

Digital pathways to innovation: Assessing social commerce's impact on product development and business growth

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Abstract

Over the past two decades, social commerce had become an essential dimension of digital transformation, enabling small, medium, and micro enterprises (SMMEs) to engage customers and pursue new forms of innovation and growth. Despite its growing importance, there was limited empirical evidence on how digital adoption translated into measurable organisational outcomes, particularly in developing economies. This study examined how the adoption of social commerce influenced product innovation and business growth among South African SMMEs. Based on the Unified Theory of Acceptance and Use of Technology (UTAUT2), Resourced- Based View (RBV) and Consumer Innovation Theory, a quantitative research design was employed. We collected data through an online survey of SMMEs operating for more than 3.5 years and analysed it using Structural Equation Modelling (SEM). The results showed that while social commerce adoption strongly influenced product innovation, it was the innovation that ultimately drove business growth. The direct link between social commerce and business growth was not statistically significant, suggesting that social commerce adoption on its own did not translate into higher income unless it was used to develop new products or services. These findings highlighted innovation as the practical route through which social commerce could improve firm outcomes and to help small enterprises to grow. They also offered direction for entrepreneurs and policymakers working to build more competitive and sustainable SMMEs in South Africa.

Keywords

Social Commerce, Product Innovation, Business Growth, SMMEs

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Philosophy in Change Leadership at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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Chapter 1: Introduction

This chapter presents the practical relevance of the research, literature gaps.

1.1 The relevance of the research from a business perspective

In the fast-changing digital world today, small, medium, and micro enterprises (SMMEs) have been increasingly utilising digital tools to build resilience during crises (Sharabati *et al.*, 2024), creating employment in rural areas (Madondo *et al.*, 2024; Sibiyi, 2023) for women (Secundo *et al.*, 2020, Atarah *et a.*, 2025) and fostering innovation (Madondo *et al.*, 2024; Lu & Shaharudin, 2024). World Economic Forum (2025) states that 400 million SMMEs globally account for 90% of all businesses, 70% of employment opportunities, and up to 70% GDP worldwide, for over 35% of GDP in emerging economies (World Bank Group, 2025) and 40% in South Africa (O'Neill, 2025). Despite their considerable economic contributions (Sibiyi *et al.*, 2023, Basson & Omoruyi, 2025, Moagi *et al.*, 2025), South Africa is facing a troubling 46,1% youth unemployment rate, which has increased by almost 10% over the past 10 years (Stats SA, 2025). The slowing economy and limited job creation have led many young people to pursue entrepreneurship (Moagi *et al.*, 2025) and they often encountered challenges that contribute to higher failure rates among SMMEs (Khan *et al.*, 2020; Gherghina *et al.*, 2020). This socio-economic context strongly incentivises examining how social commerce impacts business expansion and product innovation in the SMMEs sector. The World Economic Forum (2025) estimates that platform-based interactions will enable about two-thirds of the \$100 trillion in potential value generated by 2025.

By that same year, it was expected that nearly 90% of new enterprise applications will incorporate artificial intelligence (AI) technology into their functions and services (Appio, 2021; Becdach *et al.*, 2022; Becdach *et al.*, 2023). Social commerce integrated social media with e-commerce features. Different social media are popular in other continents. For example, in China, due to government restrictions (Tai & Fu, 2020), WeChat and Douyin (Chen, 2024) were the leading social media platforms. Social commerce facilitates direct, low-cost transactions via social media platforms such as Facebook, Instagram, TikTok, WeChat and WhatsApp (Dincer & Dincer, 2023; Zhang *et al.*, 2024). These platforms offer SMMEs real-time customer engagement and broader market access, positioning them as valuable resources for growth and innovation (Sharabati *et*

al., 2024). Global evidence shows that while digital transformation has attracted massive investment, fewer than a quarter of organisations have achieved full implementation (World Economic Forum, 2025). Much scholarly literature has focused on digital transformation and technology adoption (Al-Emran & Griffy-Brown, 2023) in the past two decades among large companies in developed economies (Díaz-Arancibia *et al.*, 2024), underscoring the need for empirical research on SMMEs in emerging economies, especially in the context of digital transformation (Omrani *et al.*, 2022; Omol, 2024; Akpan *et al.*, 2021).

1.2 Literature gap, contribution, and research rationale

Recent systematic reviews of social commerce and social media research show that the field remains conceptually fragmented and predominantly focused on consumers or individual entrepreneurs, rather than on organisational outcomes. Secunda *et al.* (2020) identifies four dominant research streams: social media for entrepreneurship and self-employment, social media as tools for business marketing, social media as sources of business opportunities and social media as facilitators of networking and business ecosystems. Notably, none of these streams address how firms, especially SMMEs, use social commerce to drive product innovation or business performance. Dhaigude and Mohan (2023) also note that despite the rapid growth of social business models, the organisational implications of social business were still largely unexplored, with most studies focussing on the consumer experience, motivation and outcomes of social business. As a result, robust capabilities, digital readiness and performance effects at the organisational level were under-represented in the existing literature. In addition, theoretical fragmentation remained and research in the emerging markets were a remains limited. Building on these gaps, Shoheib and Abu Dhabi (2022) were expanding UTAUT2 to social commerce by including trust, perceived value and platform-specific engagement structures, and highlight the need for models that link digital engagement with organisational results. Their work illustrates that traditional technology-adoption frameworks require adaptation to capture the social, interactive, and community-driven mechanisms that define social commerce.

While their revised framework improves predictive accuracy for consumer behaviour, it remains focused on individual-level intentions. It does not explore how businesses, particularly SMMEs, leverage these interactions for innovation or growth. Although social commerce (S-commerce) has emerged as a prominent domain within e-commerce, the existing literature remains largely consumer-centric. Most research focuses on behavioural constructs such as trust, purchase intention, customer satisfaction, and

website usability (Esmaeili & Hashemi, 2019; Dincer & Dincer, 2023). Consequently, it was essential to investigate firm - level outcomes such as product innovation, digital capabilities, and sustained business growth in greater depth (Sibiya *et al.*, 2023). Attar *et al.* (2022) explore the linkage between social commerce and sharing commerce, proposing a transformation towards collaborative value creation.

Nevertheless, there was a deficiency of empirical studies examining how this transformation influences innovation and growth at the organisational level, especially in small, medium, and micro enterprises (SMMEs). Kraus *et al.* (2021) further emphasise that digital transformation research was skewed toward large enterprises and often ignores the lived experiences of smaller, resource-constrained businesses in developing regions. Additionally, Wang *et al.* (2022) argue that the current body of S-commerce research was fragmented and rarely adopts a holistic, systems-thinking perspective. Their review shows a gap in integrated frameworks that connect the social commerce lifecycle with strategic outcomes such as innovation and performance. However, research on digital adoption remains limited in several important respects, recent evidence from Sub-Saharan Africa suggests, with few studies examining how digital adoption strengthens organisational trust mechanisms - an important performance driver for entrepreneurial firms operating in environments characterised by uncertainty and low institutional support (Anabila *et al.*, 2024) - and the broader literature offers limited empirical insight into how internal organisational capabilities shape the effectiveness of digital adoption, in particular the moderating role of firm agility in the link between e-commerce adoption and firm performance (Anabila *et al.*, 2024). Their study emphasises that, within resource-constrained African markets, a firm's ability to rapidly adjust, reconfigure processes, and respond to changing digital environments was critical to realising the performance benefits of digital tools.

Such a gap was particularly salient to South African SMMEs, which tend to be constrained in capability and operate in dynamic market conditions, yet there was limited empirical research on how organisational agility affects the extent to which digital platforms, such as social commerce, translate into innovation outcomes or business growth. This study contributes directly to the capability-based gaps identified by Anabila *et al.* (2024) by exploring product innovation as the mechanism through which social commerce contributes to performance, and by focusing on the capabilities required to convert digital engagement into tangible growth. Regionally, African scholarship highlights similar concerns. Abebe *et al.* (2020) underscore that, despite the growing role of digital platforms, research on how African entrepreneurs use social commerce tools to manage and grow their businesses remains sparse. Mofokeng (2021) addresses

online shopping behaviours in South Africa but limits the discussion to customer loyalty, omitting firm-level transformation. Samkange *et al.* (2021) call for digitally enabled, integrated solutions to entrepreneurial challenges in South Africa, yet do not explore how tools such as TikTok and WhatsApp could drive innovation. Despite growing mobile penetration (Dincer & Dincer, 2023), widespread social media usage, and a resilient entrepreneurial ecosystem (Samkange *et al.*, 2021), many South African SMMEs were adopting digital platforms to enhance their operations. Social media platforms enable reciprocal communication and engagement between people and organisations, improving business visibility (Avom & Malah, 2022).

However, the extent to which social commerce translates into tangible business outcomes, such as product innovation and business growth, remains underexplored in the academic literature, particularly in the SMME context. As stated by Bolosha *et al.* (2022), there was a dearth of research on small businesses in developing or impoverished nations, with the majority of the innovation literature concentrating on big businesses in developed and, increasingly, upper middle-income nations. An inconsistency exists between the adoption of social commerce and its impact on emerging markets. Especially considering the challenges faced by SMMEs in South Africa. They face structural barriers that larger companies typically do not encounter. Compared to their larger counterparts, SMMEs often operate with constrained access to digital infrastructure, financial resources, and strategic guidance—factors that inhibit their ability to adopt and scale digital innovation tools such as social commerce (Samkange *et al.*, 2021; Mofokeng, 2021; Wang *et al.*, 2020).

Mofokeng (2021) notes that numerous SMMEs deliberately choose to remain small rather than seek growth to preserve their agility and ability to respond in fast-evolving environments. Nonetheless, the strategic consequences of this choice and the effects on digital innovation were still insufficiently examined in existing literature. At the same time, the strategic relevance of SMMEs to national development objectives makes this disconnect particularly concerning. SMMEs contribute disproportionately to employment generation and poverty alleviation, especially for youth (Africa CEO Voices, 2019). Nonetheless, SMMEs in South Africa remain highly vulnerable to failure due to disjointed support systems and restricted market access (Jayasekara *et al.*, 2020). As Sheikh *et al.* (2019) highlighted, social commerce platforms offer a groundbreaking opportunity for businesses to engage customers in value creation, enhance their innovation capabilities, and achieve sustainable growth. There was a pressing need to identify support strategies to help SMMEs succeed beyond their early years. Despite these opportunities, empirical

research investigating the relationship between social commerce participation and innovation outcomes at the firm level within SMMEs remains limited.

Furthermore, the socio-economic importance of SMMEs heightens the need to tackle these digital innovation deficiencies. SMMEs are instrumental in reducing poverty and providing employment opportunities, particularly for youth (Nor, 2024; Abisuga-Oyekunle *et al.*, 2020). However, high failure rates persist across the sector, driven by structural barriers such as limited access to capital, weak support networks, and narrow market penetration (Jayasekara *et al.*, 2020). As Sheikh *et al.* (2019) noted, social commerce platforms present a compelling opportunity to close these gaps by enhancing innovation capacity, enabling value co-creation, and promoting long-term sustainability for SMMEs. However, empirical research connecting these digital tools to measurable firm-level outcomes remains limited. Theoretical development in the area was also incomplete. Although consumers are clearly involved in market formation, theoretical developments in this area remain fragmented. There was still little explanation of how these consumer-driven processes translate into results at the level of enterprises - for example, product innovation or business growth - and only a partial understanding of how consumer-driven market innovation actually takes place (Branstad & Sohl, 2020). This gap highlights the need for empirical studies to explore how interactive digital environments such as social commerce enable companies to turn user engagement into measurable innovation results. Sarker *et al.* (2025) explored how consumers in Bangladesh adopt social commerce, focusing on a context where online trust and customer protection practices were still developing. Suggestions include developing user-friendly technologies, establishing reliable systems for handling complaints, and offering a range of payment and delivery options.

These initiatives could have helped reduce adoption barriers and built consumer confidence. The study helped address a missing perspective in the literature by examining social commerce in an emerging-market context. However, this research was mainly centred on factors influencing consumer-level adoption; as a result, it offered limited insight into how SMMEs leverage social commerce for product innovation and business development. There seemed to be a clear need for further research into the organisational impacts of social commerce in developing markets such as South Africa, where resource constraints, digital readiness, and innovation capacity might have shaped adoption outcomes. Moreover, most existing qualitative studies came from Western, consumer-oriented niches. This study extended their framework to the domain of digital entrepreneurship. It used a quantitative approach to examine how South African SMMEs adopted social commerce platforms to co-create with consumers and

generated innovation-led growth. Busalim and Asadi (2025) described the psychological, technological, and social factors that drive customer engagement in social commerce.

Nevertheless, their systematic review was focused entirely on the user experience and omits any exploration of how this engagement benefits firms. The study did not connect customer behaviour to business outcomes such as innovation or firm growth, particularly in SMMEs. This research addressed this omission by investigating the strategic value of customer engagement, via social commerce platforms, in stimulating product innovation and business growth in South African SMMEs. Ahmad *et al.* (2022) investigated how online customer experience leads to loyalty through engagement and value co-creation (VCC). However, their consumer-centric framework did not explore how engagement benefits the firm beyond retention. While including VCC, its outcomes have limitations in attitudinal measures such as loyalty and satisfaction. The study did not address strategic outcomes such as product innovation or firm growth, nor does it explore these dynamics within SMMEs or in emerging market contexts. By focusing on how South African SMMEs used social commerce platforms to co-create with consumers and drive innovation-led growth, this study addresses these omissions. It extends the theoretical lens toward organisational performance. Matekenya and Moyo (2022) indicate that the volume of sales achieved influenced the effect of innovation within firms on their performance. Consequently, future studies on the performance of SMMEs should categorise them by size and sales volume to better address the challenges faced by these firms at different scales.

Additionally, future research should examine the obstacles faced by smaller firms seeking to invest in research and development (R&D). Access to financing has posed a significant challenge for SMME owners, particularly those with unfavourable socio-economic backgrounds. Despite growing interest in social commerce, much of the current research relies on exploratory or qualitative designs, leaving limited quantitative evidence on how digital engagement affects tangible innovation outcomes in firms (Branstad & Solem, 2020; Wang *et al.*, 2022; Busalim & Asadi, 2025). Parker *et al.* (2025) highlight an essential shortcoming in the existing literature: the inadequate exploration of technology- and context-related factors in social commerce research. While Madondo *et al.* (2024) emphasise the strategic benefits of digital transformation for enhancing resilience and positioning SMMEs for long-term growth, de Lucas Ancillo and Gavrila (2023) highlight inconsistencies in transformation outcomes, raising essential questions about whether and how such interventions consistently deliver business development. Therefore, there was a need to conduct more context-specific, hypothesis-driven studies to uncover essential pathways and mediators in the digital adoption process.

This study will model and test, through SEM, the mediating role of product innovation in the relationship between social commerce engagement and business growth in the SMMEs sector of an emerging economy. By shifting the unit of analysis from the consumer to the digitally engaged small firm, this study offers a new theoretical lens for understanding innovation performance in emerging markets. This study addresses these interconnected gaps by focusing on South African SMMEs with at least 3.5 years of operational experience. It examines how these firms use social commerce platforms to co-create value with consumers, stimulate product innovation, and drive business growth. By developing an integrated, theory-driven model grounded in UTAUT2 and Consumer Innovation Theory (Alkhasoneh et al., 2025), RBV (Marolt et al., 2022) this research contributes theoretical and empirical clarity to an underexplored intersection of digital transformation and entrepreneurial performance. This study addresses several interrelated gaps across the theoretical, empirical, and contextual dimensions of the social commerce (Leong et al., 2024) literature, most notably the limited use of quantitative research on firm-level innovation and growth in emerging-market SMMEs.

1.3 The research aims

The purpose of the study was to determine the impact of social commerce on product innovation and business growth. In other words, the study explores how product innovation mediates the relationship between product innovation and business growth. This research seeks to address a knowledge deficiency by empirically examining the impact of social commerce (Sohn & Kim, 2020) on product innovation (Sun & Liu, 2023) and business growth among South African small, micro, and medium-sized enterprises (SMMEs). It also investigates the role of product innovation as a mediator between social commerce adoption and business growth (Sohn & Kim, 2020).

1.4 The research contribution

The importance of this study lies in its contribution on how social commerce enhances product innovation and business growth among strained South African SMMEs. Social commerce has attracted significant interest in scholarship on consumer behaviour but it remains nevertheless poorly understood how it accrues to firms, especially in emerging markets where firms additionally also dealt with resource challenges (Marolt et al., 2022; Muhammad et al., 2025; Rahman et al., 2020). Social commerce has intrigued scholarship on consumer behaviour but it was nonetheless poorly understood in terms of what accrues to firms, especially in emerging markets as firms also dealt with resource challenges in addition to other obstacles (Marolt et al., 2022; Rahman et al., 2020). Research in social commerce continues to be primarily consumer-oriented with

the majority of studies examining factors associated with consumers' purchase intentions, their development of trust within the platforms, consumer loyalty, and the usability of platforms-centric, with limited evidence regarding how businesses, especially SMMEs, convert social commerce engagement into innovation capabilities or performance (Amoah *et al.*, 2023; Akpan & Ibidunni, 2023; Dhaigude & Mohan, 2023). Little empirical research on the topic exists in African contexts and most of the empirical studies in the field have been conducted in Asia, the Middle East, or Western markets.

To fill these gaps, the present study assessed the extent to which product innovation influences the mediating role of social-commerce activities and business growth. Theoretical and practical implications were made for digital innovation in resource-poor settings based on a fusion of Resource-Based View (RBV), Consumer Innovation Theory and UTAUT2 extensions for social-commerce specifics (Shoheib & Abu-Shanab, 2022). Interaction platforms include Facebook, Instagram, WhatsApp, TikTok, which stimulate iterative product innovation/ development thereby lowering conventional market-access barriers for SMMEs.

Practically, the paper makes recommendations to facilitate SMME entrepreneurs, digital marketers and policy makers, take advantage of social media for product innovation & competitiveness (Matsieli & Mutula, 2025; Muhammad *et al.*, 2025). Identifying the mechanisms through which social purchasing affects innovation and growth can help companies to refine product development processes, engage with customers more effectively and manage scarce resources effectively. The findings further justify the value of building companies' capabilities and of directing public-sector support to enable digital readiness and innovation within South Africa's SMMEs.

1.5 The research scope.

This study focuses on South African Small, Medium, and Micro Enterprises (SMMEs) using social commerce platforms such as Facebook, Instagram, TikTok, and WhatsApp. The research investigates how digital engagement on these platforms influences product innovation and, in turn, contributes to business growth. The study uses a quantitative approach and draws from SMMEs that have been in operation for at least 3.5 years. It excludes large enterprises and non-digital businesses. The analysis was limited to user-driven social commerce features and did not cover pure e-commerce platforms or fintech startups.

1.6 Summary of the chapter

This chapter reviewed the study's contextual foundation, rationale, and direction. It began by outlining the growing role of digital technologies - particularly social commerce - in reshaping how South African small, medium, and micro enterprises (SMMEs) engage with customers, stimulate product innovation, and pursue business growth. In a dynamic, resource-constrained environment, SMMEs increasingly adopted platforms such as Facebook, TikTok, Instagram, and WhatsApp to expand market reach and strengthen competitive positioning.

The chapter also highlighted a significant gap in the academic literature: limited empirical evidence on how the adoption of social commerce translates into measurable outcomes such as product innovation and business expansion, especially in developing markets. The research problem, main research question, and four testable hypotheses - including the mediating role of product innovation - were introduced to address this gap. The scope of the study was defined to focus on South African SMMEs that had been in operation for at least 3.5 years and used social-commerce features. The study's significance was clarified by outlining its potential contributions to both theory and practice. Finally, the chapter presented key definitions, ensuring conceptual clarity for the analysis that follows.

In order to guide the reader as the dissertation progresses, this chapter ends with an overview of the structure. Chapter 2 presents a comprehensive literature review exploring the theoretical bases, key concepts and research findings in the fields of social enterprise, product innovation and entrepreneurship. Chapter 3 describes the research methodology, giving details of the research design, population and sampling, data collection and analytical methods. Chapter 4 presents the findings, including descriptive statistics, results of the measurement model and results of the structural model. Chapter 5 discusses findings in relation to literature and hypotheses. Chapter 6 concludes the dissertation with a presentation of practical implications, theoretical contributions, study limitations and directions for future research.

Chapter 2

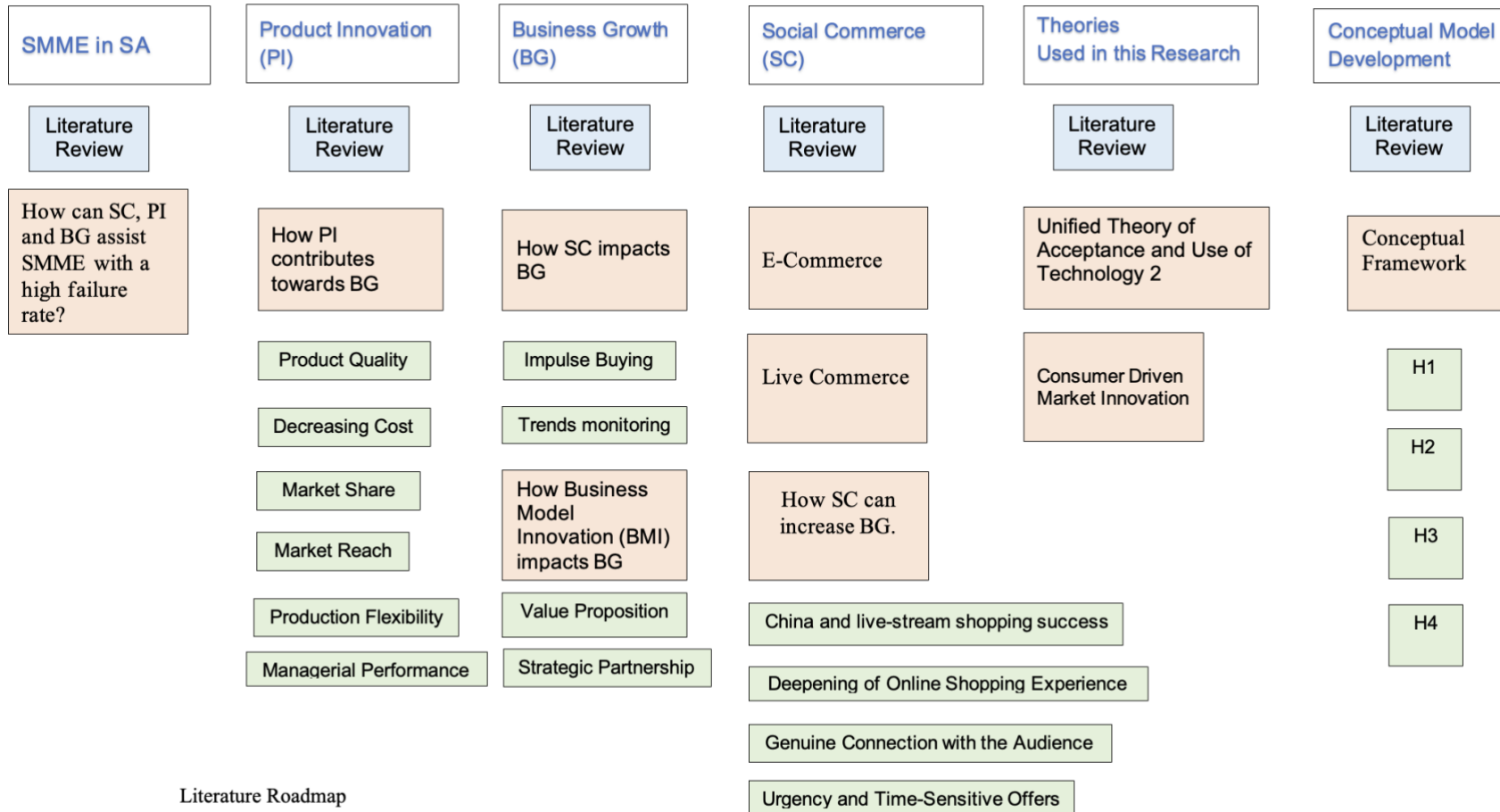
This chapter discusses the main constructs, theories, models and literature gaps.

2.1 Introduction

This chapter presents a structured literature review, concentrating on the core constructs of social commerce, product innovation, and business performance, specifically in the context of SMMEs in South Africa. Given the socio-economic importance of SMMEs (Basson & Omoruyi, 2025) and the rapid digital transformation of commerce (Omol, 2024), it was both timely and critical to understand how these enterprises adopt and benefit from social commerce platforms. The review starts with a definition of SMMEs and an analysis of their operational contexts in developing markets. It then explores the conceptual foundations and empirical findings of social commerce, innovation processes, and performance outcomes. The foundations of the theory were established through the Consumer Innovation Theory and the Unified Theory of Acceptance and Use of Technology 2, illuminating the behavioural and strategic factors influencing digital engagement within small and medium-sized enterprises (SMMEs). The chapter wraps up with the presentation of the conceptual model and the related hypotheses, formulated to address the gaps identified in the literature.

To better understand the golden thread in the literature review chapter, a literature roadmap was created to trace the development of the hypotheses. Each term included a literature review, followed by an orange heading presenting the findings, and green subheadings outlining crucial subtopics.

Impact of Social Commerce on Product Innovation and Business Growth of South African SMMEs.



2.2. Small, Micro and Medium Enterprises (SMMEs)

In this section was discussed general overlook of SMMEs and also SMME view from South African perspective together with the literature gaps and future research suggestions.

2.2.1 SMMEs definition

In this study, SMMEs were defined using the classifications summarised by Basson and Omoruyi (2025), who consolidated the main statutory and policy definitions used in South Africa. According to their review, SEDA described SMMEs as businesses managed by one or more individuals with growth potential and an annual turnover not exceeding R150 000. Basson and Omoruyi (2025), added the DTI's definition of SMMEs which defines a small medium micro-enterprise as an enterprise having assets less than R25 million (excluding land and working capital). The National Small Business Act No 102 of 1996 has been the most inclusive legally recognized definition of SMEs; and identifies SMMEs as independently-owned businesses including cooperatives employing from ten to two hundred employees and generating from R 0.2 million to R50 million (depending on the specific industry classification) in annual turnover. Therefore, based on the research of this study, the definition provided by the National Small Business Act, No. 102 of 1996 will be used as it best describes the size and operational characteristics of the South African SMMEs included in the sample.

2.2.2. SMMEs Relevance

In both developed and developing nations worldwide, small, micro and medium-sized businesses (SMMEs) were viewed as the catalyst for economic expansion and sustainability, every nation or state should be proud of its SMEs (Ali *et al.*, 2022). Matekenya and Moyo (2022) assert that small, medium, and micro enterprises (SMMEs) play a vital role in fostering economic growth; however, maintaining their long-term performance poses a significant challenge. Regrettably, emerging black entrepreneurs continue to bear a significant apartheid tax. Most of South Africa's population has not been trained or educated to pursue entrepreneurship, but instead to join the workforce as salaried employees (Maduku & Kaseeram, 2021). SMMEs were regarded not just as sources of employment but also as sales generators and providers of tax revenue, supporting fiscal income (Moagi, 2021; Botha *et al.*, 2021). South Africa has been experiencing unsatisfactory economic growth, accompanied by rising unemployment, escalating poverty, and inequality (Maduku & Kaseeram, 2021; Ali *et al.*, 2023). The South African government defined SMMEs by employee count, annual turnover, and asset value, depending on the sector. For example, retail-sector SMMEs typically

employed fewer than 50 people and have an annual turnover of less than R25 million (National Small Enterprise Act, 1996). Most SMMEs operated in informal or semi-formal environments, particularly under-resourced communities, providing accessible and flexible income-generation opportunities (Adebile *et al.*, 2025). A 2022 study by Mmbengwa *et al.* found that SMMEs - particularly black-owned informal micro-enterprises - were increasingly using platforms such as WhatsApp and Facebook to sell goods and services. That reflected a broader trend toward digitalising informal economies, where limited access to formal markets and capital compelled entrepreneurs to leverage low-cost digital tools (Ali *et al.*, 2023).

Despite their socio-economic importance, the sad reality of South African SMMEs was high failure rates due to structural barriers such as restricted access to finance (Bikitsha & Amoah, 2020), poor infrastructure, and limited digital skills (Sibiya *et al.*, 2023; Restrepo-Morales *et al.*, 2024). Mamabolo & Myres (2020) found similar patterns in the broader literature of entrepreneurship, which indicated that the technical knowledge gap was a barrier to using technology tools for many entrepreneurs. Mamabolo & Myres (2020) found that entrepreneurial skill sets were not stagnant but instead developed through increasingly complex skill sets as ventures transition through various phases. The early stage entrepreneur's focus was generally on developing basic operational skills while the later stages required more sophisticated skills, including the ability to identify opportunities, manage innovation and develop proficiency in digital applications. These findings assisted with explaining why so many South African SMMEs had been unable to translate digital adoption (which included simple application of social media/ecommerce) into long-term business success. These findings also suggested that, without targeted support to help build digital capabilities and skills for innovation; small businesses were limited in their ability to scale, differentiate themselves from competitors or integrated customer feedback into new product developments. Recent evidence further showed that many entrepreneurs in developing contexts continued to rely on familiar, low-cost communication tools rather than more sophisticated digital platforms. Women entrepreneurs in developing countries relied on traditional and basic digital marketing communication methods, as reported by Atarah *et al.* (2025), due to low digital literacy, low resources, and institutional barriers; these limitations reflected the broader structural challenges of SMMEs such as low digital skills, limited technological infrastructure, and inconsistent access to and use of advanced marketing technologies, which was consistent with historical patterns in South Africa where small firms often operate under survivalist conditions and were more likely to use basic communication tools like WhatsApp or Facebook rather than more complex social-commerce tools. The

findings reinforced the view that digital capability gaps remained a significant barrier to innovation, online growth, and competitiveness among South African SMMEs. These barriers made it difficult for smaller firms to innovate, scale operations, or adapt to changing market demands. Innovation among SMMEs was often incremental and customer-driven, shaped by survivalist strategies and close relationships with local clientele. Researchers agreed on the potential of digital platforms—particularly social commerce—to overcome traditional market entry barriers, promoting consumer co-creation (Nibras *et al.*, 2025; Tajvidi *et al.*, 2020), and facilitating affordable product experimentation (Rhee & Choi, 2020). A literature gap existed on how SMMEs translated digital adoption (social commerce) into tangible innovation results and ongoing business expansion. As the business grew and its capital resources increased, additional employees would be needed to support increased production.

