEs navigate complex regulatory regimes and highlight the value of connecting start-ups with industry-specific experts and legal professionals. This insight fills a gap in the current literature on barriers to SME integration in supply chains.

Theme 5: Supply chain knowledge, experience, and skills

Primary data from participants also indicate that SMEs often lack essential supply chain knowledge, experience and skills, which creates a significant barrier to smooth integration into supply chains. Highlighting this challenge, one incubator manager stated:

'Lack of supply chain knowledge, experience and skills is a major barrier for SMEs when trying to embed smoothly into supply chains. Many SMEs struggle with understanding logistics, procurement, and inventory management which are essential for efficient supply chain operations. Without the right knowledge and expertise, they face challenges in meeting partner requirements, managing costs, and ensuring timely delivery, all of which are very critical to successfully embedding in supply networks.' (IM/13/MA)

'Lack of relevant data and the ability to accurately analyse it are significant challenges for SMEs when trying to embed in supply chains. Many SMEs don't have access to right data or the tools to analyse it effectively, which makes it difficult for them to optimise operations, forecast demand, or make informed decisions. Without this capability, they struggle to meet supply chain standards, adapt to market changes, and operate efficiently within the network.' (SCE/D/10)

This result aligns with the view that, unlike large enterprises, SMEs often lack a thorough understanding of SCM practices (Almohtaseb et al. 2024; Kerekes & Felföldi 2020; Singagerdaa, Rahmawatia & Sabrib 2024). This knowledge gap prevents SMEs from fully appreciating the benefits of SCM and creates challenges in implementing best practices effectively. Supporting this perspective, SAPICS (2024) observed that the success of small businesses is frequently undermined by insufficient resources, skills and support in the critical area of supply chain management.

Theme 6: Need for financial management skills

The findings of this study indicate that financial viability and support are crucial for SMEs seeking to embed in supply chains. Participants highlighted that financial viability enables SMEs to meet operational expenses and service debts and fulfil their commitments. Emphasising the importance of financial viability and the role of business incubators in facilitating SMEs' access to finance, one participant observed:

'SMEs struggle to access funding and they lack good financial management skills. Yet, financial viability is critical for SME business health, survival, and continued operations. When SMEs have the financial resources to meet their operational expenses and debt payments, it allows them to deliver on their commitments, adapt to challenges, and navigate business uncertainties effectively. They need to remain financially sustainable and therefore we help them to access finance as well as offer them tools and services that help them improve their financial management.' (IM/1/FBI)

One incubator manager emphasised:

'SMEs lack effective financial planning. And yet, cost-effective financial planning is a critical enabler for SMEs to successfully embed in supply chains. By optimising resource allocation, managing cashflow efficiently and mitigating financial risks, SMEs can enhance their competitiveness and resilience. Strategic financial management ensures operational sustainability, strengthen relationships and fosters long term growth and integration into the supply chain. We support SMEs with financial management training.' (IM/6/PMI)

This observation aligns with the view that financial resources are among the most critical factors for SMEs' survival and growth (International Labour Organization 2021). It also reflects the widely acknowledged challenges that SMEs face, including limited access to finance and insufficient financial management skills (Bank of Queensland 2021). Furthermore, the finding supports the perspective that business incubators play a key role in providing SMEs with access to finance and training in financial management (Madaleno et al. 2022).

The implication is that business incubators and accelerators should actively facilitate SMEs' access to finance while offering financial management training to enable SMEs to compete effectively in supply chains, thereby enhancing their survival, long-term growth, and success. Small and medium-sized enterprises must understand the value of financial management to avoid failure over time (Muriithi 2017; Ramasobana, Fatoki & Oni 2017). Effective financial planning allows SMEs to achieve their financial goals and secure their future (Mang'ana, Hokororo & Ndyetabula, 2024). Therefore, incubators and accelerators should provide financial planning training and mentorship, helping SMEs to adopt prudent practices to become financially viable and competitive participants in supply chains.

Conclusion

This study explored the key considerations for business incubators and accelerators in embedding SMEs into supply

chains in Botswana. The findings reaffirm that SMEs embedded in supply chains benefit from enhanced market access, collaborations and partnerships, which promote resilience, shared risk management and collective bargaining power. Embedding also confers legitimacy and reduces market uncertainties, thereby improving SMEs' chances of survival. However, for business incubators to achieve effective SME embedding, a deliberate strategy and potential reinvention of the incubator business model are required.

In this regard, business incubators should develop programmes that strengthen supplier relationship management capabilities among SMEs. This involves supporting SMEs in building long-term, collaborative relationships with key suppliers to ensure supply security and continuity. To foster these relationships with suppliers, customers and other stakeholders, SMEs must also cultivate cultural insight or cultural intelligence, which should be a key focus area of the incubation programme. The study's findings are in line with the network theory in that the study demonstrated that social networks serve as mechanisms for the transfer of information and the building of trust between participants. The findings also resonate with the embeddedness theory in that it showed how enterprises can establish trust relationships, strengthen cooperation and realise resource sharing through connection.

Given that regulatory compliance can be overwhelming for SMEs, the study found that incubation programmes should provide targeted support for regulatory compliance to facilitate smoother integration into supply chains. In addition, successful embedding requires SMEs to possess strong supply chain management and financial management skills, ensuring that critical operational aspects are not left to chance. The study also highlights the importance of implementing a post-incubation plan, enabling SMEs to navigate the realities of a competitive business environment while recognising that support does not end with the formal incubation programme.

This study contributes to the existing literature on SME development and supply chain integration by empirically identifying the key considerations for embedding SMEs into supply chains, thereby enhancing their survival. It also provides valuable insights into the relationship between supply chain integration and SME sustainability, reinforcing the argument that embedding SMEs into supply chains is a strategic approach to overcoming early-stage challenges and improving long-term survivability.

Managerial implications

The contributions of this study to practice include providing SMEs with insights on leveraging supply chains to enhance their survival and growth. The findings also

inform SME policymakers about the importance of embedding SMEs in supply chains to ensure their longevity. Furthermore, the study offers guidance to incubators, highlighting the significance of prioritising mentorship and training in SME supply chain integration to strengthen SMEs both during and after the incubation period.

Firstly, to enhance survival and growth, SMEs should proactively and promptly embed themselves in supply chains to capitalise on the opportunities available within supply chain networks. Integrating into supply chains should be considered a top priority for SMEs seeking long-term sustainability. Secondly, SME policy should emphasise embedding SMEs in supply chains as a strategic practice, recognising its critical role in promoting SME survival, growth and competitiveness.

Limitations and areas for future research

As phenomenological research relies on participants' lived experiences, responses may be influenced by personal perceptions, biases and emotions. The interpretative nature of the analysis may also introduce researcher bias, despite efforts to maintain objectivity. To enhance the robustness and generalisability of the findings, future studies could integrate quantitative approaches, such as surveys or statistical modelling, to validate and complement qualitative insights. Moreover, future research could adopt a comparative regional approach, examining SMEs in Botswana alongside those in other African countries or global markets. Such studies could provide valuable insights into best practices and inform policy recommendations for SME supply chain integration.

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Authors' contributions

S.M. conceptualised and drafted the manuscript. D.P. supervised, corrected and edited the manuscript.

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Data availability

The authors confirm that the data supporting the findings of this study are available within the article and its listed references.

Disclaimer

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