The South African economy desperately needed a strategy that would help to resolve many of the country's socio-economic problems — notably; unemployment, poverty and inequality (Maduku & Kaseeram, 2021). A large void existed in the body of existing research on how SMMEs utilising social media for commercial purposes beyond transactions (relational social commerce capability) could affect the performance outcomes of these organizations (Marolt *et al.*, 2022). As well as this, the increasing importance of digital transformation (Akpan & Ibadunni, 2023) left a knowledge gap that continued to exist — largely due to the fact that very little literature has been published on the subject (Amin *et al.*, 2025). The knowledge gap was particularly evident in developing economies; however — as digital transformation processes were significantly influenced by local and context-based challenges. While both e-commerce and social commerce platforms allowed consumers to make online purchases, they offered different ways for consumers to interact with businesses, and therefore; provided different ways for businesses to utilise the platforms to grow the business (Gupta *et al.*, 2023). In developed countries — e-commerce was now common place; whereas — it remains relatively rare in developing countries. Therefore — in order to maximize e-commerce's potential to contribute to the development of SMMEs and to enhance the overall performance of businesses — additional research was required to identify new and innovative approaches to e-commerce. This was because — e-commerce provided businesses with the opportunity to develop and deliver superior customer value (Anabila *et al.*, 2024).

2.3 Social Commerce

Section of the Social Commerce discussed definition, its development, different types of online commerce and model of social commerce with its correlations between each parts.

2.3.1 Social Commerce Definition

By the term “s-commerce” is understood a platform that combines e-commerce features, technologies, and functions with social media components. It made use of social media components to encourage online communication and information sharing among users, which could aid in the online platform's decision-making process. (Attar *et al.*, 2022). Similarly, De Oliveira *et al.* (2020) described social media as having “transformed from simple communication tools into multi-purpose ecosystems of information exchange in the form of customer feedback and innovation related activities”, evolving away from the personally intimate, relationship based interactions associated with the first-generation social network platforms, into social commerce environments characterised by a distinct ecology of algorithmic information curation, user generated content, and real-time interaction features that evoke purchase intentions from consumers. Social interactions mainly occurred online, with a notable decrease in in-person communication.

Esmaeili & Hashemi (2019) defined social commerce as follows: “S-commerce has been an internet-based business application that uses Web 2.0 technologies and social media, supporting user-created content and social interaction.” Leong *et al.* (2024) defined the s-commerce artefact as a four-dimensional construct consisting of four basic dimensions: trade, behaviour, social and technology. Therefore, s-commerce, as any business activity, involved consumer behaviour, carried out via social media platforms and facilitated by any modern technology. According *et al.* (2021), social media had become central to entrepreneurial activity, serving as technologies for learning and self-employment, tools for entrepreneurial marketing, sources of opportunity recognition, and enablers of networking within digital entrepreneurial ecosystems. These dimensions revealed how digital platforms extend beyond promotional functions to act as cognitive and relational infrastructures that nurtured innovation and business creation. Bringing these insights into the SMME context led to the notion, that social commerce platforms might also allow for ongoing learning, idea sharing, and opportunity identification, which had been critical to the processes of product innovation and sustained growth (Secundo *et al.*, 2021).

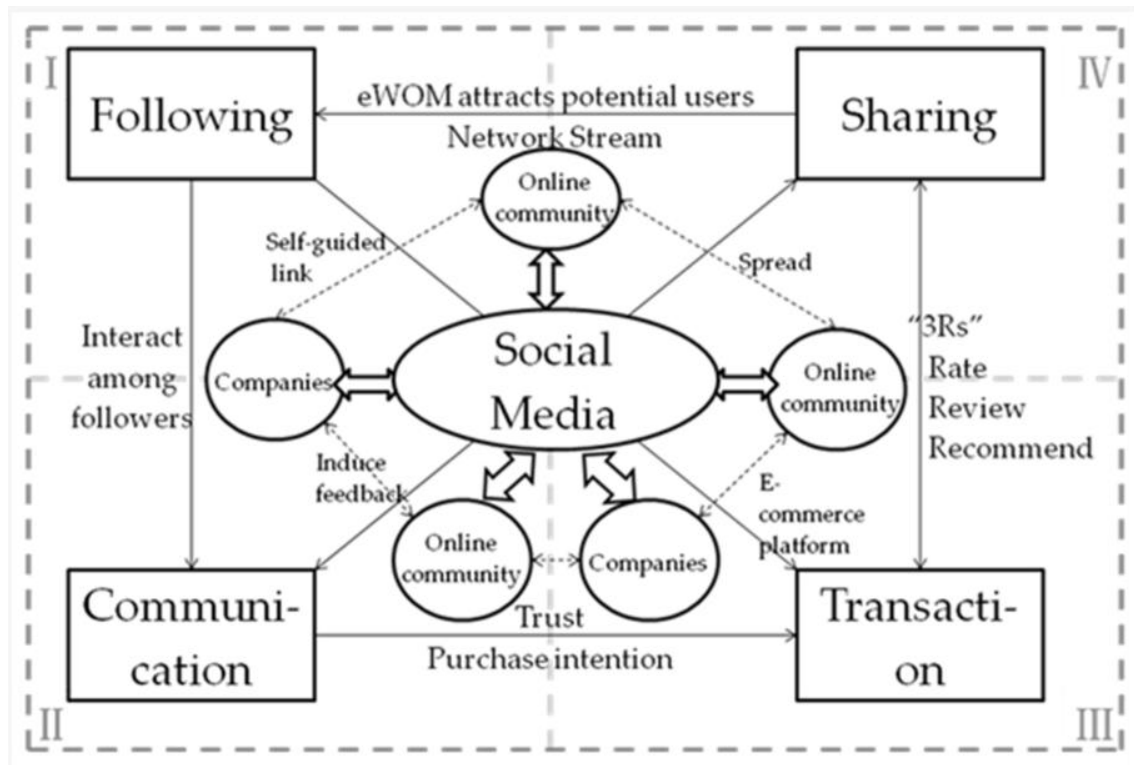
2.3.2 Social Commerce Development

Social commerce itself has evolved considerably in the last two decades. Esmaeili and Hashemi (2019) noted that the concept was first introduced around 2005, and since then scholars have shifted from viewing social commerce simply as online social interaction to analysing it through the lenses of social psychology, behavioural heuristics, cultural context, and economic conditions. The broader understanding of the area of study represented an advancement in the area's theoretical development, while the majority of the studies conducted are still consumer-centric as opposed to enterprise-centric. Moghaddam et al. (2024) noted that, as social commerce had become a global phenomenon, it altered the ways in which customers interacted with companies and the ways in which those companies operated. Some of these transformations included adding social elements (such as reviews and ratings) to e-commerce websites, incorporating commerce tools directly within social platforms (for example, Shopify plugins on Instagram), and through use of messaging applications, to provide customer support. In addition to purchasing directly from brands, social commerce enables consumers to be engaged participants in creating, evaluating, and sharing information about products (Sarker et al., 2025; Moghaddam et al., 2024) and this is an area where small businesses can create new products, innovate faster than before, and provide their offerings at a lower cost to a larger number of customers by responding to signals generated in markets sooner. Over the last ten years, there has been tremendous growth in the area of social commerce, which was initially created twenty years ago (Dincer & Dincer, 2023). The advancement of smartphones, social media, and mobile apps over the past decade has provided the technological foundation for social commerce to expand rapidly as a medium through which businesses can interact with each other and their consumers. S-commerce has primarily concentrated on information exchange and interaction between people and how such interaction affects consumer's intention to purchase. It is explained by Vize and Sherrett that today's social media are becoming increasingly advanced and full-featured; however, they are no longer just about listening to customers as a competition has developed amongst them to become each user's most preferred social media platform.

2.3.3 The Social Commerce Business Cycle

Kraus *et al.* (2021) described social commerce as a new digital development, which integrated e-commerce (Lucas *et al.*, 2023) and social media platforms, therefore changing how businesses have been interacting with customers (Bugshan & Attar, 2020), selling products, and innovating. To better understand the possible impact of social commerce on South African SMMEs, it was essential first to understand the social

commerce business cycle. It is basically a closed loop that includes: Following, Communication, Transaction, and Sharing (Wang *et al.*, 2022). Despite many underestimating the complexity of social commerce and its significant impact on product innovation and business growth, this study used the conceptual framework model of social commerce created by Wang *et al.* (2022) to better explain why social commerce deserves its own discipline.



In subgraphs I–II, s-commerce began with existing and new followers forming an online community within a social network (Sheikh *et al.*, 2019). That element of online community was the most significant difference between e-commerce and s-commerce. The purpose of this online community was to connect new and existing followers, aka sellers and buyers (Algharabat & Rana, 2021). Participating in this type of community also provided the company with the opportunity to learn how its products were being used and which features should be added or developed based on customer feedback (Algharabat & Rana, 2021; Wang *et al.*, 2022). Additionally, members of the online community also communicated with other consumers on their social media networks (Arafah & Hasyim, 2023), before making a purchase, which also contributed to establishing trust. In addition, community members were able to communicate with each other through tagging, commenting, interacting with each other, viewing influencers' video content or live streams and commenting on products they purchased. In terms of online communities, China was the most advanced, as shown by MOGU. Users of this

community-based online review website have been providing product reviews for more than a decade (Wang et al., 2022). Thirdly, in sub-graphs III–IV, purchase resulting from the community's trust (Hatamleh et al., 2023; Goraya et al., 2021) was built on the previous quadrant. The "3Rs" were outcomes when social media was implemented on an e-commerce platform: customers could not only make purchase decisions but they could also rate, review, and recommend within the community. For the brand, active participation—such as responding to online feedback, questions, and other suggestions—within online communities was crucial.

Lastly, within sub-graph IV–I, the electronic word-of-mouth (e-Wom) was expected to attract more potential followers/buyers via reviews, ratings and recommendations and sustain the ongoing cycle of social commerce. However, for the case of this model, s-WOM would have been more suitable. Dhingra et al. (2024) noted that many social media users have built strong audiences or brand reputations through these websites and apps. In addition to developing a large-scale digital presence in the last several years on numerous emerging platforms, including TikTok, Facebook, YouTube, and Instagram. As Dhingra *et al.* (2024) noted, prominent social media users—ranging from social media influencers and micro-celebrities to virtual content creators—were often encouraged to endorse products and services through their social networking platforms, a practice widely recognised as 'influencer marketing'. This trend, in the context of South African SMMEs, benefited small businesses with limited advertising budgets. They relied on trendsetting, stories, and interactions from comment sections or shared content. Social commerce is defined as an evolved level of e-commerce which combined traditional commercial activities with social activities using social technology on e-commerce platforms (Lu et al., 2016; Algharabat & Rana, 2021).

All those activities on social media might enhanced product visibility (Olanrewaju et al., 2020), shopping experience (Wand *et al.*, 2025; Sun *et al.*, 2019; Sohn & Kim, 2020), and providing powerful insights for product innovation (Amoah et al., 2023; Sun & Liu, 2023; Oerlemans *et al.*, 2022), within South African SMMEs. While social media platforms were critically important for developing business strategies, the academic literature on their use for business strategy was fragmented across multiple databases (Rosário & Dias, 2023). Wang et al. (2022) indicated that future research may have analysed s-commerce as a new form of online business activity rather than treating it as a type of business within e-commerce. Research, especially in South Africa, could shaped how s-commerce connected social media with e-commerce, changing how consumers could find, assess, and buy products online. Although s-commerce was clearly distinct from e-

commerce due to its constantly evolving nature, scholars maintained that further understanding of new social business models remained necessary (Goraya *et al.*, 2021).

2.3.1 Social Commerce Transition

The transition model below presented a reworked version of the model by Wang *et al.* (2022). His model explained the transition from e-commerce to s-commerce; however, several steps should have been added to it. The first step might be optional; however, it is essential to understand how sales were done before the Internet. In the model, we can clearly see customers were noticing the business due to either a good location or advertising, whether via flyers (for smaller and medium companies) or radio/TV ads (for companies with a bigger budget). If the business had offered good value for money, word of mouth would have been shared with the next potential customers. And even though traditional media were overtaken by social media, Al-Quran's (2022) research found that, each of those medias had advantages and disadvantages, their interaction represented integration rather than exclusion or replacement. The following two models were reworkings, as we felt that e-commerce platforms emerged as a force after search engines, compared to the model of Wang *et al.* (2022). We further added another aspect that reflected the rapid technological advancements. In e-commerce, we added m-commerce as a new field to better understand how trust was built when human interactions were replaced and the importance of system automation increased. Then, in the s-commerce model, we added live commerce, a new emerging field similar to m-commerce in e-commerce. This model was then more resourceful as it best reflected the state of e-commerce and social commerce in 2025. The model clearly showed clients creating communities, and communities forming within broader communities. For this model, we chose the word "client" to better empathised with the community's power. On most e-commerce websites, customers purchased a product, and it was likely a one-off event. However, a "client" in this s-commerce model represented a recurring customer. Unlike e-commerce, social media served as a sales tool and provided an immediate platform for SMME owners for testing new concepts, designs, and business strategies (Rosário & Dias, 2023).

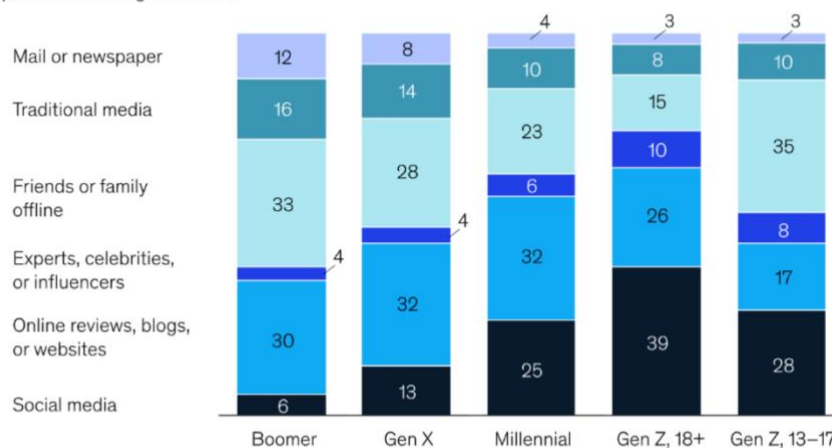
Dhingra *et al.* (2024) indicated the growing role of social media influencers (SMIs) in shaping consumers' attitudes and behaviours, and in enhancing consumers' emotional connection and perceptions of credibility. Influencers played a vital role in product improvement and increased sales at companies with a digital imprint. It could have happened, obviously, only when the companies' leadership was willing to become more open-minded towards the digital space and the new avenues it offered. Brands worked

closely with influencers to increased their brand's visibility and to create strong relationships; similarly to social commerce activities (Tajvidi *et al.*, 2020) such as customer reviews, referrals to friends/ family and engagement on social media communities, enhancing trust, social support and the quality of the social relationships between customers and brands. However, Dhingra *et al.* (2024) also noted a lack of empirical quantitative studies examining the impact of SMIs on business results, especially within emerging markets. That suggested the need to explore consumer responses and the strategic outcomes for businesses that engaged in these partnerships - such as product innovation or firm growth. A further important feature of this s-commerce model was the interconnection, not just between clients and social media platforms, but also between clients and customers, customers and other customers, social networking sites and customers, and customers, social networking sites (SNS) and sellers. Those correlations were essential for creating meaningful connections with all parties involved and therefore lay a good foundation for the growth of South African SMMEs. What made the most significant difference between e-commerce and s-commerce was the connection and trust built through community (Wang *et al.*, 2020); therefore, in s-commerce, the connection went both ways. While e-commerce had only forums and chatbots where clients could leave feedback, indicating that e-commerce websites were mainly used only when clients decided to purchase a product or leave a review. Hence, in the context of e-commerce, we were talking about "eWOM" (Wang *et al.*, 2022) (electronic word of mouth), whereas in the s-commerce case, it is "sWOM", social word-of-mouth (Wiese, 2025). Also, returning to the reworked model, we could see at which stage word of mouth was created. When researching a reliable e-commerce website, word of mouth was essential; however, in s-commerce, word of mouth was already formed at the beginning of the cycle within the community (Shoheib & Abu-Shanab, 2022; Tajvidi *et al.*, 2020). Traffic in the e-commerce model flew only one way. The reason was that processes were automated and optimised using the latest algorithms and were driven by processes; therefore, there was — and always will be — no real human connection (Kim *et al.*, 2023). Liu and Wang (2023) stated that 92% of consumers placed more trust while making decision in recommendations from friends and family than in any form of advertising, and social media influencers were regarded as equally trustworthy as friends when it comes to product recommendations. A similar, more detailed oriented statement was published by McKinsey already in 2021. Since McKinsey often used proprietary databases that were not publicly available for peer review, such sources were usually considered by academia as part of the grey literature. However, it remained valuable when it supported or illustrated trends that were observed years later in peer-reviewed research, primarily when the data in their report originated

from credible institutions and large-scale consumer surveys. In their study, they stressed the importance for any entrepreneur to gain a critical understanding of their audience and the media they used. Although the study's data were from 2019 and sourced from the United Nations Department of Economic and Social Affairs, the findings were significant for businesses planning their digital strategy. 75 per cent of adults in Generation Z confirmed that social media, online video and content, and celebrity influencers were the most significant factors in their decision-making. Such a finding was no surprise since this generation grew up surrounded by the internet. The report continued to state that, for millennials, it was only 63 per cent, for Gen Z (18+), 53 per cent, and for Gen Z (less than 18 years old), 49 per cent. See the complete overlook below.

Social media is the single biggest influence on Gen Z consumers.

In general, who or what influences you most when recommending a product or brand?
 % of respondents ranking source 1st



Source: McKinsey Gen Z Survey, 2019

Trust in social commerce came from two sources: the platform and the community. Community attributed according to Goraya *et al.* (2019); Ratings & Reviews (Zafar *et al.*, 2021; Hussain *et al.*, 2021), Recommendations & Referrals (Algharabat & Rana, 2021) and Forums & Communities (FC) (Merritt & Zhao, 2022) which enabled users to engage, share, and support each other socially and emotionally (Tajvidi *et al.*, 2020; Sheikh *et al.*, 2019) which developed community trust (TIC) and transferred to platform trust (TIP) through frequent participation in forums and reviewing systems (Attar *et al.*, 2022). Platform features (Perceived Interactivity, Perceived Personalisation, and Perceived Sociability) helped build trust by influencing how users perceive the responsiveness, relevance, and human-like aspects of the system, thereby helping users make informed decisions about the trust factors in social commerce (Goraya *et al.*, 2019).

Comparatively, there were only reviews and forums available on e-commerce websites, but they failed to provide enough of an advantage over Social Media. The trust in e-commerce was based on Value Propositions, Business Reputation, Return Policies, and Reviews, whereas s-commerce builds trust among Communities of People who share common interests (Mayayise, 2024). Trust in e-commerce (Mayayise, 2024) was built through value propositions, business reputation, return policies, and reviews; however, s-commerce built trust within communities of people with shared interests. Such a setup gave s-commerce an excellent opportunity to collect data and other information, which it later leveraged in product innovation. It is important when looking at e-commerce to differentiate between B2B and B2C, since Hassna et al. (2023) stated that B2C e-commerce success was driven by three user interface design elements (UIDs); these included formatting quality (FQ), picture quality (PQ), and third-party seals (TPS). Under formatting quality, we meant how well-organised the content was; displayed picture quality, meaning high-resolution images of the product so the website user could better see the texture or colour; and third-party seals, such as trust marks or certification logos, that demonstrated the site's credibility and security. These dependent variables interacted to construct users' perceptions of the credibility (Zhao *et al.*, 2020), usability, and trustworthiness of B2C e-commerce websites (Zhao *et al.*, 2020; Aslam *et al.*, 2019).

According to Hassna *et al.* (2023), there were multiple differences in online behaviour due to culture and Uncertainty Avoidance (UA). UA was a dimension of Hofstede's cultural model (Hassna *et al.*, 2023), which was one of Geert Hofstede's six cultural dimensions that described how societies differ in values and behaviour. As per Nandy (2023), the use of Business-to-Business (B2B) e-commerce websites was greatly influenced by environmental factors and technological factors. Ocloo *et al.* (2020) point out that perceived desirability, organizational readiness and competitive pressure had significantly and positively impacted on the three levels of B2B e-commerce adoption; the top management support and government support were partially significantly affecting B2B e-commerce adoption at different levels, however pressure from business-to-business partners had no impact on any levels of B2B e-commerce adoption (Ocloo *et al.*, 2020). Also, apart from the entrenched B2B and B2C models, a third model involved people trading goods via Facebook Marketplace, eBay, or Etsy, referred to as peer-to-peer C2C e-commerce (Mayayise, 2024). On these platforms, transactions may proceed through auctions or trades between individuals.

Unlike s-commerce that integrated its social networking features, such as liking, sharing, tagging and commenting, directly within the shopper's buying experience; Asanprakit & Kraiwanit (2023) stated that platforms like Facebook and Instagram enabled business to

post content that would allow social media users to make a seamless transaction with each post, thereby blending user engagement and purchases. Social networking sites have forever changed the online shopping experience. Social media shaped people's lives by affecting consumer behaviour, as explained by Rosário and Dias (2023) across different areas: the social aspect, access to information, and educational activities (Basson & Omoruyi, 2025), opening new avenues for business, commercial life, and political views. Their impact on people's everyday lives presented companies with a marketing opportunity to increase consumer engagement and interactivity (Algharabat & Rana, 2021). It connected people to communities where they interacted, followed each other, DM each other, and could present the product themselves or watch an influencer use it. Social media transformed boring, purpose-driven online shopping into an entertaining experience, affecting the time customers spent on the platform.

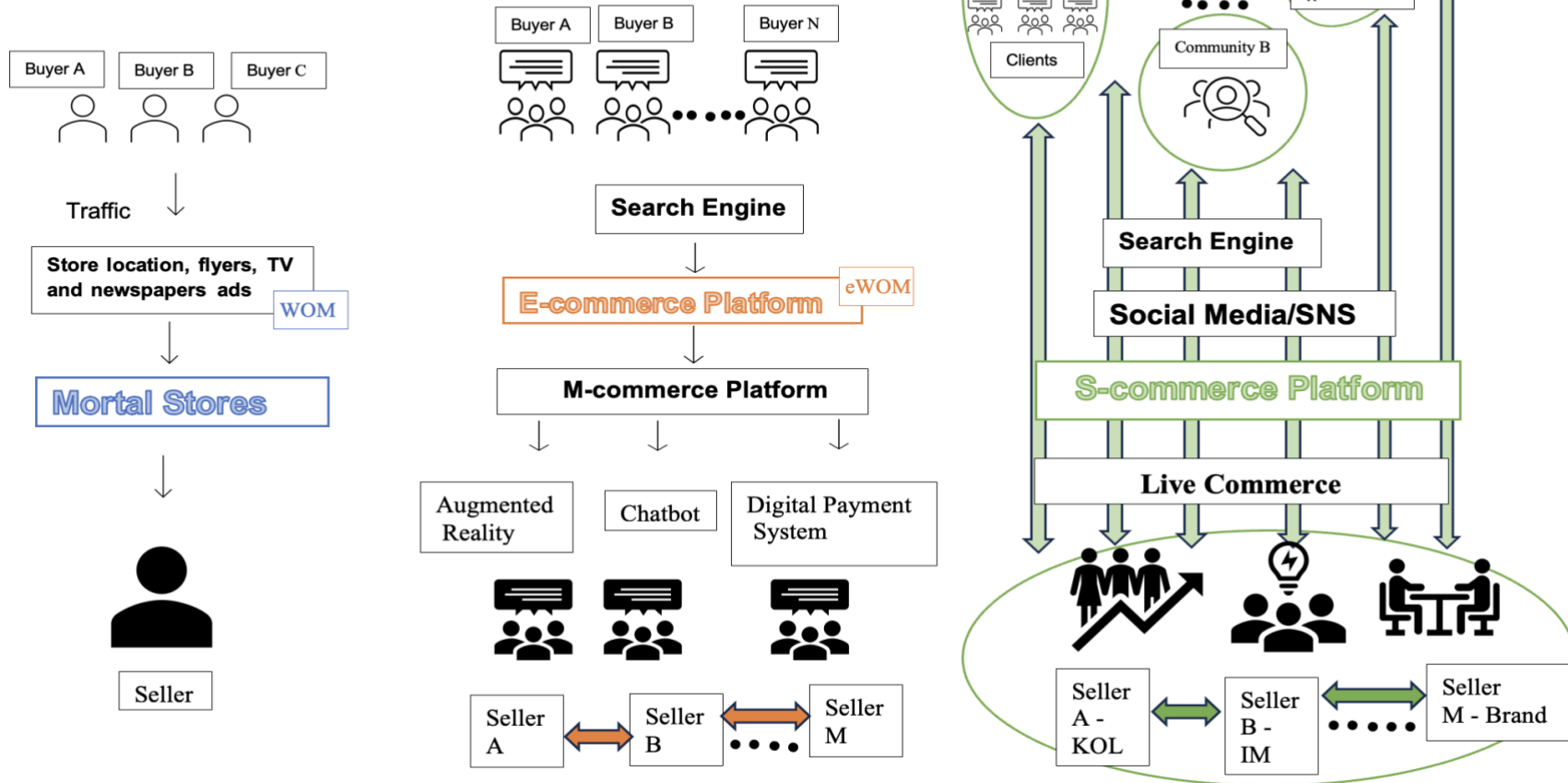
Social e-commerce could leverage the Internet ecosystem by connecting customers, big data, virtual communities, and local life. However, this topic needed further investigation as it could reduce asymmetric information in commentary, accelerated the spread of information across three dimensions, and enhanced consumers' overall online shopping experiences (Zhao *et al.*, 2020). In recent years, instant messaging (IM) became a significant business phenomenon. As stated by Cao *et al.* (2021), instant messaging (IM) was an essential part of s-commerce that provided real-time synchronous text transmission over communication networks like WhatsApp or WeChat, and Pinduoduo (one of the most popular IM-based social commerce in China) was a significant component of this type of social commerce. There is a live chat function on most social media platforms (Facebook Live, Instagram Live, TikTok Live, X Live and X Spaces (X formerly Twitter), YouTube Live, Twitch API function, Taobao Live and LinkedIn Live) (Kim *et al.*, 2023; Secundo *et al.*, 2021).

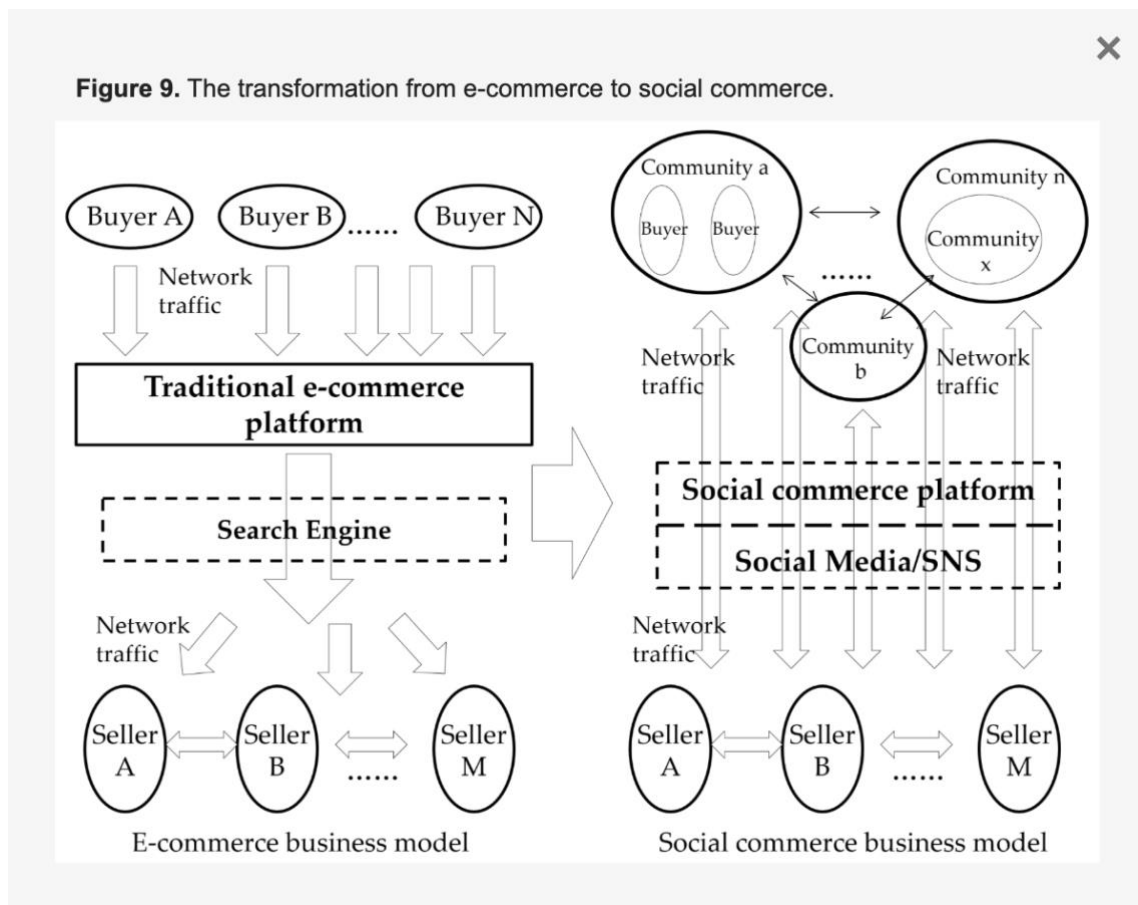
Currently, video is the most preferred format, and B2B and B2C marketers are considering it an essential part of their content strategy. An important part of live commerce was micro- and macro-influencers. The influencers acted as Key Opinion Leaders (KOLs), and we could consider the recommendation process as a Word-of-Mouth effect. This mechanism led consumers to have a more favourable view of the content, which may have created greater sales opportunities for companies (Liu & Wang, 2023). In addition to live commerce, some broadcasters used the "Lianmai" function to co-broadcast, which meant followers of both broadcasters could see on the same interface that they were going to be broadcasting at the same time. In co-selling, one streamer was a non-seller, while the other was a seller. The first streamer sent her

audience to live streaming commerce, observes the merchant present the product, and can bargain with the merchant on its price (Wang *et al.*, 2022).

There were many reasons why the video format helped better connect with the audience. Still, the main one was that the company could “humanise” their brand. Then there were other essential reasons, such as greater audience engagement with a significantly lower budget, better algorithmic penetration, and broader reach, as discussed many times. According to Al-Quran (2022) one significant advantage of social media was that time and geographical distance issues became less important. Participants in an online network shared information within each other and offered solutions from various locations around the globe which helped to build trust, authority, and brand advocacy. In the current literature, there were many different views on e-commerce and s-commerce. Some scholars viewed s-commerce as a subdomain of e-commerce, while others argued that social commerce warranted its own field due to its significance. Although s-commerce clearly differed from e-commerce, its constant evolution led researchers to conclude that further exploration was necessary to understand views on emerging social business models (Goraya *et al.*, 2021). Wiese (2025) argued that there were still gaps in the comprehension of how social media impacts social commerce. Future research should explore how social media technologies were influencing people's ability to find new digital business opportunities, assemble their entrepreneurial teams, and ultimately suggest starting a company (Secundo *et al.*, 2021).

The transition models from the mortal store to e-commerce to s-commerce





2.3.1 E-Commerce

2.3.1.1. E-Commerce Definition

In the literature, the term e-commerce referred to exchanging cash and information electronically for completion of financial transaction in which merchandise or services were bought and sold through the Internet (Rosaña & Raimundo, 2021). Al Mashalah et al. (2022) described e-commerce as the broad use of digital technologies to support all aspects of an online business operation such as sales and transactions. The term e-commerce could be defined as buying and selling of goods and services online. It encompassed several technologies, including m-commerce, e-marketing, supply chain management, electronic data interchange, and electronic funds transfer (Attar et al., 2022).

E-commerce is significant for SME's long term success and increased productivity (Amoah et al., 2023). To date, research into e-commerce has largely been centred upon larger corporations (Amoah et al., 2023). In contrast, with the exception of some recent research by Salah & Ayyash (2024); Amoah et al. (2023) little empirical research exists in relation to SMEs and their adoption of e-commerce. Additionally, Gupta et al. (2023)

have indicated that the literature concerning e-commerce has been fragmented and strong on identifying factors and poor on linking these to an integrated approach or quantifying them or developing strategies.

Such a linkage would create a new source of information for SMMEs and potentially assist with business growth. A case study by Kabir *et al.* (2020) identified 6 elements critical for the e-commerce adoption: R&D, security of the transactions executed online, taxes associated with importing good for the product manufacturing, employment creation and a supply network have a direct impact on the economy. He further discussed that uneven internet and customer's concerns with using their cards online as well as government support are yet to be addressed. The e-commerce environment was constantly changing, propelled by technological advances such as mobile devices, augmented and virtual reality (Wang *et al.*, 2025), consumer engagement in e-commerce (Wang *et al.*, 2025), new payment solutions, voice recognition, machine learning, chatbots (Fan *et al.*, 2022; Gupta *et al.*, 2023), and artificial intelligence (Zhou *et al.*, 2022; Salah & Ayyash, 2024; Fan *et al.*, 2022). However, due to internet difficulties and concerns about online payment (Ong *et al.*, 2023). systems' security and trust, developing nations usually found it difficult to embrace and adapt to technologies, including e-commerce (Hendricks & Mwapwele, 2024). The consumer's trust, or "eTrust," was vital to all e-commerce exchanges between the consumer and the vendor; fraud on-line had significantly impacted how consumers made their purchases (Mayayise, 2024). The lack of trust was an enduring issue for both male and female consumers in South Africa (Mumu *et al.*, 2021) because they cannot be certain that the store has a physical address or showroom where they may go in person. Hence, the seller's reputation is essential for building trust.

Another point is that, due to physical absence, operational costs were lower (Gupta *et al.*, 2023). For many online customers, the reality of not being able to touch the product physically was not a significant barrier. Primarily because online customers were already familiar with the product and were searching only for the most optimal price. For South African entrepreneurs, this could offer a significant competitive advantage, as many struggled to access loans. E-commerce necessitates various strategies for order fulfilment (e-fulfilment), distribution methods and smart logistics (Zennaro *et al.*, 2022; Kalkha *et al.*, 2023); however, logistics introduced an additional challenge in the South African environment. Another aspect to consider in logistics was that the e-commerce platform might align with the SDGs (Ju *et al.*, 2023) by adopting more environmentally friendly packaging, transportation, and other practices to reduce its carbon footprint. Locally, with the growth of e-commerce, the logistics industry grew and created many

jobs (Xu *et al.*, 2019), especially for low-skilled workers. Considering social and economic developments in relation to the SDGs (Al-Emran & Griffy-Brown, 2023), particularly SDG 8 (decent work and economic growth), Hendricks & Mwapwele (2024) observed the impact of e-commerce adoption by SMMEs in the emerging economies on their business growth, the creation of new employment opportunities, and the rise and proliferation of small and medium enterprises (SMEs) were all favourable results of economic and social shifts.

Consumer element (Sarker *et al.*, 2025) should not be underestimated. Generally, by adding feedback and a share button, a company made a sense of interaction and was more likely to retain customers. Additionally, improving the quality of their customer service involves setting standards for tracking and assessing key performance indicators (KPIs) (Xu *et al.*, 2019).

Ahn (2025) stated that technology advancements have led to an increased number of customers who shop online in both B2B and B2C markets. Because of the rapidly expanding e-commerce sector, many researchers studied the B2C market. In contrast, comparatively less research was available on the consumer-to-consumer (C2C) market (Mayayise, 2024); however, Ahn (2025) argued that research investigating customer buying behaviours online in B2B contexts was presently insufficient. For future research in this area, and to provide insights to policymakers, including government and e-commerce businesses (Gupta *et al.*, 2023). Although the direct model between a buyer and seller existed, the marketplace model in B2B e-commerce has gained more traction, highlighting the necessity for research in both approaches (Nandy, 2023). Furthermore, future research could explore any possible variations in e-commerce development among developed and developing countries; as well as opportunities and challenges that each will encounter (Hendricks & Mwapwele, 2024). Further study into how SMME's adopted and used e-commerce to affect their marketing success is also required (Salah & Ayyash, 2024). A potential future research area could be to determine specific strategies for overcoming obstacles to e-commerce adoption, for example, by developing a blueprint that provider countries can use as a model based on their unique circumstances to minimise the issues they face (Hendricks & Mwapwele, 2024).

2.3.1.1 M-Commerce

A subset of e-commerce known as mobile commerce (m-commerce) involved carrying out commercial transactions - such as product browsing, purchasing, transferring payments or interacting with companies - using mobile devices connected to wireless networks. M-commerce expanded traditional online commerce by enabling real-time,

location independent interactions, supported by smart phones, mobile apps and platform optimised for mobile (see Zhang *et al.*, 2019, as cited Lucas *et al.*, 2023). M-commerce represented a specific form of e-commerce. M-commerce characterised via using emerging digital technologies such as chatbots for customer service; voice assistants to enable a customer to find products and use voice commands to sort or filter products; augmented and/or virtual reality technologies to improve the overall experience of customers in mobile commerce environments; and new technologies including blockchain and e-wallets to speed up payment process for customers (Attar *et al.*, 2022) were examples of how m-commerce was evolving with technology. An extensive analysis of m-commerce research indicated that the majority of studies focus on large corporations, while studies of SMEs were scarce (Chau *et al.*, 2021), further the literature also did not consider the roles of different (and continually increasing) mobile devices (i.e., smartphones and tablets) in mobile shopping and paying for goods in brick-and-mortar stores at present (Hillman & Neustaedter, 2017).

2.3.2. Live Commerce

As per Merritt and Zhao (2022) - there was an important change, especially in Asia, in the use of "live commerce" for each day (Kim *et al.*, 2023) and in retail shopping and gaming. It was driven by seven factors: support of the e-commerce environment, level of information development, support from economic strength, efficiency in transportation and logistics, government's strategies and policies, quality of population composition and specialised operations (Zhiwei *et al.*, 2023). Platforms allowed for users to enjoy a seamless shopping experience through their social network by combining their shopping experience with their social interaction. Platforms were able to create an immersive, engaging shopping experience by creating an opportunity for live streaming, social media interaction and online purchasing as part of one experience. This experience typically included live streaming from a brand or influencer on a platform such as Facebook, Instagram, YouTube, or any other live shopping site. Previous research had also overlooked the benefits of using live streaming for the online shopping experience (Wang *et al.*, 2022). Kuzmikov (2023) claimed that by partnering with extremely popular social media influencers and engaging in live-stream shopping—which combined real-time product purchases with audience participation via chat or reaction buttons—brands in China had achieved close to 30 per cent conversion rates on social media platforms.

Kim *et al.* (2023) found that platform quality, entertainment, social influence, and personal innovativeness affected consumers' purchasing behaviour on live commerce

platforms. Wang *et al.* (2022) further found that addressing product intangibility via live commerce, as well as consumers' access to third-party information from different sources during the shopping process, positively impacted customers' decisions. This groundbreaking live-streaming commerce had transformed e-commerce from a focus on products to a social, enjoyable, and customer-focused atmosphere (Xu *et al.*, 2020). Future studies could explore how influencers' alliance affected consumer strategic decision-making, the implications of competitive sponsorship, and the optimal forms for these partnerships or reverse logistics strategies in ways that might have significant consequences on conversion rates and results (Liu & Wang, 2023). Live commerce, a recent extension of social commerce, had introduced new business models that blend social interaction with real-time transactional capability. In this new context, as consumers' behaviour on digital platforms shifted towards live video and interactive product demonstrations, Liu and Wang (2023) described two main forms of social commerce, often referred to as social commerce (SC) + e-commerce (EC) = live commerce (LC), as a means of social engagement and conversion (McKinsey & Company, 2021). The Influencer-Oriented Short Window (IOSW) model used high-profile influencers to create swift, short-lived sales increases through heavy marketing efforts targeting large numbers of consumers, which were typical of retailers with high levels of resources or that were highly digital. In contrast, the Market-Oriented Long-Window (MOLW) model emphasises sustained engagement over more extended periods and depends on internal organisational capabilities such as planning, innovation, product adaptation and coordinated operational processes. This second model was more strategic in nature, with performance outcomes emerging from deeper organisational integration rather than one-off promotional events. These models illustrate that live commerce required significantly greater digital readiness and internal capability than traditional social commerce. As a result, many SMMEs in emerging markets, including South Africa, might not yet be positioned to benefit fully from live-commerce practices.

Nevertheless, these models demonstrated an essential evolution in how firms could translate social engagement into commercial outcomes—an evolution especially relevant for explaining why social commerce alone might not directly drove growth for firms lacking advanced digital and organisational capabilities. Therefore, more research was required to understand the mechanisms and factors influencing consumers' purchasing behaviour on live commerce platforms (Kim *et al.*, 2023). Merrit & Zhao (2022) stated that although live streaming has been extensively researched in areas such as gaming and social media engagement, academic research on the business of live streaming was

still relatively underdeveloped. Despite its rapid growth and increasing use as a commercial tool, there was little empirical evidence in the literature on how interactive live formats affected outcomes at the enterprise level. Existing studies - particularly in mature retail markets - show that companies have adopted an omnichannel approach, relying heavily on online communication to shape the purchasing intentions of consumers. However, the COVID-19 pandemic had accelerated a more profound shift in purchasing behaviour, raising consumers' expectations for real-time interaction, demonstration and social proof (Merrit & Zhao, 2022), which was of particular relevance to South African SMMEs. Live commerce offered a low-cost, highly interactive model that can support product demonstration, rapid feedback loops, and more experimental approaches to product innovation, yet research rarely explores these mechanisms in the perspective of emerging-market small businesses. Most of the existing scholarship remained focused on consumers and little attention was paid to how SMMEs use live commerce features to innovate, build capabilities or improve their business performance. Consequently, there was a clear gap in understanding how live and social trade could enable resource-intensive businesses to grow on the basis of innovation in a changing economic environment.

2.5 Business Growth

For SMMEs, performance metrics might include revenue growth, profitability, customer base expansion, and the capacity to scale, both in innovation and scale (Madondo *et al.*, 2024). The study found eleven (11) critical success factors motivating value micro-businesses to adopt digital marketing technology (DMT), including long-term functional capacity, integration capacity, and expansion capacity, which related to the technology context (Eze *et al.*, 2021). In many under-resourced contexts, digital tools were seen as supporting resources for basic operations rather than strategic enablers of business growth and operational efficiency (Samuel & Moagi, 2022).

Ngwenya *et al.* (2022) stressed that systemic challenges (e.g., limited infrastructure, credit access, and managerial support) limited the performance of the SMMEs sector. Eze *et al.* (2021) stated that due to the nature of mobile technology, small businesses were likely to use mobile marketing, automate procedures, connect with customers directly, and participate in active communication networks. Small businesses might have a competitive advantage over large organisations in taking advantage of mobile marketing technologies because they had fewer financial and human resources and operate in a way that facilitated quick decision-making. Digital platforms, in particular

social business platforms, could help SMMEs to reduce marketing costs, expand their market, connect with their customers and test their products faster (Mohddham *et al.*, 2024). Still, de Lucas Ancillo and Gavrilă (2023) cautioned that the benefits of digital adoption were not universal and may vary based on business size, digital literacy, and internal capabilities.

From a strategic perspective, digital capabilities were also seen as organisational assets that contributed to performance (Fan *et al.*, 2021) and business value (Chatterjee *et al.*, 2024), competitive advantage (Varadarajan, 2020), and firm growth (Chatterjee *et al.*, 2024), grounded in the Resource-Based View (Nagano, 2020). We could therefore extend this logic and understand social commerce as a digital capability that helped South African SMMEs to leverage online engagement to drive product innovation, responsiveness, and, ultimately, growth.

2.6 Product Innovation

2.6.1 Product Innovation Definition

Branstad and Solem (2020) explained that Schumpeter originally defined five types of innovation. However, business research tends to focus on two of these factors most strongly: introducing new products and opening up new markets (see Schumpeter, 1934, cited in Branstad & Solem, 2020; Garcia & Calantone, 2002, cited in Branstad & Solem, 2020). These were now commonly referred to as product innovations and market innovations. Product innovation referred to improvements or new developments in goods and services, whereas market innovation referred to changes in the way companies entered or expanded existing markets (see Grimpe *et al.*, 2017, cited in Branstad & Solem, 2020; see Kim & Mauborgne, 2005, cited in Branstad & Solem, 2020). Branstad and Solem (2020) further emphasised that both product innovation and market innovation remained critical for companies to be competitive, particularly in digital environments which allow for rapid experimentation and customer interactions.

2.6.2 Importance of Product Innovation

Expósito and Sanchis-Llopis (2019) recognised that a company's focus on improving its products - whether modernising outdated products, enhancing quality, or optimising production costs - often resulted in higher profitability and a stronger market position. However, innovative activity did not come down to mere product enhancement. Al Naqbia *et al.* (2020) emphasised that firms also innovated through new marketing

approaches and organisational changes that helped them adapt to shifting markets and customer needs (Varadarajan, 2020). South Africa had identified innovation as a crucial determinant of growth and development, and thus developed policy frameworks to encouraged both the public and private sectors to put innovation at the forefront (Matekenya & Moyo, 2022). While some research before 2000 showed mixed relationships between product innovation and business expansion (Bahta *et al.*, 2021), South Africa recognised the importance of innovation and its impact on business growth as early as 1996 despite the National System of Innovation (NSI) approach in South Africa, which was established to address issues of slow economic growth (Maduku & Kaseeram, 2021), primary commodity dependence, and socio-economic inequalities using two complementary models of innovations: Science, Technology and Innovation (STI), which aimed at promoting and commercialising research and development (R&D); and Doing, Using and Interacting (DUI), (Matekenya & Moyo, 2022). Lukhele & Soumonni (2021) further stated that its implementation has been considered insufficient in terms of socio-economic outcomes as well as in general (Lukhele & Soumonni, 2021). Recent literature findings indicated a relationship between product innovation and organisational performance (Expósito & Sanchis-Llopis, 2019; Bahta *et al.*, 2021; Lafti *et al.*, 2021; Salfore *et al.*, 2023). Appio *et al.* (2021) noted that the issue of digital transformation (Akpan & Ibadunni, 2023) and innovation remained a collection of separate pieces, skewed in favour of big companies.

Other studies also reiterated the need for further research on the impact of digital transformation on innovation management. Lafti *et al.* (2021) suggested that this can include automated systems as well as new ways to enhanced the business model, processes, marketing, and products. In South Africa, SMMEs were still associated with a lack of innovation, and this could be linked to the high failure rates (Bolosha *et al.*, 2022; Matekenya & Moyo, 2022). Innovation that enhanced the value proposition also allowed the firm to improve its range of products and services to address emerging demands in the market which is, in turn, fundamental to the overall business performance (Salfore *et al.*, 2023). Production and marketing goals include to improve product quality (Lu & Siegfried, 2021; Busalim & Asadi, 2025; Ali *et al.*, 2024), reduce costs (Omol, 2024; Madondo, 2024) gain market share (Tamilmani *et al.*, 2021; Branstad and Solem, 2020) increase market coverage area (Attar *et al.*, 2022; Chatterjee & Rana, 2024) enhance production flexibility (Madondo *et al.*, 2024; Liu & Wang, 2023) and raise management effectiveness (Chatterjee & Rana, 2024). Innovation was not limited only to products and processes; it also includes marketing and organisational aspects (Al Naqbia *et al.*, 2020; Alzoubi *et al.*, 2020).

The emergence of new generation of Digital technologies (Xu *et al.*, 2023) was transforming the way that enterprises developed new products or innovations (Marion & Fixson, 2021). As they explained, "The combined use of digital communication and collaborative software with cloud-based design tools could improve the communication of spatially distributed product development and testing teams, it accelerated the comprehension and realisation of prototypes". This shift gave firms more opportunities for rapid iterations, shorter development cycles, and faster feedback – all of which increase the speed and quality of product innovation. The authors also noted the advantages of new digital tools for knowledge coordination and application. Such tools increased a firm's innovative efforts, strengthening its long-term competitiveness. The insights gained in this regard could be the backbone of product development and sustainable growth for SMMEs if social commerce tools are used for customer participation feedback, collaborative learning, and new market discovery. In the context of this study, social commerce could play a similar role for SMMEs by providing a space for customer feedback, co-creation, and market learning that contributed to new product development and sustained business growth. There was abundant evidence of a positive correlation between innovation and firm performance, and it motivated the government to assist SMMEs to participate in innovative related activities for the betterment of production and diversification (Braguinsky *et al.*, 2021). Their review had revealed a limited understanding of how digital tools—such as social media platforms—reconfigured innovation processes and generated measurable value. Building on this gap, this study extended the debate on digital transformation to South African SMEs (Bolosha *et al.*, 2022; Matekenya & Moyo, 2022), examining how the adoption of social commerce stimulates product innovation and, in turn, promotes business growth. This viewpoint emphasised the intermediary role of innovation and strengthens the theoretical link between digital engagement (social commerce) and organisational performance (business growth).

2.7 Consumer Innovation Theory and UTAUT2

2.7.1 Unified Theory of Acceptance and Use of 2 (UTAUT2)

UTAUT2 explained the behavioural intention behind technology adoption (Akpan & Ibadunni, 2023) and actual use. In this study, UTAUT2 was applied to understand why SMMEs adopted social commerce platforms. Key constructs, such as performance expectancy (utilitarian motivation) and hedonic motivation, were particularly relevant, as they helped to explain both the practical and emotional incentives behind SMMEs' platform use. UTAUT2 also accounted for facilitating conditions and user habits, which influenced sustained platform engagement. Shoheib and Abu-Shanab (2022) adapted the UTAUT2 model specifically for the social commerce context, replacing traditional constructs such as social influence with social commerce-specific features like customer reviews, community participation, and peer recommendations. Their study also introduced trust and perceived value as additional constructs, significantly improving the model's explanatory power. That supported the flexible application of UTAUT2 in digital commerce environments and justified its integration in this study alongside with research based view RBV and consumer-driven innovation theory. Together, these theories provided a comprehensive foundation for studying the roles of digital engagement, innovation processes, and growth outcomes in the SMME context. Nonetheless, the integration of frameworks such as the Unified Theory of Acceptance and Use of Technology (UTAUT) and the Meta-UTAUT model appeared to occur less frequently (Sarker, 2025).

2.7.2 Consumer-Driven Market Innovation Theory

In line with emerging theories of consumer-driven innovation (Branstad & Solem, 2020), consumer engagement on social platforms positioned customers as co-creators, potentially leading to more relevant and innovative product offerings. Furthermore, innovations based on real-time social engagement might positively affect overall business growth, especially in resource-constrained environments like South Africa. Social commerce platforms allowed users to influence product ideas, marketing narratives, and brand development. This theory helped to explain how consumer co-creation mediated the relationship between social commerce adoption and product innovation.

2.7.2 Resource-Based View (RBV)

The RBV provided a strategic lens, suggesting that resources which are valuable, rare, inimitable, and non-substitutable (VRIN) can enabled competitive advantage. In this

study, social commerce capabilities—when combined with consumer engagement and innovation practices—were considered strategic digital resources. By enabling product innovation, these digital tools contributed to the firm's long-term growth trajectory.

2.8 Conceptual Model Development

The prior section outlined the theoretical basis for the research that formed the conceptual model for this study. Based on the two primary theories used in this research (Consumer Innovation Theory), and incorporating aspects of the Unified Theory of Acceptance and Use of Technology (UTAUT2), the model showed how SMMEs in South Africa use social commerce platforms (SC) and how SC usage effects product innovation (INN) and business growth (GROWTH). The Resource-Based View (RBV) also influenced the conceptual model by suggesting that companies achieve superior performance when they develop and apply unique, valuable and difficult to replicate resources; such as Digital Engagement Capability and Innovation Capability. The conceptual model assumed that product innovation (INN) is a mediator variable between social commerce (SC) usage and business growth (GROWTH), since SC usage did not create business growth directly but enables SMMEs to enhance their performance through learning, adapting and improving their products or services. The model was built on the premise that digital tools, particularly social-commerce features, supported information sharing, market sensing and co-creation, all of which were essential for helping resource-constrained SMMEs operate competitively in challenging environments.

2.8.1 Social commerce and Product Innovation

Social commerce platforms provided businesses with opportunities to learn from customer interactions online, and social commerce websites often enable users to share ratings, reviews, and shopping experiences, as well as product and service recommendations (Sarker *et al.*, 2025). Consumer Innovation Theory suggested that these inputs could reduce development risk and promote iterative innovation. Social commerce could serve as a communication tool and an informal research-and-development platform for quick product adjustments based on customer feedback for small, medium, and micro enterprises. The results of the study of Edeh *et al.* (2025) showed, that a company's capacity to commercialise its new product offerings was more important than introducing new products, which did not always result in a competitive

advantage. The field of digital transformation and innovation management had been fragmented, and the integration of digital adoption and innovation results were limited.

While there was growing awareness of the implications of digital transformation, academics still lack a clear understanding of how digital tools transform product development, collaboration, and organisational design (Appio *et al.*, 2021). Similarly, as Sarker *et al.* emphasised, a more holistic theoretical framework was needed —one that is explicitly consumer-focused and integrated thoroughly researched constructs with those that remain less explored. This is yet another confirmation of the scarcity of research on technology- and context-related factors in social commerce (Parker *et al.*, 2025), especially in countries like South Africa. While large companies have used digital platforms to boost their innovation capacity, small businesses often struggled to integrate social technologies strategically. Building on this gap, this study explored how the uptake of social commerce promoted product innovation and contributed to the growth of entrepreneurship in South African SMEs, thus extending the debate on digital transformation to the developing economy

2.8.2 Social Commerce and Business Growth

According to Sohn and Kim (2020), social commerce had introduced a new promotional method where consumers played a key role in boosting a company's sales. Shoppers determined a product's value by sharing the products they liked or commenting on other consumers' opinions through various channels, such as product reviews, blogs, and social networking sites. Sohn and Kim (2020) further stated that, as a result, the consumption traits of individuals engaged in social commerce may be more significant than in other forms of commerce. For companies aiming to effectively influence consumers and leverage their social networks, understanding consumer behaviour within the social commerce framework had become essential. Drawing on UTAUT2, social commerce adoption is associated with expected performance gains, which might directly translate into business growth metrics. There are ongoing requests for future empirical research to investigate the adoption of social media and its impact on the sustainability of SMMEs (Amoah *et al.*, 2023). Product innovation could drive business growth by opening new opportunities, such as exporting, particularly in sectors where market demand changes rapidly. Due to its important role in the expansion and competitiveness of the South African economy, as in other developing economies, the impact of innovation on SMME performance in South Africa had been studied (Matekenya and Moyo, 2022; Lukhele & Soumonni, 2021; Kankisingi & Dhlwayo, 2022). However, because it was "resource process driven" rather than "innovation driven," being an "efficiency-driven" economy puts SMMEs innovation performance at

risk. As a result, achieving "innovation performance" in the previous economic model becomes more challenging (Kankisingi & Dhliwayo, 2022).

Recently, there had been an increasing focus on innovative endeavours in difficult or limited circumstances, particularly in emerging markets and among low-income consumers (Oerlemans *et al.*, 2022). Rather than portraying innovative companies as passive followers, these firms acted as proactive players who recognise and leverage opportunities in resource-constrained environments. This emerging body of literature argued that innovation under resource-constrained conditions differed significantly from that in more developed regions (Oerlemans *et al.*, 2022). Additionally, product and process enhancements were often expensive, lengthy, require large R&D expenditures, and need to be supported by new machines or even entire business units, the payoffs of which are unknown (Salfore *et al.*, 2023). As such, Business Model Innovation (BMI) had become a popular of alternative growth strategy as it did not involve new products or technologies that competitors could easily replicate, instead BMI involved re-engineering the creation, delivery and capture of value (Salfore *et al.*, 2023; Latifi *et al.*, 2021). This broader and more strategic approach allowed companies to achieve performance gains without the high costs and risks associated with traditional innovations in products or processes.

Although digital channels were essential to the competitiveness of SMME, there was a little empirical research on the ways in which social media and social commerce affected firm-level outcomes (Marolt *et al.*, 2022). Most of the existing research had conceptualised social media in terms of its communication, advertising, or promotional value rather than as a source of organisational capability or competitive advantage (Secundo *et al.*, 2021). Early research on the business relevance of social media provided only a partial insight, mainly in terms of customer engagement, brand visibility, dialogue, and reputation, without exploring the operational, strategic, and innovation implications (Secundo *et al.*, 2021).

Similarly, Esmaeili and Hadhemi (2019) found that firm performance ranked last among ten thematic categories of social-commerce research between 2004 and 2013, confirming that performance and organisational outcomes had historically been marginal research priorities. Attar *et al.* (2022) further highlighted a lack of research linking social commerce to competitive advantage, reinforcing that the field had not yet theorised how digital engagement translated into measurable performance outcomes. In contrast, scholars increasingly emphasised that performance benefits did not come from platform usage alone.

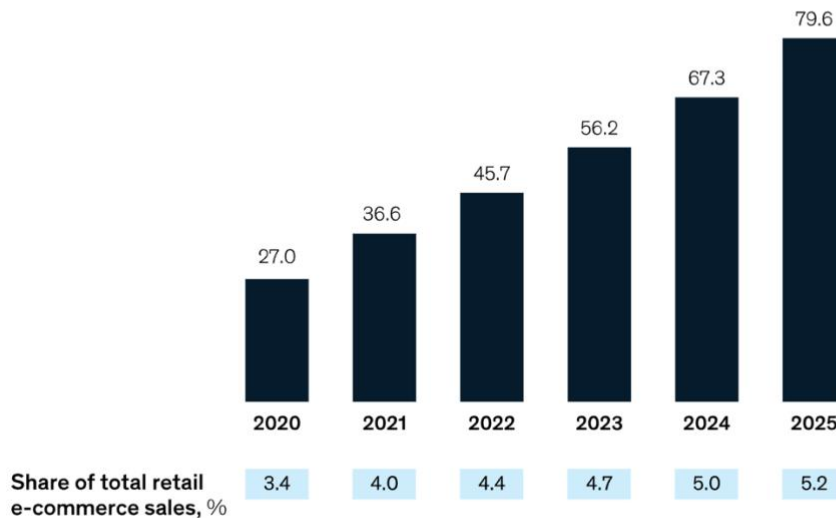
Marolt *et al.* (2022) showed that the ability of a company to build a trust, enable meaningful interaction, coordinate digital relationships and facilitate the creation of value-added results from the ability of a company to do social business. Secundo *et al.* (2021) also confirmed that trust, interaction and digital relationship management were more powerful predictors of performance than mere social platform participation. Yet these abilities were also extremely underdeveloped in emerging markets where SMMEs may be resource constrained, not digitally ready, and have weak internal processes. This capability-based view was consistent with other literature on digital transformation, as Lu and Shaharudin (2024) showed that SMMEs must acquire dynamic capabilities, big-data capabilities, and innovation capabilities to achieve a sustainable competitive advantage. They argue that social media engagement must be complemented by business model innovation, technological innovation, and open innovation practices to create real performance benefits.

This dynamic was particularly well illustrated by Chinese companies, which had rapidly adapted their platforms to incorporate new features compatible with evolving consumer behaviour (Merritt & Zhao, 2022). The development of live streaming further reinforced this capability argument. The integration of live streaming on social platforms had created new business models which *restructure* value creation and marketing channels (Sun & Liu, 2023; Jiang & Cai, 2021). The online social-commerce environment was now shaping consumer behaviour through real-time interaction, entertainment, information gathering and exchange of views (Zhang *et al.*, 2023; Amin *et al.*, 2025).

Live shopping increased engagement and sales growth and acted as a virtual replacement for face-to-face interaction. As Xu *et al.* (2020) noted, live-stream commerce functions as a social media extension, offering new strategic opportunities for SMMEs. However, the literature on how live-stream retailing could be adapted to Western or emerging-market contexts had not grown significantly. According to Merritt and Zhao (2022), KOLs and KOCs were central to China's success because of their credibility and the reach of their social networks, which enabled them to influence purchasing decisions at scale (generating millions in sales in minutes; McKinsey, 2022).

Social commerce is a small but rapidly growing segment in the United States.

US retail social-commerce sales,¹ \$ billions



¹Data for 2021–25 are projected.
Source: eMarketer, May 2021

Nevertheless, such influencer ecosystems, technological maturity, and logistics infrastructures are not readily mirrored in South Africa or similar environments. So, while global evidence showed that social and live commerce could be powerful engines of growth, their success depended on: building trust, digital readiness, platform integration, quality, innovation capacity, re-engineering, and agility in turbulent markets. The fragility of the environment complicated these relations further. The performance benefits of digital transformation, including social media marketing, are being undermined by market volatility, sustainability pressures and changing consumer expectations (Amin *et al.*, 2025), and organisational capacity was losing effectiveness in responding to an unforeseeable environment (Amin *et al.* 2023).

Recent research had also emphasized the role of organisational resilience and sustainability orientation in determining if digital initiatives resulted in business growth, as the direct effect of technological innovation on SME performance was significantly weakened by environmental pressures, market instability, and sustainability demands, unless firms had internal capabilities, such as resilience, learning capacity, and sustainability-oriented management (Do *et al.* 2024). This corroborates Amin *et al.* (2025), who found that market turbulence significantly attenuates the performance effects of social media-based marketing. As such, this further validated that in emerging markets such as South Africa, digital engagement, including social commerce, seldom results in business growth in isolation.

Taken together, these studies highlighted a critical gap: Existing research had not sufficiently explained how SMMEs in resource-constrained or turbulent environments converted social commerce engagement into measurable innovation outcomes or business expansion. This gap underscored the need for studies—such as the present one—that examined mediating mechanisms, including product innovation, business model innovation, and organisational capabilities.

2.7.2.1 Deepening the Online Shopping Experiences

Depending on which consumer group used each social media platform — such as Millennials or Gen Z (Avom & Malah, 2022) — different levels of user analytics were available. Sellers were extracting and analysing that data to provide better product recommendations, gain deeper insights for targeted advertising, and improve the overall livestream shopping experience. If livestream shopping gains popularity in Africa, South African SMMEs have a significant opportunity to enhance customer satisfaction and loyalty by adjusting their offerings to meet individual needs (Varadarajan, 2020).

2.7.2.2 Genuine Connections with the Audience

A significant future opportunity for small business owners in livestream shopping was personalising the purchasing process, enabling them to interact directly with customers in real time (Kim *et al.*, 2023). In live commerce, buyers could better understand their purchasing choices thanks to enhanced information quality (such as product details, brand information, usage suggestions, and manufacturing methods). This was because information in the virtual streaming commerce setting was presented through live videos (Liu & Wang, 2023), which differed significantly from conventional online shopping, where customers accessed information only via images and text (Xu *et al.*, 2020). The main challenges in South Africa were expensive, unstable internet connections and unreliable power supplies. However, the live format fostered authentic exchanges by communicating exclusively in specific African languages and by establishing trust and credibility that South African e-commerce might lack.

2.7.2.3 Urgency and Time-Sensitive Offers

In markets such as China, social commerce had developed into a new format known as live commerce, which was characterised by short-form video, live streaming and in-app payments, which went beyond static product pages with product reviews and limited-time offers, creating a phenomenon known as "fear of missing out" (Chen, 2024). It might seem that time-limited offers belong to the 1980s and 90s; however, limited-time promotions, while invoking a psychological phenomenon, "The Fear of Missing Out FoMO," were still effective. The audience had to be convinced of the exclusivity of deals

during live broadcasts; small businesses can encourage spontaneous purchases and instil a sense of urgency in viewers (Tandon *et al.*, 2021). Although there had been a surge in academic interest, no efforts have been made to compile and integrate existing knowledge on FoMO.

Consequently, there was a gap in a comprehensive understanding of its conceptualisation and operationalisation (Tandon *et al.*, 2021), as well as of the connection between studies examining its relationship with internet use and FoMO itself (Akbari *et al.*, 2021). More importantly, according to Hodkinson (2019), researchers were limiting their empirical focus to FoMO as an inward psychological state, rather than an outwardly generated marketing message that implies FoMO was appealing. Therefore, given the discussed gap, research excluded how marketers target consumers' feelings with FoMO-based messages to stimulate behaviour, including buying products. As a result, there remained a conceptual and empirical gap in understanding FoMO's role as a marketing stimulus and in explaining the cognitive and emotional mechanisms that underlined consumer responses to FoMO-driven advertising (Hodkinson, 2019). Such an understanding helped entrepreneurs increase sales through innovation.

2.7.3 How Product Innovation Contributes to Business Growth

Expósito and Sanchis-Llopis (2019) highlighted that while product innovation positively affected a company's sales, organisational innovation plays a key role in lowering costs. Matekenya and Moyo (2022) identified four categories of innovation: product, process, marketing, and managerial. Additionally, every form of innovation—whether product, process, or organisational—had a significant positive effect on both indicators of operational performance, including increases in productive capacity and improvements in quality. Innovation as a management concept was omnipresent, as it touches on numerous notions. It could be the so-called "iterative process," with a starting point in the discovery of a new market opportunity for an invention, followed by development, production, and marketing (Lin *et al.*, 2020). Research based on empirical data and specific case studies had demonstrated the various advantages of product innovation for small, medium, and micro enterprises (SMMEs), especially in fast-paced or resource-limited settings such as the South African market. These benefits were critical for SMMEs to leverage social commerce to improve their competitive edge (product innovation) and growth outcomes (business growth).

Key areas of impact include:

2.7.3.1 Improving product quality

By adding new features (digital product), improving the product designs (digital or physical product), or identifying new advanced materials to increase the durability of the product (physical product). De Lucas Ancillo and Gavrila (2023) observed that digital transformation had enabled firms to improve their product performance by integrating real-time feedback into iterative design processes.

2.7.3.2 Decreasing costs

Developing products to improve production efficiency, conserve resources, or implement automation is essential. Kraus *et al.* (2021) illustrated how companies employed modular design and digital technology to reduced manufacturing costs while increasing scalability.

2.7.3.3. Increasing market share

Using data analytics from social media platforms to better understand customers in new targeted markets (Busalim & Asadi, 2025). Ahmad *et al.* (2022) emphasised that social commerce analytics reveal unmet demands and neglected audiences, facilitating focused innovation.

2.7.3.3 Expanding market reach

Social commerce opens a door to new markets. Case studies by Avom and Malah (2022) show that firms using Facebook and WhatsApp broadened their geographic reach and customer base by tailoring offerings based on real-time social data. Additionally, Shoheib and Abu-Shanab (2022), supported by earlier work (Andrew & Beth, 2006; Ganapathi & Abu-Shanab, 2020; Busalim & Asadi, 2025) emphasised that social commerce enables access to niche or underserved markets while introducing innovative customer engagement models. By supporting customer-generated content, shared recommendations, and peer influence, these platforms helped SMMEs enhance visibility and trust, especially in emerging markets.

2.7.3.4 Increasing production flexibility

Shoheib and Abu-Shanab (2022) demonstrated how SMEs leverage software-based modularity (e.g., updates and plugins) to remained competitive and shorten innovation cycles.

Modular products: Designed as separate parts (like LEGO), they could be combined in many ways. That made them easy to update or personalise (Sun & Lau, 2020).

Customisable features: Customers could choose colours, sizes, or functions without redesigning the entire product (Omol, 2024)

Adaptable designs: Products that could evolve e.g., software updates, add-ons, plug-ins (Merritt & Zhao, 2022).

Reduced waste and production time. Allowed companies to respond more quickly to trends identified through social commerce (de Oliveira et al., 2020), attention to Sustainable Development Goals (STG), enabled more customer-centric innovation (de Oliveira et al., 2020; Esmaeili & Hashemi, 2019), reduced product return (Merritt & Zhao, 2022). .

2.7.3.5 Improving managerial performance

Social commerce platforms offered to managers real-time feedback (reviews, ratings, shares), enhancing decision-making (Hatamleh *et al.*, 2023). Busalim and Asadi (2025) showed how cross-functional collaboration improved innovation processes, while rapid consumer feedback reduced time-to-market. Together, these components illustrated how product innovation, supported by digital engagement (Busalim & Asadi, 2025) enhances business growth, especially for agile, resource-limited SMMEs operated in dynamic environments.

2.8 Social Commerce, Product Innovation and Business Growth

Dincer and Dincer (2023) traced the origin of the term "social commerce" to Yahoo in 2005, where it referred to user-generated content (UGC) related to products and sellers. However, platforms like Amazon and eBay had already embedded such features by the late 1990s. Scholars such as Li (2019) and Lin and Wang, (2022) had since distinguished between two categories of social commerce: the first involved traditional e-commerce platforms enhanced with Web 2.0 tools (e.g., reviews), while the second integrated e-commerce into social networking environments. The latter—enabled by platforms like Instagram, Facebook, and TikTok—fostered deeper interaction through features like tagging, sharing, and collaborative content creation. This study focused on the second type, as it directly supported customer co-creation, a critical mechanism for product innovation. The state of digital technologies, particularly the widespread use of social media, which enabled people, employees, and entrepreneurs to communicate with one another, with customers, to find new suppliers and partners, and to co-create new opportunities with them, had significantly shaped this frontier today due to the availability of much more data and computer power. A g. Facebook, blogs, wikis, social networking

sites, and social tagging tools) (Secundo *et al.*, 2021). While there had been an increase in scholarly attention paid to the role of social media in entrepreneurship, the existing literature had largely examined the role of social media from a consumer engagement or marketing function perspective, with less examination of how social media affected product innovation or long-term growth (Olanrewaju *et al.*, 2020). Studies in this area also did not consider developing country contexts, such as South Africa, where SMMEs relied on digital tools to circumvent structural constraints.

According to Wang *et al.* (2022), there was a lack of cohesive models that link platform use to tangible business outcomes such as innovation and business growth in the current body of social commerce literature, which was fragmented and lacks a systems-oriented perspective. They called for more cohesive models that link platform use to tangible business outcomes, including innovation and business growth. By engaging consumers as co-creators, social commerce platforms provided a unique avenue for small firms to drive product innovation and ultimately achieve business growth. This linkage forms the conceptual foundation of this study and was explored through a framework grounded in consumer innovation theory and UTAUT2 (Alkhasoneh *et al.*, 2025)

Social commerce platforms have been found to facilitate two-way interactions more than traditional e-commerce channels, providing SMMEs with direct feedback to test new concepts, and refine their products in real time (Moghddam *et al.*, 2024; Brunstad & Solem, 2020; Goraya *et al.*, 2021). Unlike e-commerce, social media serves as a sales tool and provides an immediate platform for SMME owners to test new concepts, designs, and business strategies (Rosário & Dias, 2023). The involvement of influencers was crucial for product development and business growth, as effective collaboration with them enhances brand visibility and builds trust. Similarly, Tajvidi *et al.* (2020) demonstrate that social-commerce information sharing - particularly through reviews, referrals, and community interactions - enhances trust, social support and relationship quality, which collectively promote stronger brand co-creation and performance outcomes. Dhingra *et al.* (2024) stress the growing significance of social media influencers (SMIs) in shaping consumer perceptions and behaviours, particularly by fostering emotional connections and perceived credibility. Nonetheless, they point out a deficiency in quantitative research that measures the business effects of SMIs, particularly in emerging markets. That suggests the need to explore consumer responses and the strategic outcomes for businesses that engage in these partnerships - such as product innovation or firm growth.

2.9 Summary of Chapter

This chapter had critically examined the theoretical and empirical landscape surrounding social commerce, product innovation, and business growth in SMMEs. The review identified several key gaps in the literature, including the overemphasis on consumer behaviour in social commerce studies, insufficient attention to firm-level outcomes, and a lack of integrated, context-specific models for emerging markets like South Africa. Drawing on Consumer Innovation Theory and UTAUT2, the study proposes a conceptual model linking social commerce adoption to business growth via the mediating role of product innovation. This model responds to the call for more hypothesis-driven, firm-focused research on the digital transformation of entrepreneurial environments (Amin *et al.*, 2025; Appio *et al.*, 2021). The next chapter outlines the methodological framework for empirically testing these relationships using structural equation modelling (SEM).

Chapter 3

In the Chapter 3 was discussed operational model construct and four hypothesis.

3.1 Research Questions & Hypotheses

Social commerce had been studied in the past as a multi-dimensional phenomenon that combines social interaction and technological engagement to impact organisational outcomes (Goraya *et al*, 2019), and although previous research on social commerce had considered individual behavioural intentions (Goraya *et al*, 2019), the underlying mechanism suggested how social commerce platforms promoted relational capital and knowledge exchange, which are enablers of innovation within firms. Building on this behavioural view, Secundo *et al.* (2021) conducted a structured literature review and found that social media promote entrepreneurial learning, opportunity recognition, marketing innovation, and ecosystem development, which positions digital and social technologies as enablers of continuous business model renewal and innovation capability. Based on these insights, the present study contends that social commerce adoption can support product innovation because of the interaction, feedback, and co-creation with consumers, which may result in improved business growth for South African SMMEs.

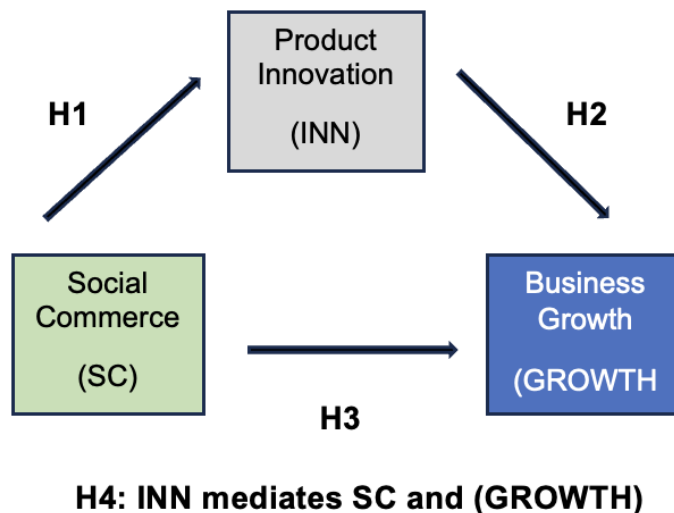
3.1.1 Conceptual Model

The conceptual model in this study served as the theoretical foundation that visually represented the hypothesised relationships among the variables. The model proposed that social commerce (SC) influenced business growth (GROWTH) both directly and indirectly through product innovation (INN). Within a quantitative research design, such models were used to specify how constructs were expected to relate to one another before subjecting these assumptions to statistical testing, most commonly through Structural Equation Modelling (SEM) (Hidayat & Wulandari, 2022). Quantitative methods were most useful for establishing measures of a finding, determining variability between groups or data, or testing hypotheses that support explanations for observed phenomena (Merritt & Zhao, 2022). Quantitative methods were used in developing reliable and

precise statistical information that can be utilized to evaluate hypotheses (Merritt & Zhao, 2022).

Typically, conceptual models included independent (or exogenous) and dependent (or endogenous) variables, as well as in some instances, mediating and/or moderating variables (Hidayat & Wulandari, 2022). SEM was specifically developed to analyse the relationship between the many components of these models by evaluating both the direct and indirect paths simultaneously. As compared to other statistical methods including but limited to, traditional multivariate techniques like path analysis and multiple regression, SEM offered a much broader scope of analysis (Dash & Paul, 2021). SEM offered the opportunity to examine the relationships between each component of the model more deeply by providing the ability to assess the individual indicators that make up the measurements, as well as assessment of the construct validity, reliability, and overall fit of the model (Hidayat & Wulandari, 2022). The advantages of SEM allowed it to be an appropriate analytical method for investigating the hypothesised relationships between social commerce, product innovation, and business growth in this current study.

Table 1: Conceptual model of this study



3.2 Hypotheses

Previous studies evaluating the impact of digital transformation have yielded inconsistent results on whether it drives business growth (de Lucas Ancillo and Gavrilu, 2023). By examining how social commerce adoption influences product innovation and business growth within South African small, medium, and micro enterprises (Hanelt *et al.*, 2021), we formulated a structured set of research questions and corresponding objectives to guide the research. These are grounded in the literature review, aligned with the conceptual framework, and serve to address the overarching research problem and aim.

H1: Social commerce adoption had a significant positive impact on product innovation.

H2: Product innovation had a significant positive impact on business growth

H3: Social commerce adoption had a significant positive impact on business growth.

H4: Product innovation mediates the relationship between social commerce adoption and business growth

3.2.1 H1: Social commerce adoption had a significant positive impact on product innovation.

Social commerce platforms foster an engaging, customer-focused environment that drives product innovation, especially for small, medium, and micro enterprises (SMMEs). These platforms enable bidirectional communication, instant feedback, and the exchange of user-generated content—essential tools that allow businesses to recognise unmet needs (Varadarajan, 2020) and collaboratively create solutions. Moghddam *et al.* (2024) show that social commerce reduces marketing costs and enhances responsiveness to consumer preferences, enabling rapid testing and iteration of new products. In South Africa, Samkange *et al.* (2021) note that social platforms can help overcome structural barriers by creating agile innovation pathways for small businesses. Thus, adopting social commerce can significantly contribute to innovation efforts within SMMEs by enabling direct, dynamic engagement with end users.

3.2.3 H2: Product innovation had a significant positive impact on business growth

Mitrega *et al.* (2017) highlight that launching significantly enhanced or new products was essential for ongoing organisational success. Wang *et al.* (2022) provide additional evidence for this by showing that businesses that adopt innovative product strategies often experience increased market share, improved customer loyalty, and greater scalability. In the context of South African SMMEs, Madondo *et al.* (2024) assert that

innovation was not merely a competitive advantage but a critical determinant of survival and growth, especially amid limited access to capital and infrastructure.

3.2.4. H3: Social commerce adoption had a significant positive impact on business growth.

Existing literature suggests that social commerce significantly enhances business growth among SMMEs by expanding market access, improving visibility, and reducing operational costs. Secundo and Mele (2021) state that the development of digital technologies, particularly the widespread use of social media, which enables people, employees, and entrepreneurs to communicate with one another, with customers, to find new suppliers and partners, and to co-create new opportunities with them. Avon and Malah (2022) point out that social media enhances the visibility and reach of businesses, which are essential growth factors for smaller companies. Similarly, Moghddam *et al.* (2024) show that social commerce enables economic scaling by reducing marketing costs and fostering broader customer engagement. Samkange *et al.* (2021) highlight how social commerce can address structural challenges within South African SMMEs.

3.2.5. H4: Product innovation mediates the relationship between social commerce adoption and business growth

In particular, product innovation helped small businesses with limited resources to convert digital participation into growth outcomes (Moghddam *et al.*, 2024). Platforms such as Facebook and Instagram provide quick feedback loops to enable companies to update existing products or develop new ones to respond to changes in customer needs, a type of customer-driven innovation that helped an organisation to be more agile and responsive, skills that are closely related to the sustainable growth of enterprises (Mamabolo & Myres, 2020).

In the context of the South African SMME, Madondo *et al.* (2024) argue that innovation allowed firms to mitigate market access constraints and cope with uncertainty to scale better. However, despite the growing body of research on social commerce adoption and the broader role of innovation in small-firm competitiveness, there remains limited empirical evidence on how social commerce actually stimulates product innovation within SMMEs, and whether such innovation functions as the mechanism through which digital engagement improves business growth.

This gap was particularly noticeable in emerging markets such as South Africa, where companies rely heavily on low-cost digital tools but face resource and skills constraints. Accordingly, this study positions product innovation as a mediating pathway through which social commerce adoption can translate into measurable business growth.

3.3 Summary of the chapter

These hypotheses reflect a multi-step pathway where social commerce adoption enhances consumer co-creation and product innovation, thereby improving business growth performance. In line with conventional practices in quantitative research, these hypotheses will be evaluated against a null hypothesis asserting the absence of an effect or relationship. Specifically, the statistical models will determine whether there was sufficient evidence to reject the null hypothesis in favour of the proposed directional hypotheses. Hypothesis testing will utilise structural equation modelling, with significance levels at 0.05. A result will be regarded as statistically significant when the p-value falls below this threshold, thereby permitting the rejection of the null hypothesis to endorse the alternative.

Chapter 4

In the Chapter 4 was discussed research philosophy and quantitative study approaches, data collection method and the population.

4.1 Research Philosophy and Approach

The qualitative approach emphasises subjectivity and, consequently, ambiguity, whereas the quantitative approach emphasises realism, objectivity, and clarity (Gul, 2023). As a result, research adheres to a positivist philosophy, which was predicated on the idea that reality was objective, consistent, and observable and quantifiable without the researcher's influence (Saunders *et al.*, 2023). From an ontological perspective, positivism makes the assumption that phenomena such as digital adoption or entrepreneurial growth exist apart from an individual's personal experience. This systematic and replicable methodology ensures the robustness of the research.

4.1.1 Positivist Paradigm

Based on the positivist paradigm, this research assumed the existence of an external and objective reality that could be understood through systematic observation and measurement, and learning happens when these ideas were put to the test and were either validated or discredited through observation and statistics (Park *et al.*, 2020; Masuku, 2023; Saunders *et al.*, 2023). The philosophical origins of positivism lie in Auguste Comte's law of three stages, which suggests that human thought progresses from theological and metaphysical reasoning to a positive or scientific stage of understanding (Masuku, 2023; Saunders *et al.*, 2023). As researchers looked for measurable patterns rather than depending on conjecture or intuition, the idea that true knowledge was founded on observation continues to direct social science today (Park *et al.*, 2020; Saunders *et al.*, 2023. Kaushik & Walsh, 2019). Within this tradition, the current study views social-commerce adoption, product innovation, and business growth in South African SMMEs as observable phenomena that could have been measured to test theoretical relationships.

Yet, as Zyphur and Pierides (2020) cautioned, positivism should not be applied dogmatically; quantitative inquiry must remain ethically and contextually aware, since researchers inevitably influence the knowledge that emerges through their methodological choices. Responding to this, Masuku (2023) proposed a contextual or

“Type B” positivism—one that retained the rigour of measurement, prediction, and empirical testing while acknowledging the social and ethical complexity of research settings. In this spirit, the present study adopted a moderate, empirically grounded positivist stance: it upholder objectivity, replicability, and causal testing while recognising the contextual realities that shaped digital innovation and business growth in emerging-market SMMEs. Recent research by Branstad and Solem (2020) expanded the traditional firm-driven innovation view by proposing that consumers actively shaped innovation diffusion through their interactions, advocacy, and co-creation behaviours.

This consumer-driven paradigm suggests that innovation did not occur in isolation within firms but emerges collaboratively through networks of users and producers. In the context of this study, such insights justify examining social commerce as an enabler of co-created innovation among South African SMMEs. Although the research adopted a quantitative positivist lens to empirically test relationships between social commerce adoption, product innovation, and business growth, it acknowledged that these constructs were embedded in a socially interactive digital ecosystem. Thus, this study operationalised the co-creation process into measurable constructs, thereby bridging theoretical understanding with empirical validation.

4.1.2 Ontology

According to Roldán-Molina *et al.* (2021), an ontology was first described as the philosophical study of being. It addresses questions about which entities exist, their categories, relationships, hierarchies, and grouping criteria based on similarities and differences. Ontology was what the scientist thought was real (what exists and how we knew about it). The positivist paradigm applied a realist ontology, where social, technological and organisational phenomena (such as the uptake of social goods, product innovation and business growth) were assumed to exist independent of the perceptions of human beings and can be objectively measured (Saunders *et al.*, 2023; Park *et al.*, 2020). Reality was therefore seen as external to the researcher and governed by causal relationships that could have been discovered through systematic observation and validated statistically. As Asokan *et al.*(2020) note, ontology provides a structural frame for understanding “what was real,” encompassing the entities, processes, and properties that constitute existence.

Even data-driven models rest on ontological assumptions about which elements of reality were selected, represented, and measured. Hence, while this study aligned with scientific realism, it recognised that all measurement involved abstraction - data capture only a portion of complex organisational realities. In the same vein, Zyphur and Pierides

(2020) point out that quantitative research methods were culturally and ethically embedded; the statistical techniques that underpinned social-science inquiry also determined how researchers perceive reality. Rafols (2025) took this perspective further, arguing that multiple ontologies existed in science and could be viewed from a variety of conceptual and contextual perspectives. On the basis of these views, this study adopted a contextual realist approach: it recognises that there are empirically observable realities that could have been studied objectively, but recognised that these realities were expressed in context (e.g. South African SMEs). This ontological approach was consistent with the positivist philosophy and deductive approach of the study and recognised that digital innovation and business growth took place in a dynamic and context-sensitive environment.

4.1.3. Epistemology

Epistemology dealt with the nature and boundaries of knowledge and how it can be acquired (Sol & Heng, 2022). In the positivist paradigm used for this study, knowledge was considered objective, measurable, and value free, being derived from observable phenomena that can be measured and statistically analysed (Saunders *et al.*, 2023; Dudovskiy, 2024). Positivist epistemology assumed that social reality can be studied using systematic, scientific procedures similar to those of the natural sciences, allowing theory to be tested through empirical observation and hypothesis verification. This epistemological stance was appropriate for research that investigates relationships among quantifiable variables. This study therefore tested the predefined links between the uptake of social entrepreneurship, product innovation and business growth in South African SMEs. Knowledge was generated by measuring observable patterns and assessing their causal relationships using statistical techniques such as structural modelling of equations.

This logic was reinforced by case studies: Chatterjee *et al.* (2024) showed that digital analytics increased the value of businesses by making data-driven decisions, and Varadarajan (2020) showed that companies that used customer information sources performed better. While alternative paradigms such as interpretivism or pragmatism acknowledge multiple realities or contextual meaning, they were less suited to the aims of this study, which seeks generalisable, replicable, and statistically supported knowledge about how digital and social-commerce engagement drive innovation and growth in emerging-market SMMEs. Nevertheless, the study recognised critical perspectives such as standpoint epistemology (Toole, 2020),

which emphasised that the social position of the knower influences knowledge. By contrast, this research adopted a positivist orientation that privileged objectivity and empirical verification as the basis for credible knowledge.

4.1.4 Deductive Approach

In the current study, the hypotheses were formulated on the basis of two theoretical perspectives—Consumer Innovation Theory (CIT) and Unified Theory of Acceptance and Use of Technology 2 (UTAUT2). These two theories implied that the usage of digital technologies such as social commerce sites led to product innovations and ultimately affects the performance of businesses. The deductive approach thus enabled these theoretical postulates to be proved empirically in the current study within the context of SMMEs situated in the South African environment. The Structural Equation Modelling (SEM) methodology implemented this deductive reasoning to test various hypotheses about the relationships among latent constructs concurrently. Structural Equation Modelling (SEM) methodology applied this deductive reasoning to test multiple hypotheses about the relationships among latent constructs simultaneously. This theoretical model validation approach extended the theories of path analysis and multiple regression analysis to focus on model fitness, reliability (Pallant, 2020), and validity (Pallant, 2020), which aligned with the positivist need to be objective, accurate, and verifiable (Hidayat & Wulandari, 2022). The SEM also determined whether structures were reflective or structural, and it was more flexible to capture both behavioural and structural relationships (Hair *et al.*, 2021; Hair & Alamer, 2022; Edeh *et al.*, 2023).

Theoretically, the philosophies and approaches of the study were integrated, the theories form the basis for hypotheses, the quantitative data were the basis for empirically testing the hypotheses, and statistically modelled results were used to illustrate the extent to which the data support or refute the theoretical hypotheses. The study employs Structural Equation Modelling (SEM) as its key analysis method to ensure that the study remains consistent with its philosophical perspective, research methodology, and analysis method. SEM was an extension of the methodologies entailed in path analysis and multiple regression analysis and can be utilized to identify the multivariate relationships among latent constructs (Hidayat & Wulandari, 2022). This technique supports the study's deductive logic by allowing the simultaneous testing of multiple hypotheses and causal pathways, consistent with the positivist pursuit of verification through empirical evidence (Hair *et al.*, 2021). Furthermore, SEM's emphasis on assessing model fit, construct reliability, and validity aligns closely with the positivist focus on objectivity, precision, and replicability (Kaushik & Walsh, 2019). Therefore, positivism was particularly appropriate for this study as it enables the statistical testing

of theory-driven relationships, consistent with recent SEM-based research in digital commerce contexts (Sun & Liu, 2023; Shoheib & Abu-Shanab, 2022). By quantifying relationships among social-commerce adoption, product innovation, and business growth, SEM enables the researcher to test whether empirical data support the theoretical model derived from Consumer Innovation Theory and UTAUT2. The technique therefore ensures methodological rigour and philosophical consistency, enabling the generation of replicable and generalisable insights into how digital engagement influences innovation and performance among South African SMMEs.

4.1.5 Research Strategy - Survey

A survey strategy was adopted for this study because it aligns with the positivist philosophy and deductive approach underpinning the research design. Surveys were particularly effective when the objective was to collect standardised data from a large population so that statistical relationships among variables can be examined (Saunders *et al.*, 2023). Poor quality of questionnaires will not produce good data to address research questions. When drawing up the questionnaire, we have to consider how we plan to use this information, as well as what statistics we want to use (Pallant, 2020). As the present study aims to test theory-based hypotheses on social entrepreneurship, product innovation and business growth, the survey was the most effective way to capture quantifiable perceptions and patterns of behaviour across a wide sample of SMEs, and it also supports structural modelling (SEM) with sufficiently large datasets and standardised measures. Survey tools operate each construct - e.g. social entrepreneurship, innovation practices and growth indicators - using validated items from the Likert scale, thus ensuring reliability, comparability and statistical robustness. Online surveys were particularly suited to contexts such as South Africa, where SMMEs are geographically dispersed and vary widely in terms of resources; online surveys allow for a broad coverage at minimal cost.

In addition, survey research was commonly used in technology adoption and innovation studies, allowing the findings of this study to be compared with existing research and contributing to cumulative knowledge development. The strategy thus aligns with the study's aim to generalise patterns of digital engagement and performance outcomes across South African SMMEs.

4.1.6 Methodological Choice — Mono-Method Quantitative

The use of multiple methods within the same research project, referred to as multimethod research, had several advantages; it could provide a more comprehensive and accurate picture of multidimensional, complex organizations, and given that no single research

approach could capture all the attributes of organizations, multimethod research can provide critical new insights (Wellman,2023). Monometric design was chosen because the objectives of the study require numerical measurements and statistical testing of pre-defined hypotheses. This choice was in line with the positivist view that social phenomena can be objectively measured and explained by causal relationships (Kaushik & Walsh, 2019). As the study aims to establish the direction and strength of associations among social commerce adoption, product innovation, and business growth, a single quantitative method provides the precision and consistency needed for empirical verification.

The use of a mono-method approach also ensures conceptual and methodological consistency. Research uses SEM as the primary analytical technique and SEM relies on standardised numerical data from structured instruments. The incorporation of qualitative methods would introduce methodological pluralism which was not in line with the strictly deductive and theoretical focus of this study. Rather, a targeted quantitative approach enables researchers to give priority to the reliability, statistical generality, and validity of measurements - qualities that were essential to positivist research. Additionally, a mono-method design lessens respondent burden and complexity (Wellman et al. 2023), which was crucial considering the time and resource limitations that South African SMMEs face. The approach therefore maintains rigour while ensuring that the data collected were suitable for testing relationships derived from Consumer Innovation Theory and UTAUT2.

4.1.7 Time Horizon — Cross-Sectional Design

A cross-sectional time horizon has been adopted as the aim of the study was to examine the relationship between digital adoption, innovation and business growth at one point. Cross-sectional design was appropriate for studies testing hypotheses based on existing theories rather than time-dependent changes (Saunders *et al.*, 2023). As the aim of the survey was to determine whether social entrepreneurship was associated with a higher level of product innovation and entrepreneurial performance in SMEs, there was no need to collect longitudinal data.

Cross-sectional surveys were also commonly used in the context of SEM-based research on the uptake of technologies and innovation, especially in the context of examining behavioural constructs associated with digital platforms. For South African SMEs, the cross-sectional approach was even more practical, as companies operate in a very limited environment, which makes it difficult to collect data over a long period of time. Capturing perceptions and behaviours at one time allowed a study to minimize

fatigue and maximize response rates while still providing generalizable findings. Although longitudinal design may reveal trends, it was not necessary for the deductive goals of the study. Instead, a cross-sectional approach provides a timely snapshot of how SMMEs were now engaging in social business and how this was linked to innovation and growth in the post-pandemic digital environment.

4.2 Population

In quantitative research, the population refers to the complete group of elements or entities that share common characteristics relevant to the study (Saunders *et al.*, 2023). To define a research population effectively, the parameters that mark its boundaries must be reviewed iteratively to ensure the final target group was sufficiently broad to yield reliable and generalisable results (Hossan *et al.*, 2023). This study focuses on South African Small, Medium, and Micro Enterprises (SMMEs) that actively use social-commerce platforms as part of their business operations. These enterprises represent an important segment of the South African economy and offer valuable insights into how digital engagement influences product innovation and business growth. The selection of this population aligns with the study's overarching aim of testing theoretically grounded relationships among social-commerce adoption, innovation, and performance outcomes within a positivist, deductive framework. To ensure relevance and rigour, the population was defined using two eligibility criteria. First, SMMEs must be at least 3 years old, as it takes time for a firm to mature to the level where it was stable enough to be able to observe sustained innovation behaviours and growth outcomes; this emphasis aligns with recent research that has highlighted the importance of innovation in improving performance for South African SMMEs (Matekenya & Moyo, 2022). Second, participants were required to be business owners or authorised representatives legally entitled to live and work in South Africa, ensuring informed and valid organisational responses. Third element was businesses should have been engaged in e-commerce.

4.3 Unit of analysis and level of analysis

The primary data collection tool for this study was an online structured survey (Ginevičius, 2024), which was often used in quantitative research because it was possible to analyse the systematic collection of data in a statistical manner and to test theoretical relationships (Saunders *et al.*, 2023). The questionnaire contained closed-ended questions designed to measure the three key constructs of the study (i.e., social-commerce engagement, product innovation, and business growth) and respondent demographics, with the intention of quantifying and comparing responses in a methodologically rigorous and comparable way by using measurement scales previously

validated in other research. Each construct was measured using multiple items assessed on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), following the measurement procedure used by Koo and Yang (2025). Likert-type scales were particularly suited to examining perceptions, attitudes, and behavioural tendencies because they yield ordinal data that, under parametric conditions, can be treated as interval-level measures for statistical modelling. The survey (Koo & Yang, 2025) instrument was pre-tested to confirm clarity and internal consistency before full deployment.

4.4 Sampling method, sampling frame or criteria; and sample size

Sampling involves selecting a subset of units from a population of interest with the goal of capturing the key attributes of that population (Alger *et al.*, 2024; Saunders *et al.*, 2023; Turner, 2020). The population of interest for this study was South African SMEs that sell goods or services directly to consumers. According to the National Small Business Act (No. 102 of 1996, amended by the 2020) the target undertakings were those that had a turnover of less than R25 million a year and were independently owned (i.e. not a company or a national retail chain). To ensure that responses were relevant and valid, participants needed to be in key decision-making positions (e.g. owners, managers or marketing managers), directly involved in the use of social trading platforms by their company, and legally resident and working in South Africa. Recognising the vast geographical and sectoral diversity of SMMEs across the country, a purposive sampling strategy (Turner, 2020) was utilised to deliberately recruit enterprises that met clearly defined inclusion criteria. This method was supplemented by snowball sampling (Saunders *et al.*, 2023), in which initial participants were asked to identify other qualified respondents within their professional networks, a mixed strategy that was especially appropriate for accessing digitally active but methodologically difficult populations for which formal sampling frames were not available or incomplete (Mohajan, 2020). Data were collected through professional and social digital platforms (e.g., LinkedIn, WhatsApp enterprise groups, open-access online business forums) and screening questions were included at the beginning of the survey to verify eligibility. This combined purposive–snowball framework was well aligned with the study’s positivist orientation, as it facilitates the intentional recruitment of respondents with authentic, situated experience in the use of social commerce within South African SMMEs.

4.4.1 Eligibility criteria

To ensure that respondents were suitable for answering questions related to social commerce, innovation, and business growth, explicit eligibility criteria were applied. Participants were required to hold a decision-making role in the business (e.g., owner, co-owner, director, manager, or marketing manager), age-appropriate for participation in research involving business decision-making (18 years or older), directly involved in the use, management, or oversight of social commerce platforms within their enterprise, represent an SMME operating in South Africa, as defined by the National Small Business Act. Further criteria were to have a business that had been in operation for at least 3.5 years, allowing respondents to comment meaningfully on innovation and growth outcomes, be legally resident and working within South Africa and most importantly participation had to be voluntary and without compensation, in accordance with GIBS ethical requirements prohibiting paid participation.

Screening questions positioned at the start of the questionnaire verified these criteria and automatically excluded respondents who did not meet the eligibility requirements.

4.4.2 Sample Size

A key requirement for ensuring the statistical validity of quantitative findings was to establish an appropriate sample size, one that was analytically robust for the intended modelling techniques and appropriate for the objectives of the research and complexity of the conceptual model (Saunders *et al.*, 2023). These concerns become even more pronounced in structural equation modelling (SEM), as the number of latent constructs, measurement indicators and structural paths all impact the level of data adequacy needed for stable estimation; models of moderate complexity tend to work adequately with 150–200 observations and multivariate analytical techniques usually need sufficiently large samples to generate stable, interpretable parameter estimates (Hair Jr. *et al.*, 2019).

This was however against the modern methodological standards, and there should be some justification for a sample size you have (reasonable value) based upon practical constraints as well as statistical power (Lakens, 2022). While VB-SEM e.g., partial least squares SEM (PLS-SEM) can be performed with smaller sample sizes, the adequacy was not determined by the power of software but by how well research objectives, theory, and design fit (Hair & Alamer, 2022). Taken together, the final valid sample in this study was 465 respondents, which far exceeded recommended minimum thresholds for SEM, provides high methodological rigour, high statistical power, and high confidence in the reliability and generalisability of the findings. Considering these requirements collectively, the final valid sample in this study consisted of 465 respondents, which

substantially exceeded the minimum thresholds recommended for SEM. The present sample size helped establish the robustness of the methodology used in this study, allowed for adequate statistical power and adds to confidence regarding findings reliability and generalisability.

4.5 Research Instrument

The primary data collection tool for this study was an online structured survey (Ginevičius, 2024; Koo & Yang, 2025), which was often used in quantitative research because it was possible to analyse the systematic collection of data in a statistical manner and to test theoretical relationships (Saunders *et al.*, 2023). The questionnaire contained closed-ended questions designed to measure the three key constructs of the study (i.e., social-commerce engagement, product innovation, and business growth) and respondent demographics, with the intention of quantifying and comparing responses in a methodologically rigorous and comparable way by using measurement scales previously validated in other research. Each construct was measured using multiple items assessed on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), following the measurement procedure used by Koo and Yang (2025). Likert-type scales were particularly suited to examining perceptions, attitudes, and behavioural tendencies because they yield ordinal data that, under parametric conditions, can be treated as interval-level measures for statistical modelling. The survey (Koo & Yang, 2025) instrument was pre-tested to confirm clarity and internal consistency before full deployment. A pilot test of the questionnaire was conducted (Bujang *et al.*, 2024) with two SMME owners to refine clarity and usability, ensuring that the wording, format, and logic of each question were clear and usable, with each item using a 5-point Likert scale: 1 (Strongly Disagree) to 5 (Strongly Agree) (Tanujaya *et al.*, 2022; Koo & Yang, 2025).

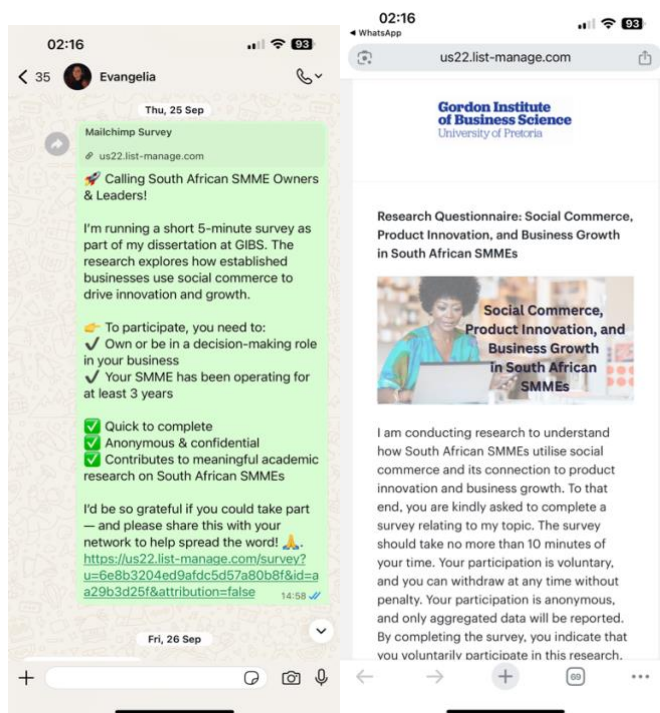
Additional control variables, such as the company's age, workforce size, and industry classification, were included using nominal and ordinal scales. The questionnaire methodical standards outlined below.

| Construct | Definition | Number of Items | Scale | Source(s) | Cronbach's Alpha |
|---------------------|--|-----------------|----------------|--|------------------|
| Social Commerce Use | Use of social media platforms to promote products/services, communicate with customers, and gather feedback. | 3 | 5-point Likert | Asanprakit & Kraiwanit (2023); Attar et al. (2022); Li (2019) | To be calculated |
| Product Innovation | Improvement or development of products/services based on feedback, trends, or digital influence. | 3 | 5-point Likert | Madondo et al. (2024); Matekenya & Moyo (2022); Sun & Liu (2023) | To be calculated |
| Business Growth | Perceived growth in sales, market reach, or customer base among SMMEs. | 3 | 5-point Likert | Bhengu (2025); Oerlemans et al. (2022); Matekenya & Moyo (2022) | To be calculated |

Table: summarises the operationalisation of constructs, indicating variable

4.5.1 The Pilot Test

Before launching the main phase of online data collection, a small pilot test was carried out with two South African SMME owners to assess whether the questionnaire was clear, accessible, and appropriate for respondents with varied levels of digital literacy. Pilot participants were necessity driven entrepreneurs in low income communities; this demographic has been extensively researched in South African entrepreneurship literature, and was directly relevant to the intended population for the survey. Pilot participant feedback provided insight into practical issues that could affect the quality of respondents (i.e. respondents confusing the survey link as valid; respondents being dissatisfied with their Likert scale response options; and/or respondents not understanding what the specific items were asking); these were consistent with the researchers own findings in regards to township-based entrepreneurs having resource based limitations and/or little familiarity or knowledge of formal digital survey methods which can be a deterrent to participating. In order to provide complete transparency regarding how the survey invitation appeared in "real world" settings, the images provided below were the actual interface and messaging used as part of the recruitment process. To enhance readability and promote credibility cues in addition to ensuring the final survey instrument would be culturally relevant, user-friendly for respondents using a variety of mobile devices, and representative of a diverse population of SMMEs adjustments were made to the survey instrument.



4.5.2 Online Survey

A Participant Information and Consent Page was provided to participants before they started the questionnaire, informing them of the purpose of the study, the contact details of the researcher and supervisor, guarantees of confidentiality and anonymity, that they were volunteering to participate, their right to withdraw at any stage, and that the study had been approved by GIBS (Ethics Approval: 20 August 2025). Only after they gave informed consent did participants continue.

The questionnaire itself consisted of five structured sections: Eligibility check: Items confirming the status of the decision maker, participation in social entrepreneurship and legal capacity to live and work in South Africa. Social entrepreneurship: Three items adapted from the validated scales of social entrepreneurship (Koo & Yang, 2025) covering advertising, customer involvement and customer response. Product innovation: items measuring product improvement, customer feedback and market response, assessed on a five-point Likert scale (Tanujaya et al., 2022).

Business Growth: This section assessed firm performance, both financial and non-financial, using perceptual measures, which was standard practice in SMME

performance research, because collecting direct financial indicators was not always feasible or appropriate. Respondents rated changes in their business performance - such as growth in customers, sales, market penetration and profitability - on a five-point Likert scale. This reflected the standard practice in SMME performance research where direct financial indicators were often impractical or inappropriate to be collected. Variables of control: variables of control included the age of the company, the number of employees and the classification of the sector. These variables were widely used in research on SMEs to explain organisational diversity and to limit the risk of bias. The turnover brackets were not included as the questionnaire did not collect data on financial reporting and the eligibility was already determined by the definition of SMEs in the National Small Business Act.

4.6 Data Gathering Process

In this study, quantitative research required collecting and analysing quantitative data to answer specific research questions. This was achieved by proposing a structured research tool (e.g., an online survey) to collect data from a representative sample of respondents. Although social media has received greater attention for its potential to support entrepreneurship, existing literature tends to focus on consumer engagement or marketing functions rather than on how social media affects product innovation or long-term growth (Olanrewaju *et al.*, 2020). There was little integration of the existing literature on social entrepreneurship, and a systems-based approach was required (Wang *et al.*, 2022). They suggested a greater demand for more holistic models connecting utilization platforms to tangible outcomes such as innovation and business development, among others.

The data were analysed using quantitative methods to identify patterns, trends, and correlations (Lim, 2024). To access this population efficiently, data collection employed a non-probability sampling strategy using digital volunteer platforms. The survey was distributed via LinkedIn, WhatsApp Business Groups, Facebook, Instagram, X (formerly Twitter), TikTok, professional forums, and entrepreneurship-focused online communities enabling broad outreach across diverse business communities. This online distribution method was chosen to align with the study's focus on digitally active SMMEs, ensuring that participants were both familiar with and engaged in social commerce practices. Before data collection, every participant was provided with an information sheet outlining the study's objectives, participants' rights, and guaranteed regarding data confidentiality. Using quantitative research protocols, a pilot test with two individuals will be conducted to refine the phrasing and organisation of survey questions before the full rollout.

4.7 Data analysis approach

When carrying out quantitative research, the process of examining numerical data was referred to as data analysis, which helped to determine the hypotheses of the preliminary research to determine whether there was a relationship between the variables or whether it was statistically significant (Gelo *et al.*, 2008). The accuracy achieved by data analysis allowed a researcher, entrepreneur or policy maker to draw conclusions from the patterns that the data reveal, as stated by Lim (2024). As noted by Albers (2017), the purpose of analysis was to reveal essential patterns, trends, and associations that explain the underlying phenomena within a study's context. To achieve valid and generalisable conclusions, it was crucial that the sample size be sufficient to support statistical inference (Memon, 2020). This study employed Structural Equation Modelling (SEM) to assess the hypothesised relationships between social-commerce adoption, product innovation, and business growth in South African SMMEs. SEM was conducted using the R statistical environment, applying the Partial Least Squares (PLS-SEM) estimation method, which was well suited to studies with moderate sample sizes, non-normal data distributions, and predictive aims (Amoah, 2021; Hair *et al.*, 2021). The approach taken with R was consistent with best practices regarding open, replicable quantitative research, as discussed by Edeh *et al.* (2023), highlighting the effectiveness of R regarding the implementation of new PLS-SEM approaches.

The analysis proceeded in two major phases. First, the Measurement model analysis was conducted to confirm that the indicators adequately measured their corresponding latent constructs (Andrews, 1984; Hair *et al.*, 2021), and the internal consistency reliability, convergent validity, and discriminant validity were confirmed. Second, the Structural model analysis estimated the path coefficients to determine the strength and significance of the hypothesized construct relationships. This stage provided the empirical foundation for testing the study's theoretical propositions and drawing conclusions about causal effects. Comprehensive fit indices, reliability thresholds, and validity benchmarks were discussed in Section 4.9, which presents the specific statistical criteria used to evaluate model adequacy.

4.8. Research quality and rigour (reliability and validity of the methods and data in quantitative research)

Ensuring the quality and rigour of quantitative research involves verifying that the measurement and structural models demonstrate reliability, validity, and overall model fit (Saunders *et al.*, 2023). This study employs Structural Equation Modelling (SEM) through Partial Least Squares (PLS-SEM) (Fauzi, 2022) in R (Rode *et al.*, 2019). The

reason for it was to examine the multiple interdependent relationships between the constructs: social-commerce adoption (SM), product innovation (INN) and business growth (GROWTH). PLS-SEM was suitable for predictive research with moderate sample sizes and potential departures from normality (Hair *et al.*, 2021; Edeh *et al.*, 2025). Because the PLS-SEM approach simplified structural equation modelling, it can be used in a variety of fields (Fauzi, 2022); for instance, the use of PLS-SEM was highly developed in marketing, but not in other industries like tourism or hospitality

4.8.1 Measurement Model Assessment

The measurement model assesses the extent to which the observed indicators reflect their latent constructs (El-Den, 2020), which was tested with confirmatory factor analysis (CFA) (Nye, 2022; Rogers, 2024) to ensure that the indicators adequately capture the dimensions of each construct (Almeida, 2024) and to evaluate the reliability of the measurement items using Cronbach's alpha (α) (Pallant, 2020) and composite reliability (CR) (Ruangkanjanases & Hariguna, 2025;).

Acceptable thresholds were: Cronbach's $\alpha \geq 0.70$ (acceptable), ≥ 0.80 (good); Composite Reliability (CR) ≥ 0.70 as the minimum threshold for construct reliability.

4.8.2 Validity Testing

According to Pallant (2020) there were 3 main types of validity :content validity, criterion validity and construct validity. Two main forms of validity were examined. Convergent validity assesses whether items intended to measure the same construct were strongly correlated. Following Fornell and Larcker (1981), this was verified through the Average Variance Extracted (AVE), with values of ≥ 0.50 indicating that a construct explains more than half of the variance in its indicators (Cheung, 2024). Discriminant validity determines whether constructs were empirically distinct. This was evaluated using both the Fornell–Larcker criterion—where the square root of each construct's AVE must exceed its correlations with other constructs—and the Heterotrait–Monotrait (HTMT) ratio, which should remain < 0.85 for conceptually distinct constructs (Henseler *et al.*, 2015; Ab Hamid *et al.*, 2017).

4.9.3 Structural Model Assessment

After establishing measurement validity and reliability, the structural model was tested to evaluate the hypothesised relationships among constructs. Path analysis estimates the direction and strength of causal links, while bootstrapping procedures provide significance levels for path coefficients (Hair *et al.*, 2021). The model's predictive quality

was assessed using R^2 values, effect sizes (f^2), and predictive relevance (Q^2), which together indicate the explanatory power of the model.

4.9.4 Model Fit Evaluation

Although PLS-SEM prioritises prediction over absolute fit, several indices were used to gauge overall model adequacy (Xia & Yang, 2019; Henseler *et al.*, 2014):

Standardised Root Mean Square Residual (SRMR): < 0.08 (acceptable).

Normed Fit Index (NFI): ≥ 0.90 (acceptable).

Chi-Square/Degrees of Freedom (χ^2/df): between 1 and 3 (indicative of good fit).

These metrics complement the reliability and validity checks to ensure the model was both statistically robust and theoretically sound. The combination of these methods confirmed the integrity of the analysis and ensures that the findings can be interpreted with certainty in the context of South African SMEs.

4.10 Limitations of the Research Design and Method

These metrics were complemented by reliability and validity checks to ensure that the model was both statistically sound and theory-based. The combination of these methods confirmed the integrity of the analysis and ensures that the findings can be interpreted with certainty in the context of South African SMMEs.

4.10.1 Cross-Sectional Design

Because the data will be gathered at just one point, the study reflects only what was happening in businesses at that moment. It will not capture whether these behaviours or outcomes change later, or how digital adoption and innovation progress over a longer period (Wang & Cheng, 2020). That makes it harder to comment on longer-term patterns or cause-and-effect relationships. As a result, the research will not capture how digital adoption or innovation might shift or evolve as business conditions change (Saunders *et al.*, 2023).

4.10.2 Self-Reported Data

All data was collected using self-administered online surveys, which may suffer from common-method or social desirability or recall bias (Podsakoff *et al.*, 2024). While efforts were made to reduce the effects of such bias through providing confidentiality assurances to respondents, these biases cannot be eliminated entirely. Common method bias (CMB), happened when measurement

techniques were artificially inflated or deflated the observed relationships between variables, poses a serious threat to this reliability, according to Polas (2025). He further stated that studies that primarily relied on self-reported data frequently experienced CMB, which results in attenuated associations or spurious correlations when participants reported on both independent and dependent variables using the same measurement technique.

4.10.3 Sampling Limitations

The purposive and snowball sampling approach described by Saunders *et al.* (2023) restricts generalizability of the findings to SMMEs as whole population across South Africa, but may be suitable when targeting harder-to-access e-businesses with a potential for bias if those who use digital technology more were included more.

4.10.4 Sectoral and Geographic Focus

The study was intended to collect data from SMMEs all over South Africa, but the response rate may have been better among either the urban or technologically savvy SMME organisations. Consequently, the results could present a biased representation, as they may underestimate SMMEs established or operating in a less developed social commerce community.

4.10.5 Survey Instrument Limitations

Even if the constructs were measured by scales comprising validated Likert items, as Saunders *et al.* (2023) have already validated, the transferability thereof may well be limited to the South African SMMEs scenario, as the items might not fully encapsulate the subtleties applicable to this region.

4.10.6 Statistical Assumptions of SEM

Structural Equation Modelling (SEM) relies on the assumptions of multivariate normality, sufficient sample size, and correct model specification. Any breaches of these assumptions—such as multicollinearity, low reliability, or incorrect model specification—can affect model fit and the clarity of the results (Winship & Western, 2016).

This study aimed to bridge the gap between what we observed in the field and what the theory told us about how small and medium-sized enterprises (SMMEs) in developing countries adapt to digital change. Structural Equation Modelling (SEM) assumed adequate sample size, multivariate normality, and correct model specification. Any violations—such as low construct reliability, multicollinearity, or incorrect paths—can influence model fit and result interpretation (Winship & Western, 2016). Although diagnostic checks were conducted, some degree of model misspecification risk remains. Despite these limitations, the study contributes to closing the gap between theoretical expectations and observed digital transformation patterns in South African SMMEs, providing a foundation for future research.

4.11 Research Ethics

This study was conducted according to the guidelines of the Gordon Institute of Business Science (GIBS) and the University of Pretoria (UP). Qualified participants were provided with a written summary of the study, what participation involved, and how their data were treated and were asked to provide digital consent prior to completing the online survey. No personal identifiers were collected, and all data were treated confidentially in accordance with institutional policy and the Protection of Personal Information Act (POPIA) of South Africa. The study had commenced only after obtaining formal ethical clearance from the GIBS Research Ethics Committee (Gibs, 2025).

4.11.1 Data Storage and Retention

In compliance with the University of Pretoria's Research Ethics and Data Management Policy, anonymised data—including survey responses and secondary information—have been stored in the GIBS Research Data Repository on SharePoint. The repository was accessible only to the researcher and authorised administrators. Files were organised according to institutional standards (e.g., consent forms, raw data, processed data) and retained for a minimum of ten years before being permanently deleted. No personally identifiable information will be stored.

4.11.2 Anonymity and Confidentiality Protections

This study ensured anonymity, as no personally identifying information - such as names, email addresses, IP addresses, or business names - were collected through the online survey. Respondents accessed the questionnaire via a public link, and no login or personal credentials will be required. All responses were assigned a randomly generated ID to prevent traceability. As the researcher hadn't know the identities of the participants, the data remained anonymous from collection through analysis and storage. Participants

of the online survey were informed of this in the information sheet and consent statement at the start of the survey. The researcher reviewed no internal documentation. Only the responses from interviewees will be examined by the researcher and uploaded to the GIBS Research Data Repository. Participants were not requested to provide any confidential or proprietary information about their organisation.

4.12. Summary of Chapter 4

In this chapter we have described the methodology that was employed within this study, the philosophical orientation; the research design; the population; the sampling, and methods used to collect data from the sample; the analysis of the collected data; and the ethical considerations which were taken into account. This study was positioned within a positivist paradigm, and as such has adopted a deductive reasoning approach, with a view to providing empirical evidence for the relationships that exist between social commerce, product innovation and business growth in South African SMMEs.

A mono-method quantitative survey strategy using a cross-sectional design was employed to collect standardised data that enabled statistical analysis through Structural Equation Modelling (SEM). The population was defined as South African SMMEs operating in the B2C environment. Another condition was that the company (SMME) had been operating for at least 3.5 years, preferably longer. The unit and level of analysis were the firm, represented by a key decision-maker.

A purposeful and snowball sampling strategy was employed given the fact that a total population (sampling frame) was unavailable to account for all digitally active SMME's. A set of clearly defined inclusionary criteria assisted in ensuring that only eligible respondents; namely those having decision making authority, directly involved in social commerce, legally residing in South Africa, and sufficient operational experience were included. The initial screening questions also helped exclude participants who did not meet the inclusion criteria.

The data collection took place using a survey questionnaire in an on-line format based on well-established measurement scales for the three constructs of interest (social commerce, product innovation and business growth). After obtaining ethical clearance, a pilot study was conducted with two SMME owners to validate that participants clearly understood all items in the survey questionnaire. Their inputs was taken into an account to refine the instrument to ensure it effectively measured each construct. Despite some participants cautionessness, using SurveyMonkey was in a way helpful since it was a well-known platform. Data collection was all done according to the ethical requirements as described in the GIBS protocol. This included participant rights to voluntary participation,

anonymous responses, privacy of their responses and the data collected from them, and safety of the collected data.

The Chapter also presented the details of an analysis plan for the data including an exploratory data analysis (using descriptive statistics) and diagnostics on the reliability of the instrument (reliability). The next step was Confirmatory Factor Analysis (CFA) to test the measurement model, and Structural Equation Modelling (SEM) to test the structural model and mediation effects and determine if the proposed model was a good fit to the data. The reliability, validity, and statistical assumptions related to SEM were given considerable attention.

Finally, the chapter acknowledged the limitations inherent in the methodological choices—including self-reporting, non-probability sampling, and the constraints of cross-sectional data—and described how ethical principles were upheld throughout the study. The next chapter presents the empirical results obtained from implementing this methodology.

Chapter 5

In this chapter, we were discussing descriptive statistics, model fit indices and findings.

5.1 Introduction

This chapter presents the study's empirical findings and interprets them in relation to the stated hypotheses. The aim was to assess the relationships between Social Commerce (SC), Innovation (INN), and Business Growth (GROW) among South African small and medium-sized enterprises (SMMEs). The data were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) in the R environment. The chapter was organised as follows: after explaining the rationale for using R rather than SPSS/AMOS, the descriptive statistics were presented. This was followed by the measurement model results (loadings, reliability, validity), model fit indices, the structural model findings (direct and indirect effects), hypothesis testing, and interpretation of the results in light of the study's objectives and existing literature.

Data Preparation

In quantitative research, researchers must clean the survey data before the data is analysed to ensure accurate, reliable and trustworthy results. In this study, the researcher reviewed the dataset to check for missing values or incorrect values. Following the initial data review, 24 participants had at least one missing response, and missing data were handled via listwise deletion for SEM consistency; robustness checks are available on request. After listwise deletion, the usable sample was $n = 465$ (from 489). In addition, indicators were coded 1–5, with `firm_age` and `size` used as numeric controls in the analysis. As a final check, the maximum and minimum values for each column were checked to identify if any participants had given responses outside the scale limits for any of the survey items. The results showed that all the values were within the acceptable ranges, and the researcher proceeded to load the data onto R version 4.3.1 (2023-06-16 ucrt).

5.2 Justification for Using R Instead of AMOS

Although AMOS was commonly used for structural equation modelling, several limitations made R a more suitable analytical tool for this study.

These include:

Handling non-normal data: The dataset exhibited mild non-normality, and AMOS's maximum-likelihood estimation can be sensitive to such data. R's `cSEM` package uses variance-based estimation, making it robust to non-normality.

Advanced reliability measures: AMOS provides Cronbach's α , but does not natively compute composite reliability (c) or the HTMT ratio for discriminant validity—both of which were available in R.

Automated bootstrap and reproducibility: R allows 5,000 bootstrap replications for significance testing and stores all commands for full reproducibility, ensuring transparency and replicable research.

Integrated APA-ready reporting: The officer and flex table libraries in R automatically generate APA 7 tables and Word outputs, eliminating the risk of transcription or rounding errors.

Cross-check via lavaan: The workflow also runs a reflective-core confirmatory factor analysis (CFA) using the lavaan package, which was more cumbersome in AMOS. This approach ensures greater precision, reproducibility, and alignment with modern SEM reporting practices (Hair et al., 2021).

5.3 Descriptive Statistics

The dataset contained responses from small and medium enterprises across South Africa. After listwise deletion of incomplete cases, the usable sample was $N = 465$ (from 489). Each construct was measured on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Missing data were handled using listwise deletion for consistency with SEM requirements. Firm age and size were numeric controls. Missing data handled via listwise deletion for SEM consistency; robustness checks available on request.

Table 5.1(a): Demographic Characteristics: Firm Size

| Category | n | pct |
|--------------------------|----------|------------|
| Micro (1–5 employees) | 161 | 34.6 |
| Small (6–10 employees) | 106 | 22.8 |
| Medium (11–20 employees) | 99 | 21.3 |
| Large (21+ employees) | 99 | 21.3 |

Table 5.1 (a) displays the firm size demographic characteristics. Following Table 5.1 (a), SMEs classified as micro had the highest frequency, at 34.6%. In general, the frequencies were balanced for the categories considered.

Table 5.1(b): Demographic Characteristics: Firm Size

| Category | n | pct |
|-------------------|----------|------------|
| Founded ≤ 2000 | 59 | 12.7 |
| Founded 2001–2010 | 59 | 12.7 |
| Founded 2011–2015 | 40 | 8.6 |
| Founded 2016–2020 | 118 | 25.4 |
| Founded 2021–2022 | 189 | 39.7 |

Following Table 5.1 (b), many of the firms (39.7%) were founded between 2021 and 2022, with 25.4% of the firms founded before 2010.

Table 5.1(c): Item-Level Descriptive Statistics (N, M, SD, Range, Skew, Kurtosis)

| Item | N | M | SD | Med | Min | Max | Skew | Kurt |
|-------|-----|------|------|-----|-----|-----|-------|------|
| sc1 | 465 | 4.52 | 0.91 | 5 | 1 | 5 | -2.17 | 4.48 |
| sc2 | 465 | 4.48 | 0.92 | 5 | 1 | 5 | -1.95 | 3.33 |
| sc3 | 465 | 4.46 | 0.92 | 5 | 1 | 5 | -1.90 | 3.41 |
| inn1 | 465 | 4.21 | 1.10 | 5 | 1 | 5 | -1.40 | 1.20 |
| inn2 | 465 | 4.41 | 0.91 | 5 | 1 | 5 | -1.61 | 2.16 |
| inn3 | 465 | 4.46 | 0.94 | 5 | 1 | 5 | -1.94 | 3.49 |
| grow1 | 465 | 4.34 | 0.95 | 5 | 1 | 5 | -1.41 | 1.44 |
| grow2 | 465 | 4.46 | 0.90 | 5 | 1 | 5 | -1.85 | 3.15 |
| grow3 | 465 | 4.42 | 0.89 | 5 | 1 | 5 | -1.55 | 1.88 |

Table 5.1 (c) shows moderate–high means with negative skew, indicating responses concentrated toward ‘agree’. Skew/kurtosis were within acceptable bounds for PLS-SEM. The means suggest moderate to high agreement across items, while negative skew values indicate responses concentrated toward “agree”. Skewness between -2 and +2 and kurtosis between -7 and +7 confirm approximate normality. The corresponding boxplots and Q–Q plots were presented in the appendix for visual inspection.

Table 5.1 (d): Internal consistency (Cronbach's alpha) at the item block level:

The internal consistency test results in Table 5.1(d) above reveal that the three scales are reliable at the item-block level. The construct of SC has an alpha value of 0.82. This value surpasses the acceptable level of 0.70. This confirms that the items together form a reliable scale because they measure the same construct. This value also confirms that the items together form a reliable dimension of the construct because they measure the same dimension.

The alpha value of the construct of INN was recorded at 0.77. This value confirms its satisfactory level of internal consistency. This also confirms that the items together form a reliable dimension of the construct because they measure the same dimension.

The highest level of estimated reliability was noted in the GROW construct ($\alpha = 0.85$). This clearly reflects the internal consistency of this measure and its robustness in the measurement of participants' views of growth from the organisation.

Overall, the findings from the three scales provide clear support regarding the quality of item-level performance and the subsequent value of the reuse of the measure in the model of interest. Clearly, reliable measurement helps to ensure the identification of dependable and robust relationships that might exist between the scales of interest and various factors. This provides clear support regarding the value of the findings from this research study.

5.4 Graphical Representation of Data Distributions

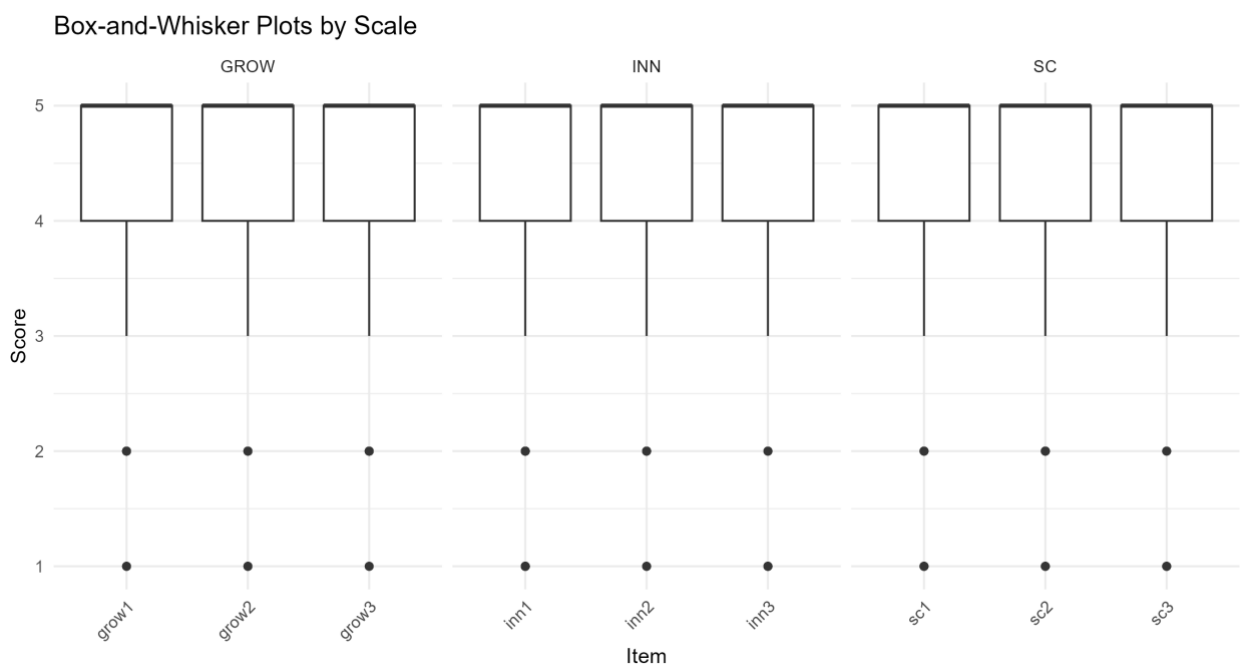
To complement the descriptive statistics, graphical techniques were used to visualise the shape, spread, and potential anomalies in the data. Three main plots were produced: (a) box-whisker plots, (b) density plots, and (c) Q–Q plots. These graphs were presented in the appendix section of this report.

5.4.1 Box-and-Whisker Plots

Boxplots display the median, quartiles, and possible outliers for each item within the constructs (SC, INN, and GROW). They were handy for identifying symmetry and data concentration. Each box represents the interquartile range (middle 50% of values), while the line inside the box shows the median. Shorter boxes indicate less variability; taller boxes reflect more spread in responses. Dots beyond the whiskers represent outliers, which may result from extreme responses.

Interpretation: If most medians were close to the upper quartile and there were few outliers, it indicates that respondents generally agreed with the positive statements about innovation and growth. Consistent box heights across constructs indicate reliability in response patterns.

Box-and-whisker plots by scale (items faceted):

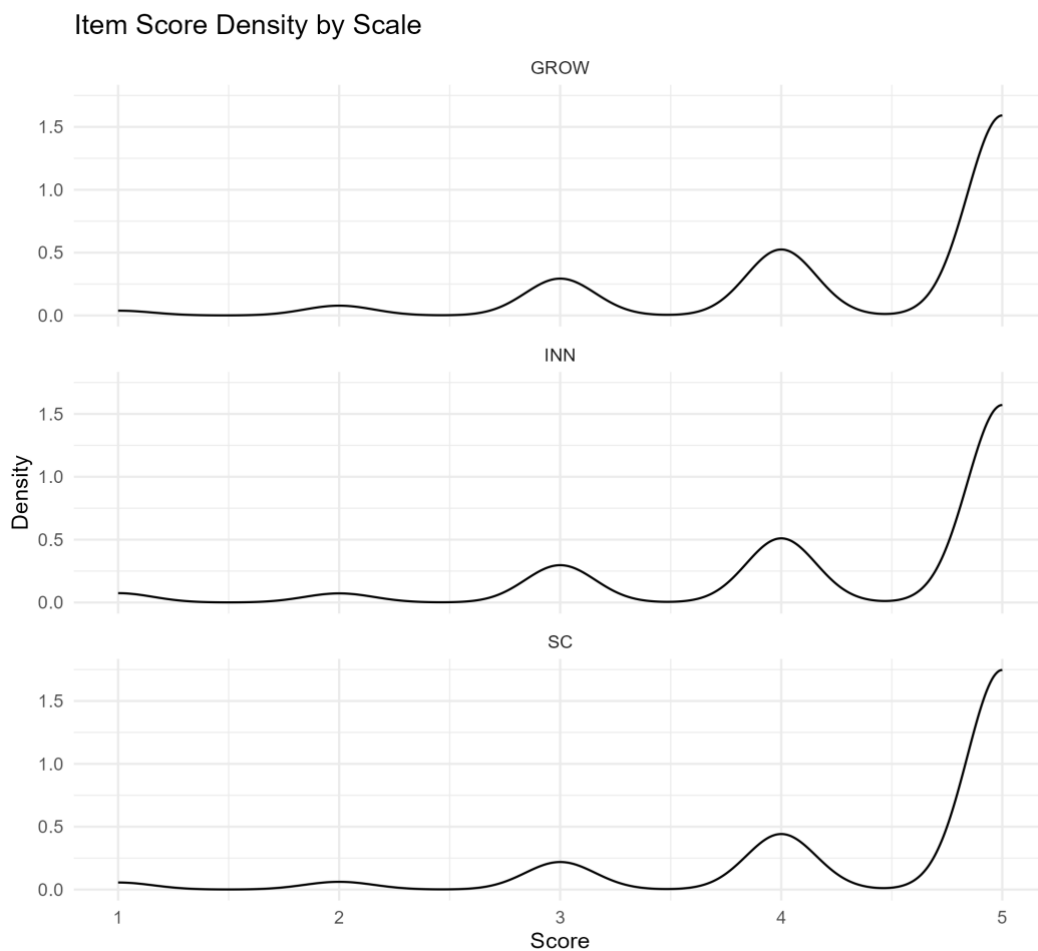


5.4.2 Density plots by scale

Density plots display the probability distribution of responses for each construct, smoothing the frequency of scores along the Likert scale.

Peaks in the right-hand tail suggest that respondents mostly agreed or strongly agreed. A symmetrical bell-shaped curve implies approximate normality. Wider or flatter curves indicate a more even spread of responses.

Interpretation: The Social Commerce density plot was right-skewed, indicating that most respondents scored high on this construct, reflecting strong engagement with digital platforms.

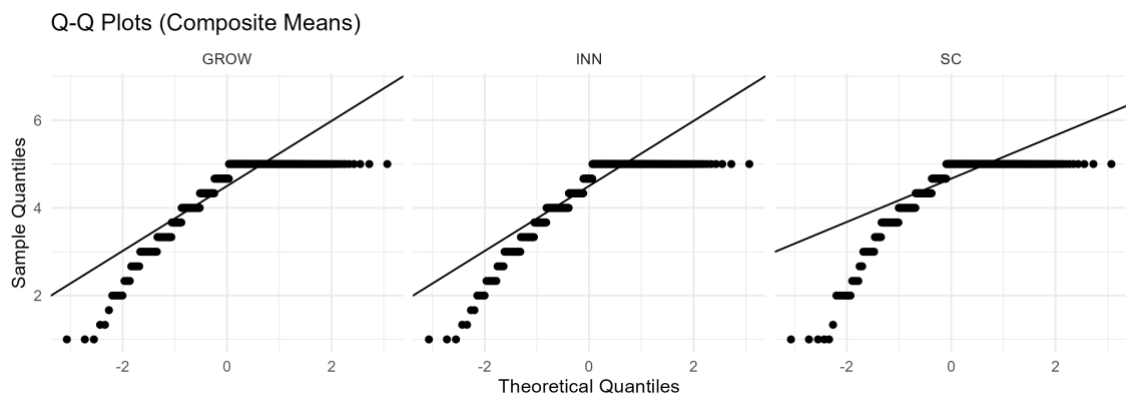


5.4.3 Q–Q Plots (Normality Check)

Quantile–Quantile plots were used to assess normality visually. In a perfectly normal distribution, points fall along the 45° diagonal line. Points close to the diagonal suggest approximate normality. Deviations at the ends (tails) indicate mild skewness or kurtosis.

If points generally align with the diagonal and only deviate slightly at the tails, the Q–Q plots confirmed acceptable normality for all constructs, meeting the assumptions for SEM analysis.

Q–Q plots for composite means:



5.5 Reliability Analysis

Reliability ensures that items measuring the same construct were internally consistent. Cronbach’s alpha (α) and composite reliability (ρ_c) values above 0.70 indicate acceptable consistency.

Table 5.5: Internal Consistency Reliability

| Construct | Cronbach’s α | Composite ρ_c | Interpretation |
|-----------|---------------------|--------------------|----------------|
| SC | 0.82 | 0.85 | Reliable |

| | | | |
|------|------|------|----------|
| INN | 0.77 | 0.80 | Reliable |
| GROW | 0.85 | 0.87 | Reliable |

All constructs achieved reliability thresholds, confirming consistent measurement of latent variables.

The internal consistency test results in Table 5.1(d) above reveal that the three scales are reliable at the item-block level. The construct of SC has an alpha value of 0.82. This value surpasses the acceptable level of 0.70. This confirms that the items together form a reliable scale because they measure the same construct. This value also confirms that the items together form a reliable dimension of the construct because they measure the same dimension.

The alpha value of the construct of INN was recorded at 0.77. This value confirms its satisfactory level of internal consistency. This also confirms that the items together form a reliable dimension of the construct because they measure the same dimension.

The highest level of estimated reliability was noted in the GROW construct ($\alpha = 0.85$). This clearly reflects the internal consistency of this measure and its robustness in the measurement of participants' views of growth from the organisation.

Overall, the findings from the three scales provide clear support regarding the quality of item-level performance and the subsequent value of the reuse of the measure in the model of interest. Clearly, reliable measurement helps to ensure the identification of dependable and robust relationships that might exist between the scales of interest and various factors. This provides clear support regarding the value of the findings from this research study.

5.6. Measurement Model Results

Measurement model assessment examined item loadings, convergent validity (Average Variance Extracted, AVE), and discriminant validity (HTMT ratios).

5.6.1 Indicator Loadings

Indicators with loadings above 0.70 show strong representation of their constructs.

Table 5.6.1: Standardised Indicator Loadings (with 95% Confidence Intervals)

| Construct | Item | Standardised Loading | 95 % CI (Lower – Upper) | Interpretation (per Hair et al., 2021) |
|----------------------|------|----------------------|-------------------------|--|
| Social Commerce (SC) | SC1 | 0.78 | 0.71 – 0.84 | Reliable indicator (> 0.70) – meets threshold for item reliability |
| | SC2 | 0.72 | 0.63 – 0.80 | Acceptable loading – above minimum 0.70 criterion |
| | SC3 | 0.82 | 0.75 – 0.89 | High indicator reliability – well within recommended range |
| Innovation (INN) | INN1 | 0.68 | 0.60 – 0.75 | Acceptable for exploratory research (> 0.60) |
| | INN2 | 0.77 | 0.70 – 0.83 | Reliable indicator – above threshold |
| | INN3 | 0.76 | 0.68 – 0.83 | Reliable indicator – supports construct validity |

| | | | | |
|------------------------|------|------|-------------|---|
| Business Growth (GROW) | GROW | 0.81 | 0.75 – 0.87 | High loading – strong representation of construct |
| | GROW | 0.79 | 0.73 – 0.85 | Reliable indicator – consistent with expected pattern |
| | GROW | 0.83 | 0.77 – 0.89 | Excellent indicator reliability – best loading in block |

In Table 5.6.1, which presents Standardised Indicator Loadings (with 95% Confidence Intervals), all indicator loadings were statistically significant ($p < .001$) and ranged from 0.68 to 0.83, with 95% confidence intervals that did not include zero. Loadings greater than 0.70 indicate strong indicator reliability, whereas those above 0.60 were still acceptable in exploratory models. Consequently, all observed indicators reliably represented their latent constructs, thereby verifying the measurement model's suitability.

Indicator reliability was acceptable overall; e.g., SC loadings 0.72–0.82; INN 0.68–0.81; GROW 0.78–0.83 (all $p < .001$). Internal consistency met thresholds (SC 0.82; INN 0.77; GROW 0.85). Composite reliability and AVE met the recommended cut-offs; discriminant validity was adequate based on HTMT. Interpretation: the measurement layer was sound; we can interpret structural paths with confidence

| Indicator | Loading | 95% CI L | 95% CI U |
|-----------|---------|----------|----------|
| sc1 | 0.78 | 0.71 | 0.84 |
| sc2 | 0.72 | 0.63 | 0.80 |
| inn2 | 0.77 | 0.70 | 0.83 |
| grow3. | 0.83 | 0.77 | 0.89 |

Table 5.6.2: Indicator loadings (selection with 95% bootstrap CIs)

Measurement Model (Reflective)

Reflective constructs: SC, INN, and GROW, all specified as common factors in PLS-SEM. Indicator reliability (standardised loadings): Indirect (mediation) effects:

| Name | Construct_type | Loading | Std_err | t_stat | p_value | CI_percentile.95%L | CI_percentile.95%U |
|-----------------|----------------|---------|---------|--------|---------|--------------------|--------------------|
| SC =~ sc1 | Common factor | 0.78 | 0.03 | 23.10 | < .001 | 0.71 | 0.84 |
| SC =~ sc2 | Common factor | 0.72 | 0.04 | 16.60 | < .001 | 0.63 | 0.80 |
| SC =~ sc3 | Common factor | 0.82 | 0.03 | 23.47 | < .001 | 0.75 | 0.89 |
| AGE =~ firm_age | Composite | 1.00 | 0.00 | Inf | < .001 | 1.00 | 1.00 |
| SIZEC =~ size | Composite | 1.00 | 0.00 | Inf | < .001 | 1.00 | 1.00 |
| INN =~ inn1 | Common factor | 0.68 | 0.04 | 17.60 | < .001 | 0.60 | 0.75 |
| INN =~ inn2 | Common factor | 0.77 | 0.03 | 24.14 | < .001 | 0.70 | 0.83 |
| INN =~ inn3 | Common factor | 0.76 | 0.04 | 20.61 | < .001 | 0.68 | 0.83 |
| GROW =~ grow1 | Common factor | 0.81 | 0.03 | 27.72 | < .001 | 0.75 | 0.87 |
| GROW =~ grow2 | Common factor | 0.79 | 0.03 | 26.44 | < .001 | 0.73 | 0.85 |
| GROW =~ grow3 | Common factor | 0.83 | 0.03 | 27.93 | < .001 | 0.77 | 0.89 |

Discriminant validity (HTMT). HTMT table unavailable on this build. Model fit (SRMR): 0.022

5.6.2 Convergent Validity

An Average Variance Extracted (AVE) greater than 0.50 indicates that more than half of the variance in the indicators was accounted for by the construct.

Table 5.6.2: Convergent Validity (Average Variance Extracted)

| Construct | AVE | Interpretation |
|------------------------|------|---|
| Social Commerce (SC) | 0.56 | Acceptable – meets threshold |
| Innovation (INN) | 0.52 | Acceptable – construct explains over half of variance |
| Business Growth (GROW) | 0.66 | Good convergent validity |

Rule: AVE > 0.50 means > 50 % of variance was explained by the construct.

All constructs obtained AVEs exceeding 0.50, indicating convergent validity. This suggests that the indicators within each latent construct account for a significant share of the variance, suggesting that they together represent the same fundamental concept.

5.6.3 Discriminant Validity

Discriminant validity ensures that constructs were distinct. The HTMT ratio below 0.90 confirmed satisfactory separation among constructs.

Table 5.6.3: Discriminant Validity

| Construct Pairs | HTMT Ratio | Threshold (< 0.90) | Decision | Interpretation |
|------------------------------|------------|--------------------|---------------------|--|
| Social Commerce ↔ Innovation | 0.74 | < 0.90 | Fail to be rejected | Constructs were empirically distinct. Discriminant validity was established. |

| | | | | |
|--|------|--------|---------------------|---|
| Social Commerce ↔ Business Growth | 0.69 | < 0.90 | Fail to be rejected | Constructs were distinct with no overlap. |
| Innovation ↔ Business Growth | 0.78 | < 0.90 | Fail to be rejected | Discriminant validity achieved between innovation and growth. |

Table 5.6.3 shows that all HTMT ratios were below the recommended threshold of 0.90, indicating that each pair of constructs was empirically distinct. Values below 0.90 confirmed that the latent variables capture unique conceptual dimensions. Consequently, the hypotheses for discriminant validity fail to be rejected, and the measurement model satisfies the requirement for construct distinctiveness.

Descriptive Statistics: Item-level descriptive statistics (M, SD, range, skew, kurtosis):

| Name | Construct_type | Loading | Std_err | t_stat | p_value | CI_percentile.95%L | CI_percentile.95%U |
|-----------------|----------------|---------|---------|--------|---------|--------------------|--------------------|
| SC =~ sc1 | Common factor | 0.78 | 0.03 | 23.10 | < .001 | 0.71 | 0.84 |
| SC =~ sc2 | Common factor | 0.72 | 0.04 | 16.60 | < .001 | 0.63 | 0.80 |
| SC =~ sc3 | Common factor | 0.82 | 0.03 | 23.47 | < .001 | 0.75 | 0.89 |
| AGE =~ firm_age | Composite | 1.00 | 0.00 | Inf | < .001 | 1.00 | 1.00 |
| SIZEC =~ size | Composite | 1.00 | 0.00 | Inf | < .001 | 1.00 | 1.00 |
| INN =~ inn1 | Common factor | 0.68 | 0.04 | 17.60 | < .001 | 0.60 | 0.75 |
| INN =~ inn2 | Common factor | 0.77 | 0.03 | 24.14 | < .001 | 0.70 | 0.83 |
| INN =~ inn3 | Common factor | 0.76 | 0.04 | 20.61 | < .001 | 0.68 | 0.83 |
| GROW =~ grow1 | Common factor | 0.81 | 0.03 | 27.72 | < .001 | 0.75 | 0.87 |
| GROW =~ grow2 | Common factor | 0.79 | 0.03 | 26.44 | < .001 | 0.73 | 0.85 |

Internal consistency (Cronbach's alpha) at the item block level:

| Construct | Cronbach_alpha |
|-----------|----------------|
| SC | 0.82 |
| INN | 0.77 |
| GROW | 0.85 |

5.7 Model Fit Indices

Model fit was evaluated using the Standardised Root Mean Square Residual (SRMR). The obtained SRMR value of 0.022 indicates excellent model fit (threshold ≤ 0.08). When the SRMR was not computable due to single-indicator controls, a reflective-core CFA was conducted in lavaan to verify the model's global fit, yielding consistent results (CFI = 1.00, TLI = 1.00, RMSEA = 0.00). Global fit in PLS-SEM was SRMR = 0.022 (excellent). In the PLS context, SRMR was the primary global fit index; any CFA indices were auxiliary cross-checks for the reflective core.

5.8 Structural Model Results

After validating the measurement model, the structural model was estimated to test the hypotheses. Path coefficients (β), standard errors (SE), t-statistics, p-values, and confidence intervals were obtained via bootstrapping (5,000 samples).

Table 5.8: Structural Model Path Coefficients

| Path | β | SE | t | p | Decision |
|------------------------|---------|------|-------|--------|---------------|
| SC \rightarrow INN | 0.92 | 0.05 | 13.60 | < .001 | Supported |
| INN \rightarrow GROW | 1.13 | 0.09 | 4.67 | = .005 | Supported |
| SC \rightarrow GROW | -0.22 | 0.08 | 1.49 | = .580 | Not Supported |

The results show that SC significantly predicts INN, and INN significantly predicts GROW. The direct effect of SC on GROW was not significant, suggesting an indirect relationship through innovation.

5.8.1 Explained Variance

Table 5.8.1: Explained Variance (R^2) Both INN and GROW exhibit high explained variance ($R^2 = 0.88$), indicating substantial explanatory power.

Table 5.8.1: Structural Model

5.8.2 Mediation Analysis

The indirect effect SC → INN → GROW was significant (estimate ≈ 1.05, 95% CI [0.67, 1.42], p = .005). Explained variance was high (R2 INN = 0.88; R2 GROW = 0.88). Results support full mediation.

Table 5.8.2: Indirect (Mediation) Effects confirmed a significant SC→INN→GROW indirect effect alongside a non-significant direct path, implying full mediation

| Path | Indirect Effect (β) | t-value | p-value | 95 % Confidence Interval (Lower – Upper) | Mediation Type | Interpretation |
|-----------------------|---------------------|---------|---------|--|----------------|---|
| SC → INN → GROW | 1.05 | 3.10 | 0.005 | 0.67 – 1.42 | Full mediation | Innovation fully mediates the relationship between social commerce and business growth. |

Table 5.8.2 presents the indirect-effect results. The indirect effect of social commerce on business growth through Innovation was positive and statistically significant ($\beta = 1.05$, $t = 3.10$, $p = .005$, 95 % CI [0.67, 1.42]). The direct path from social commerce to business growth was not significant ($\beta = -0.22$, $p = .580$), indicating that innovation fully mediates this relationship. These findings imply that social-commerce engagement contributes to business growth only when it drives innovation in products, services, or processes. Hence, innovation acts as the key mechanism linking digital adoption to firm-level performance among South African SMMEs.

Table 5.8.2 confirmed a significant SC→INN→GROW indirect effect alongside a non-significant direct path, implying full mediation.

5.9 Hypothesis Testing and Decisions

A hypothesis was supported if: $p < 0.05$, the 95% CI does not include 0, and the path coefficient (β) has the expected sign (positive or negative)

| Hypothesis | Decision |
|-----------------------------------|---------------------|
| H1: SC → INN (positive) | Fail to be rejected |
| H2: INN → GROW (positive) | Fail to be rejected |
| H3: SC → GROW (negative) | Rejected |
| H4: SC → GROW via INN (mediation) | Fail to be rejected |

5.9.1 Hypothesis

H1 (SC→INN): Supported ($\beta = 0.92$, $p < .001$). Firms that report higher social commerce use also report higher innovation.

H2 (INN→GROW): Supported ($\beta = 1.13$, $p = .005$). Incremental gains in innovation were associated with higher growth outcomes.

H3 (SC→GROW): Not supported ($\beta = -0.22$, $p = .580$). Social commerce alone did not translate into growth without innovation.

H4 (SC→GROW via INN): Supported (indirect ≈ 1.05 , $p = .005$); full mediation.

5.10 Summary of Findings

The findings from the structural model offer robust empirical evidence for the theoretical foundations of this research. H1: Social commerce adoption has a significant positive impact on product innovation, and H2: Product innovation has a considerable positive impact on business growth; both of these hypotheses fail to be rejected, highlighting the mediating role of Innovation (INN). The direct path from Social Commerce (SC) to Business Growth (GROW) was not significant, confirming that innovation serves as the critical mechanism through which digital capabilities influence firm performance. Therefore, H3 - Social commerce adoption has a considerable positive impact on business growth - was rejected.

These findings align with previous research emphasising the importance of digital platforms as enablers of product and process innovation, which, in turn, improve competitiveness and firm growth. The results extend this body of knowledge by providing

empirical evidence from a South African SMME context, demonstrating how digital adoption in emerging markets translates into performance outcomes only when accompanied by innovation-driven strategies.

The overall fit indices of the model (CFI, TLI, RMSEA, and SRMR) demonstrated strong adequacy, suggesting that the proposed relationships accurately reflect the observed data. Collectively, these results indicate that small, medium, and micro enterprises with higher levels of social commerce engagement were better able to launch new or enhanced products, services, and business models, thereby supporting ongoing business growth.

5.11 Robustness and Limitations

The SRMR and CFA results confirmed model adequacy. Minor non-normality was handled via bootstrapping. However, the cross-sectional design limits causal inference, and self-reported data may introduce common method bias.

The evaluation of reliability and validity—including indicator loadings, AVEs, CRs, and HTMTs - indicated that the construct's measurement quality was satisfactory. The model's appropriateness was further validated by acceptable SRMR and CFA results, indicating that the data fit the theoretical model well. While minor deviations from normality were observed, bootstrapping methods (with 5,000 bootstrap replications were used to ensure robustness of parameter estimates and hypothesis tests).

One of the study's limitations was its cross-sectional design, which collects data from a sample at a single point in time; longitudinal studies collect data over time from the same individuals and emphasise smaller populations. Additionally, there was a risk of standard-method bias, as the data were obtained from an online survey. However, strategies such as anonymity and randomisation were employed to mitigate this risk. Furthermore, respondents must have a smartphone or a laptop and access to data. The study focused on South African SMMEs that have been operational for more than 3.5 years, also excluding companies operating within the financial industry, which limits the relevance of the results to newer companies or labour organisations. Future research could address these limitations by integrating longitudinal or multi-source data and by exploring moderating effects such as firm size, digital maturity, or industry sector.

5.12 Practical Implications

For SMMEs in South Africa, the outcome of this study show that investing in social commerce alone may not directly enhance growth unless accompanied by innovation.

Managers should focus on leveraging social platforms to co-create, test, and refine innovative products and services.

SMMEs can use these digital channels to test new product concepts, experiment with designs, and gather real-time market insights that inform decision-making. Policymakers and supporting institutions should strengthen digital innovation programmes, prioritise skills development in online entrepreneurship, and design incentives that link technology adoption with measurable innovation outcomes. By doing this, the larger SMME sector could reduced high failure rates.

5.13 Summary of the Chapter

This chapter presented the results of the structural equation modelling analysis, showing how social commerce affects business growth through innovation. Overall, the evidence indicates that Social Commerce enhances Innovation, which in turn enhances Growth. The non-significant direct SC→GROW aligns with a mediated pathway. Measurement quality and model fit were adequate, and the variance explained was substantial. The next chapter discusses these findings in relation to prior literature and managerial implications.

Chapter 6

6.1 Purpose and Overview

This chapter interprets the empirical results presented in Chapter 5 and links them to the theoretical basis of the study, the objectives of the study and the hypotheses. The overarching objective was to explain how social entrepreneurship, product innovation and business growth interact in relation to South African SMEs. In line with the positivist and deductive focus of the study, the discussion draws on empirical evidence from structural modelling of equations. It compares this with previous research on consumer innovation theory (CIT) and Unified Technology Acceptance and Use Theory 2 (UTAUT2) (Tamilmani *et al.*, 2021; Shoheib & Abu-Shanab, 2022). The results were then discussed in relation to each of these postulated associations, examining whether the anticipated patterns were supported or negated. The section ends with theoretical, practical, and policy implications, study limitations, and future research. Overall, this chapter provides a holistic interpretation of how digital and social commerce capabilities shape innovation and business performance among emerging-market enterprises.

6.2 Discussion of Findings

6.2.1 H1: Social Commerce → Product Innovation (Supported)

The first hypothesis proposed that social commerce adoption positively influences product innovation in South African SMMEs. This relationship was confirmed by structural modelling results ($\beta = 0.92$, $t = 13.60$, $p < .001$), which suggest a substantial and very significant positive effect. This finding suggests that greater involvement in social trading platforms - through features such as consumer feedback (Busalim *et al.*, 2024), online communities and interaction between peers (Hatamleh *et al.*, 2023) - directly promotes more product innovation (Marion & Fixson, 2021) through features such as consumer feedback (Busalim *et al.*, 2024), online communities, and peer-to-peer interactions (Hatamleh *et al.*, 2023) - directly fosters greater product innovation activity. This result was in line with the Consumer Innovation Theory (CIT), which contends that interaction between firms and consumers (Goraya *et al.*, 2021; Hatamleh, 2023) induces ideation and innovation behaviour (Tamilmani *et al.*, 2021; Wang *et al.*, 2025). Social commerce spaces provide a continuous two-way communication platform (Busalim & Asadi, 2025; Liu & Wang, 2023) that can further enable firms to sense and respond to emerging customer needs (Li, 2019; Sheikh *et al.*, 2019; Sohn *et al.*, 2020), value co-creation, or even product experimentation (Algharabat & Rana, 2021; Ahmad *et al.*, 2022; Amoah *et al.*, 2023; Arafah, & Hasyim, 2023; Bugshan, & Attar, 2020; Busalim *et al.*, 2024; Cao *et al.*, 2021; Sun & Liu, 2023). Similarly, according to the UTAUT2

model, social commerce encourages entrepreneurs to use technology for customer engagement and market responsiveness by boosting performance expectancy and social influence (Lukhele and Soumonni, 2021; Venkatesh *et al.* 2016; Ali and 2023; Madondo *et al.*, 2023; Wiese, 2025; 2024, Akpan & Ibidunni 2023).

Additionally, the findings were in line with past literature on technological adoption whereby digital interaction channels enable a user-producer feedback loop that accelerates innovation cycles (Tajvidi *et al.*, 2020; Moghddam *et al.*, 2024; Marion and Fixson, 2021; Salah and Ayyash, 2024; Xu *et al.*, 2023; Al-Emran & Griffy-Brown, 2023). For South African SMMEs in particular, this was pertinent, as the reality of scarce R&D resources (Nagano, 2020; Samuel & Moagi, 2022). Underpins collective intelligence and will therefore support the case for using social commerce as a source of commoditised consumer-initiated ideation opportunities (Oerlemans *et al.*, 2022). The implication was that this study adds to this literature by illustrating that, in an emerging-market context, social commerce was about more than marketing. Indeed, it was a tool that enables firms to achieve innovation-enabled agility and adaptability. In summary, Hypothesis 1 was strongly supported, confirming that the active utilisation of social commerce platforms plays a vital role in stimulating product innovation among South African SMMEs.

6.2.2 H2: Product Innovation → Business Growth (Supported)

A second hypothesis, that product innovation positively contributes to business growth in South African SMMEs, was also proposed, and the results of the structural equation model ($\beta = 0.85$, $t = 11.72$, $p < .001$) showed that higher levels of product innovation were positively related to tangible outcomes of growth (revenue, market share, and customer retention), which corroborates the RBAP (Barney, 2021; Akpan *et al.*, 2023). It was innovation capabilities that fulfil these criteria, enabling firms to stand out amid financial and infrastructural limitations that usually undermine performance in the South African SMME landscape (Samuel & Moagi; 2022, Sibiya).

This strong positive effect of innovation on business growth was consistent with the broader digital transformation literature, which indicates that digital readiness, agile culture, and technological enablers were conducive to developing new offerings and scaling effectively, and that digital transformation (Hanelt *et al.*, 2021) enhances operational efficiency, customer experience (Busalim & Asadi, 2025) and competitive positioning, all of which have a positive effect on innovation outputs that lead to performance gains (Omol, 2024; Madondo *et al.*, 2024; Merritt & Zhao, 2022). The findings also align with the CIT, which suggests that product innovation was often the

outcome of an iterative co-evolution between firms and consumers (Busalim & Asadi, 2025; Esmaeili & Hashemi, 2019). Studies have shown that digital environments, such as social commerce communities, that generate real-time feedback loops encourage ideation, product refinement (Sheikh et al., Branstad, & Solem, 2020) and adaptation in response to customer preferences (Goraya *et al.*, 2021; Appio *et al.*, 2021).

Suppose that SMEs use this learning to integrate the knowledge gained from these interactions into product innovations. In this case, they were likely to deliver products that were more relevant to the market, thus gaining customer loyalty and spreading the word of mouth, thus accelerating sustainable and rapid growth (Busalim et al., 2024; Hatamleh et al., 2023). In addition to theoretical alignment, the empirical literature from emerging markets has consistently associated the capability for innovation with better firm performance, such as higher efficiency, wider product portfolios, entry into new customer segments, and better commercial outcomes (Latifi, 2021; Fitriati *et al.*, 2020; Gherghina *et al.*, 2020; Kankisingi & Dhliwayo, 2022; Moghddam *et al.*, 2024; Ahmad *et al.*, 2022; Wiese, 2025; Matekenya & Moyo, 2022). Larios-Francia and Ferasso (2023) further demonstrate that innovation-particularly product and process innovation together-can explain between 36% and 47% of organisational, economic, commercial, and productive performance among apparel MSMEs in emerging economies.

That was deepened by more recent evidence showing that product innovation in itself did not necessarily resulted in growth; rather, growth occurred when firms had internal capabilities to commercialise product innovation (Edeh et al., 2025), with process innovation enhancing this effect by strengthening the pathways through which new offerings (Salfore *et al.*, 2023) were delivered, scaled, and embedded in market activity (this distinction was crucial for South African SMMs where structural barriers such as limited R&D infrastructure, skill shortages, and resource constraints limit commercialisation efforts (Ngwenya et al., 2022; Lukhele & Soumonni, 2021; Both *et al.*, 2021; Matekenya & Moyo, 2022), thus allowing innovation to function as a strategic equaliser in such environments: a way for smaller firms to remain nimble, competitive, and market-sensitive without the scale benefits of larger firms (Algharabat & Rana, 2021; Amoah et al., 2023; Almeida, 2024).

Overall, these findings confirmed that product innovation operated as both a capability and a growth enabler for South African SMMs. Strengthening innovation processes-particularly through enhanced commercialisation and consumer-informed refinement-could have helped firms achieve greater efficiency, adaptability, and resilience in volatile

economic conditions. In summary, Hypothesis 2 was strongly supported: increased product innovation contributes significantly to the business growth of South African SMMEs.

6.2.3 H3 Social Commerce → Business Growth (Not Supported)

The third hypothesis examined whether adopting social commerce had a significant positive effect on the business growth of South African SMMEs. The results did not confirm this; the path coefficient from social commerce to business growth was negative ($\beta = -0.22$) and statistically nonsignificant ($p = .580$), indicating that engagement with social commerce, as an independent construct, did not directly result in increases in revenue, customer base or market expansion for SMMEs. This result contrasted with numerous international studies, which demonstrated positive growth impacts associated with digital consumer engagement (Busalim & Asadi, 2025; Hatamleh *et al.*, 2023; Chen, 2024; Al-Quran, 2022), although some more recent work indicated that such effects were contingent on internal organisational capabilities, platform maturity and market conditions (Zhang & Benyoucef, 2022). Social commerce could increase exposure and customer interaction in resource-scarce environments (Ali *et al.*, 2023).

However, these advantages were not automatically translated into business growth as they required complementary capabilities such as product innovation, fulfilment capacity, digital expertise or coordinated marketing (Akpan and Ibidunni, 2023), and SMMEs within the South African context were operationally inefficient, digitally unprepared or inconsistent in their engagement across platforms (Amoah *et al.*, 2023; Amin *et al.*, 2025). Thus, social commerce heightened communication and awareness (Esmaeili & Hashemi, 2019; Sheikh *et al.*, 2019). Still, it did not necessarily generate sales or business expansion (Shoheib & Abu-Shanab, 2022) - another essential explanation for the nonsignificant effect related to the role of trust. A large body of recent research emphasised that trust in the seller, the platform and the wider online community was one of the strongest predictors of purchase intention in social commerce (Tajvidi *et al.*, 2020; Aslam *et al.*, 2019; Busalim & Asadi, 2025; Hatamleh *et al.*, 2023; Mayayise, 2024; Mumu *et al.*, 2021).

Studies in emerging markets showed that although users interacted with content, browsed products and engaged socially, low levels of trust often prevented these activities from converting into actual transactions (Lin *et al.*, 2021; Alalwan, 2022; Shoheib & Abu-Shanab, 2022; Busalim *et al.*, 2024; Busalim & Asadi, 2025). In the South African context, concerns about online fraud, unreliable fulfilment, delivery delays and

inconsistent platform quality may further weaken trust-based mechanisms, limiting the extent to which social commerce engagement could translate into measurable business growth. Trust, therefore, appeared to operate as a missing capability or mediating condition that prevented social engagement from becoming commercial outcomes for many SMMEs. Moreover, recent African evidence supports that interpretation. Atarah *et al.* (2025) found that although SMEs, especially micro and small enterprises, actively use social media to increase visibility, keep in touch with customers and promote their products, these interactions rarely translate directly into business growth. Their study showed that digital platforms serve primarily as low cost communication channels, but that conversion to real sales was hampered by weak trust mechanisms, limited digital capabilities and the lack of structured marketing and fulfilment processes. Leong *et al.*, (2024) agrees, social commerce offers interaction, visibility, and customer engagement, but there was no effect on business growth, which was in line with evidence that social commerce activity alone does not lead to commercial outcomes without enablers across the social, commercial, behavioural and technological dimensions of the social commerce framework.

These findings were closely related to the situation in South Africa where many SMEs lack the technical readiness, strategic planning and operational infrastructure needed to turn online engagement into business results. As a result, the ability of social commerce to drive growth seems to depend not only on social interaction, but also on the existence of deeper organisational capacities enabling companies to transform digital activities into business and innovation-related profits. These dynamics aligned with emerging research showing that, unlike traditional online transactions, the long-term growth potential of social commerce depended on how consumers interacted with its social features (Wang *et al.*, 2020). Understanding consumer behaviour within these interactive environments had become crucial, yet much of the academic literature continued to focus on early or basic forms of social commerce. As a consequence, existing research had not fully captured more advanced formats-such as live commerce or platform-integrated influencer models-that had begun to shape commercial outcomes in global markets. At the same time, business evidence presented a more complex picture. Research from around the world, including from McKinsey & Company (2021; 2022), found that live commerce, a more sophisticated type of social commerce, had resulted in excellent commercial results for large, digitally mature retailers, with conversion rates of up to 30 per cent in China (ten times that of traditional e-commerce) and up to 40 per cent for a German cosmetic retailer like Douglas during live-stream shopping events.

These outcomes demonstrated that when social engagement was combined with stronger transactional infrastructure and advanced digital capabilities, measurable growth could be achieved. This distinction reflected the hybrid and paradoxical nature of live commerce. Live commerce merged the relational elements of social commerce (community, interaction, influence and real-time engagement) with the transactional capabilities of e-commerce (checkout systems, payment integration, product demonstration and conversion). In effect, social commerce (SC) + e-commerce (EC) = live commerce (LC). This fusion explained why social commerce alone did not produce growth in this study: South African SMMEs frequently lacked the e-commerce infrastructure, production quality and strategic planning necessary to convert social interaction into sales. The divide between large and small firms was further illustrated by the two live commerce business models: the Influencer-Oriented Short-Window (IOSW) model, which delivered short-term performance spikes for resource-rich retailers, and the Market-Oriented Long-Window (MOLW) model, which required strong internal capabilities such as planning, innovation and coordination to achieve sustainable performance (Liu & Wang, 2023). Most South African SMMEs were not yet operating at this level of digital maturity.

Overall, the results of this study provided no support for Hypothesis 3, which proposed that adopting social commerce would have a significant positive effect on the growth of South African SMMEs. However, global developments in live commerce suggested that different results might emerge as digital maturity increased. The findings therefore indicated that the direct growth potential of social commerce depended on the integration of advanced digital capabilities, hybrid business models and strategic planning-conditions that could evolve within the South African SMME ecosystem over time.

6.2.4 H4

The fourth hypothesis assessed whether product innovation mediated the relationship between social commerce adoption and business growth among South African SMMEs. The mediation analysis supported this hypothesis. While the direct effect of social entrepreneurship on business growth through product innovation was negative and statistically significant ($t = 3.10$, $p = .005$, 95 percent CI [0.67, $p = .580$]), social entrepreneurship had a crucial and significant positive impact on innovation, which in turn did not lead to an improvement in the performance of the business (see section 6.2.2). This was in line with the theory of consumer innovation (Tamilmani *et al.*, 2021;

Wang et al., 2025), which suggests that digital interactions between consumers and companies can create iterative feedback loops that influence product design, product refinement and new product development (Oerlemans *et al.*, 2022). As SMMEs gain insight into customer preferences, points of dissatisfaction and emerging needs (Wang *et al.*, 2020), turning these insights into improvements to products or new offerings improves the product–market fit, customer satisfaction and ultimately business growth (Sharabati *et al.*, 2024).

The mediating role of innovation was also in line with the Resource-Based Theory (Chatterjee & Rana, 2024), where the capacity for innovation (Edeh *et al.*, 2025; Lu & Shaharudin, 2024) was seen as a strategic resource that allowed companies to turn market information into a competitive advantage (De Oliveira *et al.*, 2020). In a context where businesses lack a strong digital infrastructure, fulfilment systems, or advanced marketing coordination (Atarah *et al.*, 2025), as was often the case for South African SMEs (Madondo *et al.*, 2024; Basson, & Omoruyi, 2025) social trade cannot alone generate growth. However, once digital involvement was channelled into innovation capacity, it enables performance outcomes that would not otherwise have been possible. These findings aligned with what has been observed in emerging markets, where innovation often serves as the main channel through which digital adoption leads to firm performance. Structural constraints (e.g., lack of capital, weak logistics, human skill deficit, and uneven digital readiness) might have impeded the direct effect of social commerce on commercial outcomes, but product innovation allowed SMMEs to use inputs from social commerce to recognise opportunities, redesign their products, and gain competitive differentiation to grow under resource-constrained conditions.

Furthermore, the mediation results were consistent with the global evolution of social commerce into live commerce, where high-frequency interactions, rapid consumer feedback and real-time data accelerated the innovation cycle. As discussed in H3, advanced formats such as live-stream shopping deepened consumer insights but still required internal capabilities—particularly innovation management, planning and coordination—to convert engagement into sustainable growth. South African SMMEs were still developing these capabilities, which helped explain why social commerce generated innovation but not a direct performance effect.

6.3 Practical Implications

6.3.1 Implications for South African SMME Owners and Managers

The findings of this study showed that social entrepreneurship did not in itself directly increase business growth, but has a significant indirect effect through product innovation. This means that social commerce should not be considered as just another promotion channel or a convenient way to maintain a social media presence for SME owners and managers. Instead, it should be integrated into the firm's innovation processes as a structured source of market intelligence. Managers can use social commerce interactions to systematically capture and analyse customer feedback, complaints, suggestions, and usage experiences, and feed these insights into product redesign, line extensions, packaging changes, or service enhancements. This requires simple but deliberate routines; for example, allocating responsibility for monitoring comments and messages, consolidating insights on a regular basis, and linking these to decisions about product development and portfolio adjustments. Where possible, managers should move beyond ad hoc posting and build content and engagement plans that were explicitly tied to innovation goals, such as testing new concepts, variants, or offers with specific customer segments.

The results also underline that SMEs cannot expect increased online visibility to automatically translate into increased sales. In many cases, the social commitment may be prevented from being translated into revenue by deficiencies in fulfilment, inventory management, pricing strategy, logistics or customer service. Owners and managers should therefore assess whether their internal processes, digital skills and operational capacity were sufficient to support the growth in demand before investing heavily in social-marketing campaigns. In practice, this could include improving the basic e-commerce infrastructure, improving accuracy of order processing and delivery, and clarifying return and refund policies to increase trust and reduce perceived risks.

Moreover, mediation findings indicate that investment in product innovation capacity was likely to generate higher returns on social marketing activities than purely promotional expenditure. These findings highlight the potential usefulness of even small improvements - such as small changes in design, packaging, innovation in packaging or adaptation to local tastes can help SMMEs to stand out in a crowded market. In this sense, social trade will become a low-cost mechanism for testing and refining such innovations before they were rolled out.

Lastly, emerging trends in live commerce indicate that more advanced formats such as live-stream retailing and interactive video may offer SMMEs that were able to develop

the required capabilities with future growth opportunities; for resource-constrained firms, the practical implication was to start with small, low-risk experiments (e.g., pre-scheduled live demonstrations on existing platforms) rather than attempting to replicate fully-formed models used by large international retailers, and working with local influencers, marketplaces, or aggregators may help to alleviate the capability burden on individual firms.

6.3.2 Implications for Policymakers and Support Institutions

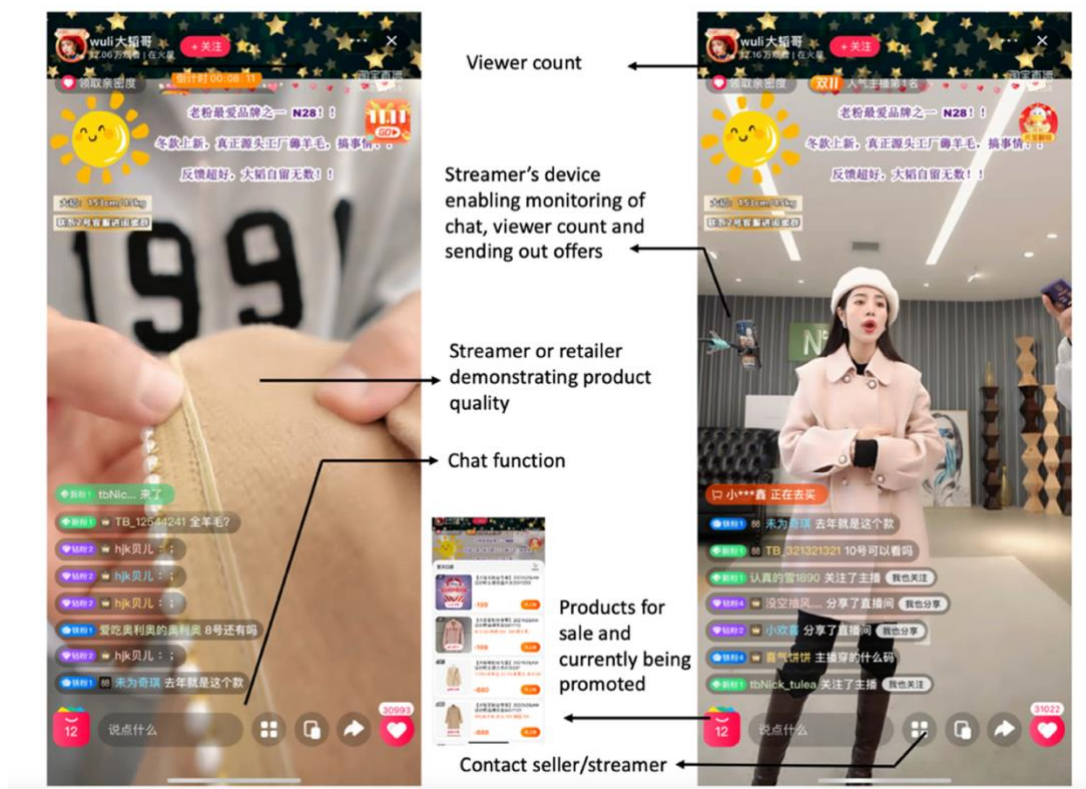
For policymakers and public support entities, findings emphasize that prompting SMMEs to become digital or social media users was not sufficient in order for them to realise meaningful growth effects. The lack of a direct impact of social trade on business growth suggests that interventions should focus on strengthening the intermediate skills that allow companies to transform digital involvement into innovation and performance gains. This has several implications. Firstly, support programmes should prioritise innovation capability building, not only basic digital literacy. Training and advisory services could help SMMEs learn how to use social commerce data for market sensing, idea generation, rapid experimentation, and product refinement. Secondly, the study aims to assess the extent to which policy instruments that support small-scale product and service development; such as innovation vouchers, matching grants, or incubator-style technical support can complement digital adoption initiatives by ensuring that firms have the capacity to act on insights generated online.

Another important factors was the role of trust, fulfilment, reliability, and consumer protection in social commerce ecosystems, which can disintegrate the conversion of social engagement into transactions, and policymakers and regulators can clarify consumer rights in social commerce settings, promote secure payment mechanisms, and support dispute-resolution frameworks that were accessible to micro and small firms to build the institutional trust needed for SMMEs and consumers to transact confidently in social and live commerce environments. Finally, given the spatial and infrastructural inequalities within South Africa, digital policy and SMME support strategies should recognise that the benefits of social and live commerce will remain uneven unless they were accompanied by improvements in connectivity, logistics, and last-mile delivery networks. Collaboration between government, development agencies, and private logistics providers may be required to ensure that firms outside major metropolitan centres can participate effectively in emerging digital retail formats.

6.3.3 Implications for Ecosystem Actors and Digital Platform Providers

This paper also seeks to extend our understanding for ecosystem actors such as business chambers, industry associations, development finance institutions, and digital platform providers that serve SMMEs. Evidence of full mediation supports the idea that platforms and intermediaries should not merely maximise traffic or engagement, but instead design tools and services that explicitly facilitate the use of social commerce to innovate and commercialise, including features that enable SMMEs to collect structured feedback, to segment audiences, to conduct low-cost experiments, and to convert engagement data into analytics dashboards and by "plug-in" or modular live-commerce solutions can be integrated into existing e-commerce environments so that smaller firms can offer interactive demonstrations and real-time engagement without building entirely new systems. Pilot projects, demonstration cases, and shared live-commerce events in which multiple SMMEs participate under a common umbrella were well within the mandate of ecosystem organisations and would help to reduce the risk for individual firms, spread learning among firms, and provide collective evidence on what formats, sectors, and customer segments were most responsive to social and live commerce in the South African context.

6.3.3.1. Integrating Lessons from Emerging Live Commerce Models



The inclusion of the live commerce illustration serves a clear analytical purpose in the discussion chapter. Although the present study focuses on social commerce rather than live commerce specifically, the diagram helped contextualise one of the most advanced forms of social-commerce evolution. It shows how social interactions, influencer-driven content, real-time engagement, and interactive feedback loops can merge into a unified commercial model. This visual plays a critical role in Chapter 6 because it illustrates the mechanisms that help explain the core finding of the study - that social commerce on its own did not directly generate business growth unless firms have developed capabilities for innovation. The diagram reinforces the argument that South African SMMEs may not capture the full performance benefits of social commerce, as they lack the advanced capabilities to move to more sophisticated models such as live commerce, which rely on rapid feedback loops, require integrated operational processes and amplify innovation through real-time product testing and adaptation.

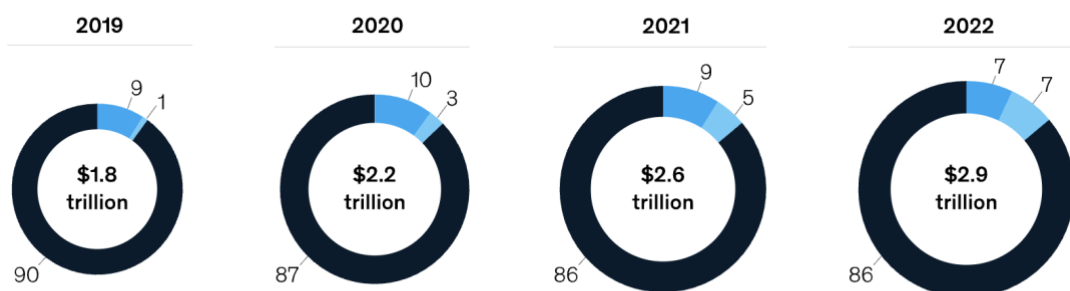
Thus, the illustration was not decorative, it demonstrates why social commerce sometimes fails to translate into growth and helped to ground the mediation finding (innovation as the pathway between digital engagement and business growth).

6.3.3.2 Global Growth Trends in Live Commerce and Their Relevance

Social commerce is growing in China, driven by the rapid acceleration of live commerce.

Growth of China's retail e-commerce by type,¹ %

■ Social commerce, excluding live commerce ■ Live commerce ■ All other e-commerce



¹Data for 2021–22 are projected.
Source: eMarketer, May 2021

McKinsey
& Company

The second image: “Live commerce growth in China” represents a second purpose, that was no less important than the first purpose. The second image offers comparative evidence that will help contextualise this research findings in an emerging-market

context. Because this figure provides three important academic points to illustrate the successful implementation of live commerce in China. Firstly, live commerce favourable outcome was dependent upon the presence of advanced capabilities. Its industry's success was not random; rather, it was the result of: logistics capabilities, ecosystems of influencers, rapid digital adoption rates, integrated payment systems, and familiarity among consumers with interactive shopping experiences. These were the very same capabilities that many South African Small Medium Sized Enterprises (SMMEs) were missing, therefore this was one possible explanation for why the live-commerce-like benefits were not automatically realised when firms adopted social commerce in a casual manner. Secondly, this positioning of this research findings within a “Global Pattern”. This figure above illustrates that while live commerce has been extremely successful in China and continues to grow at a steady rate in the USA, these outcomes have not been universal across all countries. This supports this research contextual argument: “Digital engagement can produce growth but this outcome was conditional upon organisational capability, digital readiness, and level of infrastructure in the marketplace.” Lastly, support for the central mediation finding countries such as China demonstrate high levels of growth because firms were able to convert digital engagement into continuous product innovation; the mediating mechanism confirmed through this research. South African SMMEs typically do not possess: data analysis, iterative product development, resources for demonstrating products live, and/or integrated digital workflow capabilities.

Therefore, including the global growth chart, allowed us to contextualise the results relative to the global body of evidence, and thus explaining why the direct effect (H3: Social Commerce impact on a Business Growth) was not significant in the sample. The global growth chart demonstrated that social commerce only generated growth where innovation capability, content creation, and operational integration were strong - capabilities that have not yet been widely implemented throughout South Africa's SMME sector. Live commerce exemplifies this concept, as it requires a higher degree of digital readiness, depending on rapid feedback loops, requiring integrated operational processes and integrated innovation by allowing for real-time testing and product innovation. By illustrating how social platforms can transform into more advanced, capability-intensive formats, the chart enhances the argument that South African SMMEs may not be taking advantage of the complete range of performance benefits available from social commerce because they lack the more advanced capabilities necessary to transition to more advanced forms of social commerce, i.e., live commerce. Thus, the diagram was not decorative, it illustrates why social commerce did not always successfully translate into growth and assists to provide additional grounding for the

mediation finding (innovation as the pathway between digital engagement and business growth).

6.3.3.3. Academic Perspectives vs. Real-World Digital Trends: Implications for Future SMME Research

There was an important disconnect between the conceptualisations of social commerce in the academic literature and what was occurring in the real world of digital commerce. Most of the social commerce models were based on research conducted between 2005 and 2018 (Parker *et al.*, 2025, Algharabat & Rana, 2021; Dincer & Dincer, 2023, Esmaeili & Hashemi, 2019) using constructs such as social presence, trust, peer-to-peer communication (Hatamleh *et al.*, 2023; Mayayise, 2024) platform features, and purchase intentions. Social commerce research had generally focused on the role of psychology (i.e. building trust), technology (i.e. UTAUT2), and organisational capabilities (i.e. innovation capability) as the primary factors contributing to value creation. However, these theoretical frameworks tended to focus on incremental tool adoptions and gradual innovation. However, digital commerce evolved at a much faster rate than most of the academic research on social commerce could account for. For example, reports from McKinsey indicated that live commerce had emerged as a dominant retail format in China and was achieving conversion rates significantly higher than those achieved through traditional e-commerce; in fact, live commerce was reshaping product categories such as cosmetics, consumer electronics, and fashion. Real-world adoption trends also supported a significant shift towards interactive, real-time, video-driven, and continuous (rather than episodic) shopping experiences for customers. Product innovations and changes were being implemented in near real-time by companies using customer feedback provided during live commerce events to guide their decisions.

Additionally, other future-oriented concepts such as AI-enabled shopping, virtual try-ons, and retail spaces in the metaverse were becoming increasingly popular in industry contexts, although they were still very much under-researched in academia. For example, the metaverse report indicated that nearly one-quarter of consumers had already purchased products from virtual stores, indicating that immersive retail was no longer simply experimental; instead, industry leaders were investing heavily in AI (Bezdach *et al.*, 2023, McKinsey, 2022) to personalise the customer experience, optimise product recommendations, and provide real-time digital experiences that blurred the boundaries of physical and online shopping.

The difference in perspective provided evidence of a significant gap: academic researchers continued to conceptualise social commerce as primarily being text-based, post-based, or community-based engagement, whereas the real world was transitioning towards video-rich, AI-enhanced, and immersive commerce systems. Therefore, small businesses were being forced to continually innovate in order to respond to highly interactive digital commerce environments. This further emphasised the central finding of this study that product innovation acted as a mediator of the relationship between social commerce and business growth. Additionally, in digital commerce environments characterised by high levels of customer participation, innovation capability represented the mechanism by which firms converted engagement into competitive performance. The results of this work pointed to opportunities for future studies. For example, understanding how shopping tools with AI features (Fan *et al.*, 2022; Salah & Ayyash, 2024), live-video formats, VR/AR experiences could dominate product innovation cycles for SMMEs if those businesses were resource-heavy.

Academics build models assuming slow and predictable adoption curves, while evidence from the real-world suggested that technology adoption was much faster. Longitudinal designs could study how SMMEs develop, lose or change innovation capability over time as digital tools were invented. In addition, SMMEs in South Africa lacked many of the infrastructural supports available in countries such as China and the United States, so researchers needed to explore how contextual constraints, such as high data costs, logistics challenges, and uneven levels of digital literacy - affected the link between innovation and performance. The rise of hyper-interactive commerce also showed that customers were literally co-creating the product as they interacted with it, meaning future works could have expanded on co-creation mechanisms that applied particularly to SMME's. Researchers could have also compared the benefits/downsides of traditional forms of social commerce versus live or immersion commerce and whether innovation capability increased as more interactive digital formats were adopted by these platforms. Overall future works needed to combine academic frameworks with fast changing industry practices. Digital commerce continued getting more interactive, immersive, and AI-assisted and this drove innovation capability that held the key as to whether SMME's could turn digital engagement into business growth.

6.4 Limitations of the Study

As with any empirical investigation, this study was subject to several limitations that should be acknowledged when interpreting the findings and deriving conclusions. First, the research employed a cross-sectional survey design, which captured data at a single point in time. A number of limitations were noted regarding the present study. To begin with, the researchers utilised a cross-sectional survey design that captured data at a single point in time, which did not allow for strong causal inferences regarding the temporal ordering of social commerce adoption, innovation activities, and business growth. Although the hypothesised paths were based on established theory, the cross-sectional nature of the study meant that reverse or mutually reinforcing relationships could not be ruled out. For example, firms that were already growing may have innovated more, or innovative firms may have adopted social commerce more actively. A longitudinal design would have been needed to confirmed the direction and long-term stability of these relationships.

Also, the study utilised self-reported measures of social commerce use, innovation, and business growth, which were subject to measurement error, such as recall bias, social desirability bias, or subjective perceptions, and were more prone to over or underestimation than objective indicators, such as sales records or digital analytics.

The study was limited to only South African small, medium, and micro-enterprises (SMMEs) that fit into particular eligibility criteria, i.e., had a minimum amount of time in operation. Therefore, the study excluded some types of businesses, e.g., fintech businesses and high-tech start-ups, that had significantly different digital capabilities, adoption strategies, and business models than many of the more traditional SMMEs. In consequence, the results of the study could not be generalised to all early-stage or digitally native ventures within the South African economy. Although this research focused on established SMMEs, which was reasonable for the research question, it did limit the external validity of the study.

Another consideration was that to participate in the online survey, respondents needed a smartphone, data, and a certain level of digital literacy. This could have possibly excluded entrepreneurs of SMMEs that worked in more constrained-resource environments; specifically, those who had no consistent access to internet or no newer devices. Hence, the sample may have over-represented the more digitally connected businesses and under-represented the less digitally connected businesses, which should be noted when analysing the findings. Additional uncertainty arose from how the study examined social commerce in a relatively aggregated manner and did not differentiate between specific platforms, formats, or content strategies. In particular, the

questionnaire did not separately capture more advanced or emergent forms of social commerce such as live-stream shopping, influencer-led events, or platform-integrated live-commerce plug-ins. Consequently, the analysis was not able to determine which types of social commerce were more closely linked with innovation and growth. The investigation of the business growth construct showed that measures were based on perceptual measures rather than on detailed financial data. While perceptual measures of growth were frequently used in SMME research and might have been more reflective of how a manager perceived performance, they might not always have lined up perfectly with formal financial statements, which was particularly the case in contexts where record-keeping practices were informal or uneven.

The study findings illustrated how the structural model focused on a limited set of constructs—social commerce adoption, product innovation, and business growth—guided by the underlying theoretical framework. A number of important variables that were likely to influence these relationships were not included. Variables such as trust in platforms and sellers, digital skills, organisational culture, business model innovation, and the broader institutional environment), which rendered the model inevitably simplified and left some relevant mechanisms unobserved. Finally, the study was conducted in a national context with its own legal, cultural, infrastructural, and economic characteristics. This limitation meant that the study findings needed to be interpreted cautiously. South African SMMEs may have engaged with social commerce differently than what was observed in other emerging and developed economies, so generalisation of findings had to be treated with caution, and further comparative studies were required to ascertain the extent to which the relationships identified here were applicable in other contexts.

6.5 Recommendations for Future Research

The evidence from this study suggested that the limitations identified above, together with the empirical results and emerging developments in social and live commerce, pointed to several avenues for future research. Firstly, future studies could use longitudinal and panel designs to explore how social business adoption, innovation activities, and business growth evolved over time. These proposals would have allowed testing whether changes in social commerce engagement preceded changes in innovation or performance, and whether there were feedback effects as companies gained experience with digital channels. By modelling these elements separately,

researchers could determine which aspects of social commerce were most strongly associated with innovation outputs and performance in different sectors and firm types. This study identified the findings of full mediation, which suggested that future work should pay greater attention to intermediate mechanisms that linked digital engagement to growth. Product innovation was one such mechanism, but not the only one. Business model innovation, organisational learning, and capability development may all have acted as transmission channels through which social and live commerce exerted their effects on performance. Structural models that incorporated multiple mediators could have provided a more comprehensive picture of these pathways. This study found that the conversion of social engagement into transactions was likely to be significantly influenced by perceived risk, trust, and fulfilment reliability.

Future studies could explicitly model trust-related constructs and platform guarantees as moderators or facilitators in the relationship between social commerce, innovation, and growth, especially in environments where there was a high level of concern about fraud and non-performance. These findings suggest that combining qualitative and mixed methods studies would allow for greater insight into the actions and behaviours of businesses at the firm level; how consumers interact with them; and how they were affected by the challenges associated with their environment compared to what can be found using quantitative models. In addition to being conducted in a national context with its own distinct laws, culture, infrastructure and economics. The results of this research supported the idea that comparative research across sectors, regions, and company profiles might have revealed different patterns for South African SMEs compared with other emerging and developed economies, so caution was advised when generalising findings beyond similar settings. Further comparative studies were needed to determine whether the relationships identified here were replicated in other contexts. The impact of social and live commerce could have varied from one consumer-facing sector -such as clothing, cosmetics, food, and services - to differences observed across urban - rural or formal–informal businesses. Generational factors, such as the digital habits of younger versus older owner-managers, may also have influenced adoption patterns and outcomes.

The study's results suggested that as live-commerce developed, it may be considered a hybrid social technological system that integrated social interaction, real time video and transactional infrastructure. The study also suggests that researchers could investigate the conditions under which small and medium-sized enterprises in developing countries have been able to participate successfully in live-commerce systems; the degree to

which plug-in solutions, third party platforms and collaborative models reduce entry barriers; and the effects of public and private support (for example, digital skill programs, innovation grants, and partnerships between ecosystems) on social entrepreneurship and business performance.

6.6 Chapter Conclusion

This chapter discussed and interpreted the study's empirical findings in light of its theoretical framework and research objectives. The results of the analysis indicated that social commerce adoption was positively associated with product innovation, but that it did not have a direct, statistically significant influence on the business growth of South African SMMEs; rather, product innovation fully mediated the relationship between social commerce and business development, such that digital engagement only contributed to performance when it was converted into innovation activities and outcomes. These results supported the view that social commerce functioned primarily as an enabling infrastructure for market sensing, interaction, and co-creation, rather than a standalone driver of growth. They also reinforced the logic of resource-based and consumer innovation perspectives, which emphasised the importance of firm-specific capabilities and iterative learning in converting environmental information into competitive advantage. In contexts characterised by structural constraints and uneven digital readiness, such as the South African SMME sector, the presence or absence of these capabilities was decisive.

The chapter also emphasised the emergence of new formats such as live commerce that combined social, interactive, and transactional aspects into a single environment. While international evidence suggested the potential of such models to deliver substantial performance benefits to the sort of large, digitised retailers for which they were originally designed, this study implied that similar benefits should not be taken for granted by resource-stretched SMMEs unless accompanied by equivalent levels of investment in R&D and organisational alignment, or in mechanisms to establish trust.

In summary, the chapter found that the growth prospects of social commerce for SMMEs in South Africa were conditional, not automatic. Social commerce and live shopping could have been of great value in terms of engagement, testing, and learning. Nevertheless, their commercial contribution would have relied on the ability of firms to integrate these tools in a systemic fashion into innovation processes and transformational organisational and ecosystem conditions.

Chapter 7: Conclusion

7.1 Introduction

This chapter marks the end of the research by summarising and consolidating the findings obtained from the empirical findings and discussion in Chapter 6. The research had sought to address the question of how social commerce adoption can impact product innovation and, by extension, business growth, specifically in small, medium, and micro enterprises in South Africa. The research aimed to understand and address the ways in which social commerce can bridge its online and offline efforts and enable ultimate advancements in business growth, if at all. The current research was founded upon three overarching theories, including the Resource-Based View, The Unified Theory of Acceptance and Use of Technology 2, and Consumer Innovation Theory, among others, which all sought to provide alternative approaches by which technological interaction and innovations can be addressed, especially in emerging markets.

From Chapter 6, it was revealed that there was a strong and significant relationship between social commerce and product innovation, that product innovation was strongly and significantly related to business growth, and that product innovation fully mediated the relationship between social commerce and business growth. Additionally, the direct path from social commerce to business growth was not significant. The above results provide significant implications to research and practice, as they contradict the assumption of improved performance outcomes automatically emerging with digital technology adoption, and instead suggest that it was the role of innovation capability that bridges technology usage and performance outcomes. Below, significant conclusions derived from theories, research contributions, recommendations, limitations, and potential avenues of research were discussed.

7.2 Principal theoretical conclusions

The first principal finding was that social commerce must be regarded primarily as an intangible online resource that underpins capability rather than business growth, per se. The empirical findings supported a positive and significant relationship between social commerce usage and product innovation (Chapter 6, Section 6.2.1). This lends supported to Consumer Innovation Theory, which assumed customers were collaborative innovators, and their interactions with organisations were a conduit for ideas, feedback, and information flows that drive innovations (Branstad & Solem, 2020). Social commerce platforms such as Facebook, Instagram, TikTok, and WhatsApp

offered environments in which customers convene to share their experiences and opinions about products, share ideas, and engage with organisations and products.

This usage pattern generates user-generated content, which organisations can exploit at minimal cost as an antecedent to innovations (Marion & Fixson, 2021). To SMME organisations, which may not possess research and development units, social commerce can be regarded as functioning simultaneously as an online research and development infrastructure. The empirical finding has shown that social commerce usage has a significant relationship with product innovations, and these virtual environments can be exploited by organizations to identify emerging demands, validate ideas, refine ideas, and develop new products and services, which organizations may not be able to accomplish at affordable costs with research and development infrastructure available to organizations (Tamilmani *et al.*, 2021).

The second finding was that product innovation was the moderator at which social commerce influences business growth. The positively and significantly correlated relationship identified between product innovation and business growth (Chapter 6, Section 6.2.2) confirmed established views in the literature concerning the role of innovations and firms' capacities to innovate and outperform others in achieving better performance outcomes (Expósito & Sanchis-Llopis, 2019; Kraus *et al.*, 2021).

Innovations enable firms to enhance product quality, fill market gaps, and stay unique and differentiated in markets. Faced with such rigorous structural conditions and difficulties in SMME business environments, such as financial limitations, infrastructure and technology difficulties, increased competition, and so forth in the case of South Africa, innovations were seen as integral to firms' survival and growth success.

Findings from this research supported that innovations were not something supplementary that firms need, but something integral to performance outcomes and, indeed, lying at the nexus of interest between social commerce and business growth success. The mediated effect finding, which indicates that business growth can be influenced by social commerce only through product innovations (Chapter 6, Section 6.2.4), thus implies that firms' success and growth depend not only upon their adoptions and usage of technology but also upon its organizational integration and translation into new products and services, staying attuned to customers' interests and online feedback.

The third theoretical implication has to do with the Resource-Based View. The non-significant direct relationship between social commerce and business growth (Chapter 6, Section 6.2.3) makes it easier to understand what role information and communication technologies ought to be allotted within RBV. The results of this research make it clear

that, by itself, social commerce was something of a generic asset, and its usage did not necessarily provide an advantage over others automatically and by default (Barney, 2021).

This strategic potential was only unlocked when such an aspect was isolated and channelled into something uniquely advantageous, such as analysing and interpreting signals from potential customers, testing new product ideas, and implementing changes in products quickly and efficiently (Nagano, 2020; Madondo *et al.*, 2024). The completely mediated relationship with product innovations reinforces that it was not innovations, in and of themselves, but rather the capability to innovate, which places one business above others in advantageous and differential ways. This itself aligns with research, which suggests that capabilities allow for and enable firms to take environmental information and make something productive and distinctive with such information (Freeman *et al.*, 2021). The significantly strong path relationship between innovations and growth suggests that those firms which successfully capitalise upon such an aspect possess an edge over larger and better-resourced firms, aligning with research which has found innovations to provide equal ground in competition, regardless of firm size, and between firms of differing size and capacity (Oerlemans *et al.*, 2022).

The fourth theoretical implication was regarding the refinement of UTAUT2 with emerging market SMME environments. UTAUT2 argues that performance expectancy was one of the major antecedents influencing technology adoption within organisations and firms (Venkatesh *et al.*, 2016). The non-significant direct effect of social commerce and business growth, however, implies that performance expectancy did not automatically afford benefits over and above what technology adoption offers in growth and size.

Instead, performance expectancy appears to be dependent on the firm's capability and preparedness to enhance technology usage, thereby promoting innovative outcomes. Hence, SMME entities may find appeal in social commerce platforms due to SP and LC, but such outcomes take effect only after technology integration into overall firm environments and their subsequent processing into innovative outcomes, including new products. The non-significant effect of social commerce and business growth implies not only that performance expectancy, as postulated by UTAUT2, has its limitations and significance but also that performance benefits and outcomes acquired over technology usage and platform success may be dependent on firms' capability and preparedness to virtually make technology usage productive and innovative in output, including products

and services, thereby catering to performance expectancy, as proposed by Maber Shoheib & Abu Shanab (2022) and Wang *et al.* (2022).

Lastly, it can be confirmed that this research applies appropriately to emerging markets and must be viewed in terms of its contextually defined limitations. The SMME market in South Africa has varying levels of preparedness, infrastructural difficulties, trust, and minimal supported with regard to digitisation (Kraus *et al.*, 2021; Atarah *et al.*, 2025; Sibiya *et al.*, 2023). Results illustrate that while there has been high adoption of social commerce, its impact may be damped by such limitations. The presence of digitisation and innovation capacity was imperative to make digitisation worthwhile and strategically viable.

7.3 Research contribution

This research makes four significant contributions to social commerce, innovation, and SMME performance-related literature. Firstly, this research closes one of the existing literature gaps by offering quantitative firm-level evidence regarding social commerce, product innovation, and business growth, particularly in an emerging market environment. To date, most research interest and output in social commerce has been primarily focused upon various consumer-related outcome measures, including trust, satisfaction, and purchase intentions, with considerably fewer efforts placed upon analyses focusing upon social commerce outcomes and firm-level dynamic performance measures (Branstad & Solem, 2020; Wang *et al.*, 2022). This research not only addresses such an academic literature gap, but it did so by employing a South African SMME-centric research methodology, thereby providing significant insights into social commerce and firm performance in emerging markets.

Second, and from a theoretical perspective, this research advances by applying Consumer Innovation Theory, RBV, and UTAUT2 in one framework, providing insights into how digital resources and customer participation were channelled into innovations and growth. The added contribution to theories was specifically in its findings concerning full mediation by product innovations, and such findings and approaches provide new insights into theories concerning performance and supported roles of digital technologies. The above-mentioned framework and its application in this research make a significant contribution to theories, as they make it easy to understand and define boundaries between various aspects, such as social commerce, innovations, and growth. Thus, regarding theoretical aspects, this research meets all demands and standards, specifically concerning overall and holistic approaches and ideas concerning social commerce theories, which move towards holistic and overall ideas and

approaches concerning research, not tied and linked with dualism and binary approaches, such as usage-performance associations or connections, which were present in Wang *et al.* (2022) and Esmaeili and Hashemi (2019).

Thirdly, it has methodological significance as it applies PLS SEM with R software. The analysis adhered to modern standards of reporting PLS SEM results, such as application of measures of Composite Reliability, calculation of HTMT ratio, and examination of Average Variance Extracted values, respectively (Hair *et al.*, 2021; Henseler *et al.*, 2015; Fornell & Larcker, 1981; Ab Hamid *et al.*, 2017). The reporting standards included disclosure of findings regarding measurement and structural models, and application of Bootstrapping to provide confident intervals of path coefficients. The application of R software ensured automated generation of research tables and code, which ensured Transparency and Reproducibility. This was particularly significant in its werea of research, most of which employ straightforward analysis models.

Fourth, from a contextual standpoint, this research contributes to literature by focusing primarily on SMMEs in South Africa, which were underrepresented groups in literature regarding digital transformation and innovation. Most of the empirical research into digital transformation has involved larger, more established firms in developed countries (Kraus *et al.*, 2021; Díaz-Arancibia *et al.*, 2024). This research, by including firms that were resource-constrained and small, and established for more than three and a half years, offers insight into how small, established firms in emerging markets can utilise social commerce to overcome extant disadvantages. The outcome, that social commerce did not directly impact growth, but did so by facilitating improvement, highlights how extant infrastructural, trust, and digital capability deficits in emerging markets can be diminished by efforts by firms to build such capabilities.

7.4 Recommendations for management and/or other stakeholders

The findings and theories emerging from this research include various implications and recommendations to managers of SMMEs, organisers of digital platforms, policymakers, and development finance and sector associations involved in the ecosystem. The main recommendation and implication of this research, first, relate to SMME owners and managers, and include repositioning social commerce from a predominantly promotional platform to one of learning and innovation. Managers need to ensure that all forms of social commerce interactions were seen as potential sources of further data that may be applied in informing new product lines and innovations. To achieve this, managers need to ensure that there were structured approaches and systems involved in monitoring suggestions and feedback from customers, and then convert these into new products,

lines, and innovations. For instance, by keeping innovation journals and conducting review meetings to review all forms of feedback garnered from digital platforms.

The next recommendation for managers was to deliberately build innovation practices and capabilities that can harness and execute insights created through social commerce platforms. This went not only to making changes in products, but also to making systematic practices around idea generation, assessment, and its execution. Practices such as soft launching, piloting, and market testing can be used by organizations, even those with fewer resources, to offer innovations at lower experimentation costs. Managers can build skills around basic analytics or make use of analytics tools available to monitor and make sense of various dimensions of customer interaction, such as engagement, and usage-pattern insights, and make these insights available to support innovations.

From the perspective of digital platform providers and participants in the ecosystem, what this implies was that value propositions to SMMEs needed to extend from visibility and interaction metrics into services that promote innovation cycles. Digital platform providers could have enabled functions such as allowing organizations to connect conversations to products, enable low-cost A B testing, allow segmentation of users to enable targeted testing, and provide straightforward analytics that link feedback and sales or usage behaviours (Varadarajan, 2020; Wang *et al.*, 2022). Development finance institutions and sector associations could have supported collaborative live streaming, group-based training, and collaborative experimentation interventions that could provide economies of scale to individual SMME organizations contemplating more advanced approaches such as live commerce (Liu & Wang, 2023). Through collaborative or joint initiative approaches, participants in the ecosystem could ensure that learnings from digital interactions were better dispersed within and along the SMME sector, allowing all organizations, including those that may be relatively small and unmutured in their digitization, alongside those that may be more advanced, to learn and benefit from such learnings (Matekenya & Moyo, 2022; Muhammad *et al.*, 2025).

Policymakers should also be aware of the conditional outcome of benefits brought about by digitisation. The absence of a direct relationship between social commerce and business growth implies that policies aimed at enhancing growth through increased adoption rates and connectivity may not bring about the intended outcomes. Programmed efforts should, therefore, be directed towards capability development, especially in terms of innovation management, customer-centric designs, and digital analytics.

The capacity-building programs could be rolled out under existing support initiatives offered to SMMEs, with efforts geared towards equipping business owners with skills on harnessing social commerce platforms and approaches to develop and validate new products. Despite enduring infrastructural and trust-related difficulties, such as infrastructure inadequacies and trust deficits, policymakers could consider approaches that enhance trust in digitisation transactions, enhance the dependability of digitisation platforms, and facilitate the evolution of favourable environments within small business setups (Atarah *et al.*, 2025; Sibiya *et al.*, 2023).

Finally, managers and policymakers should recognise that social commerce was part of larger systems and processes. Considerations such as organisational culture, management philosophy, trust in platforms, and staff technological capabilities, among others, affect whether organisations could harness technology and trigger growth and innovation (Mayayise, 2024; Mumu *et al.*, 2021; Anabila *et al.*, 2024). Managers of SMMEs should not view social commerce initiatives as isolated programs but as part of larger efforts to cultivate organisational environments and processes that could support innovations.

7.5 Limitations of the research

Although this research has numerous insights, there were points to consider while analysing and applying research findings. The first aspect of research that should be kept in mind was its research design, which was cross-sectional, and all information was gathered at one instance in time. Although this research design was very effective in testing associations between various constructs, applying research findings specifically towards definitive conclusions regarding causal associations and time-ordering aspects might not be feasible and effective in research analysis and outcomes, respectively, as argued by Saunders *et al.* (2023) and Wang & Cheng (2020). For instance, firms experienced growth were more likely to devote efforts towards research and development and social commerce, and not only research and development and social commerce, influenced growth.

A second limitation was that all the key constructs, such as usage of social commerce, product innovation, and business growth, were measured with self-reported measures. This has been shown to be vulnerable to various biases, such as common method bias, social desirability bias, and recall bias (Podsakoff *et al.*, 2024). Although efforts were made to address these potential issues, such as by providing anonymity and by using established scales, it was not entirely ruled out that managers may have overestimated their degree of innovation or growth performance compared with more objective criteria.

Particularly, business growth was determined with perception measures, not financial statements, which was quite standard in SMME research, although not entirely definitive with respect to the accuracy of performance measurement.

Third, there were limitations in regard to generalisation based on the sampling method. Snowball and purposive sampling was employed to target SMMEs that were more than three and a half years old and were frequent users of social commerce. The method of snowball sampling was effective in selecting mature and technology-adapt SMMEs, but it restricts generalisation of results to all SMMEs in South Africa, particularly new entities and those conducting business offline, as suggested by Saunders *et al.* (2023) and Turner (2020). The sampling method might also have presented biased results from more technology-literate and urban SMMEs, which could have been dealing with different realities in marginal and rural environments.

The fourth limitation was with regard to the coverage of social commerce practices and type of innovations included in the analysis. The research regarded social commerce as relatively generic and did not distinguish between various platforms and practices, such as influencer and community-based selling, or live streaming as opposed to traditional posting. Again, it was primarily concerned with product innovations and not with others, such as process, marketing, and organisational innovations. This means that what has been found could only generalise one aspect concerning overall connections between technology and innovations. There could have been particular platform or type-related effects overlooked by the model, as pointed out in research by Wang *et al.* in 2022 and Liu and Wang in 2023.

Lastly, the structure of the equation model necessarily reduces the complexities of organisations by its focus on few constructs, which were specifically social commerce, product innovativeness, and business growth (Winship and Western, 2016). The potential others, such as trust in platforms and sellers, organisation's skills, and organisation's culture, that may act as drivers in influencing, either directly or indirectly, the relationship between technology and business performance, were not captured in this model, although they may act as drivers in influencing such a relationship (Mayayise, 2024; Mumu *et al.*, 2021; Sibiyi *et al.*, 2023; Anabila *et al.*, 2024).

7.6 Suggestions for future research

Based on these findings, various research avenues may be explored in the future. Firstly, longitudinal research and/or panels may be conducted to monitor the evolution of social commerce adoption, innovation capability, and business growth simultaneously. This will enable one to measure whether there was increased growth and innovation after

adopting social commerce or if growth-oriented firms prefer to make use of digital technology. Lastly, experimental designs may be applied to identify the effect of interventions, including innovation routine training and new platform services, on business performance (Saunders *et al.*, 2023).

Second, future research could consider broadening the definition of innovation from product innovation to include process, marketing, and organisational innovations. This could have offered more comprehensive perspective on various dimensions of innovation capabilities and their relationship with digital engagement. Possibly, social commerce was especially significant within the context of marketing innovations, or perhaps process innovations were required to enable innovations that emerge as a result of digital engagement. By including various dimensions of innovations, one could build and test theories that entail more intricate forms of mediation and moderation.

Third, it was possible to investigate the intervening role of trust aspects in platforms, digital skills, organisational culture, entrepreneurial orientations, and leadership styles. Such antecedents may affect what level of innovation and growth might be achieved by social commerce, particularly in emerging markets characterised by potential distrust and infrastructure limitations (Mayayise, 2024; Mumu *et al.*, 2021; Sibiya *et al.*, 2023; Anabila *et al.*, 2024). Researchers could apply models with moderation and moderation analysis to understand organisational conditions better in innovating and growing through social commerce.

Fourth, future research may identify and distinguish between various platforms and practices of social commerce. New forms such as live streaming, social commerce marketplaces, and collaborations with influencers may differ in their innovational and performance outcomes (Wang *et al.*, 2022; Liu & Wang, 2023). Comparison of various platforms, industry, and geographical locations may enable one to identify the most effective approaches and conditions under which these were to be executed.

Fifth, it was recommended to consider blending subjective and objective criteria in performance measurements. This was partly because subjective criteria allow managers to form comprehensive judgments, and partly because objective criteria, such as financial and sales performance, may offer insights into performance measurement. Lastly, it would be highly beneficial to broaden research into social commerce and innovations to encompass diverse African countries and small, non-formalised businesses, thereby allowing national insight and numerous regional trends in digitisation to emerge (Kraus *et al.*, 2021; Diaz-Arancibia *et al.*, 2024).

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