

# The Role of Digital Innovation in the Growth of Small and Medium Enterprises (SMEs)

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Article History	Abstract
Original Research Article	<p><i>Digital innovation affects SMEs' development, efficiency, competitiveness, and sustainability, according to this study. SMEs are vital to economic growth, but many confront structural barriers like market, finance, and managerial capacity. In response to these problems, digital innovation has transformed traditional business models using e-commerce platforms, cloud computing, mobile apps, and digital payment systems. This conceptual and literature-based study uses the Resource-Based View to describe how digital innovation improves SME performance as a strategic organisational resource. The investigation reveals that digital innovation boosts SME growth through market access, operational efficiency, customer interaction, product innovation, and financial inclusion. The effectiveness of these results depends on enabling elements like digital infrastructure, management ability, financing, and supporting regulatory frameworks. Despite its potential benefits, the study found high implementation costs, low digital skills, cybersecurity concerns, aversion to change, and weak institutional support systems hinder SMEs' digital adoption. These limits are especially severe in emerging economies, where infrastructure and socioeconomic issues hinder digital integration. The study also suggests that context-specific research and post-adoption integration and long-term sustainability outcomes are lacking in the literature. The study found that digital innovation may boost SME growth and resilience, but it requires internal capabilities and external enabling conditions. To maximise digital transformation benefits for SMEs, it advises improved infrastructure, digital skills training, targeted financial support, strengthened institutional frameworks, and increased public-private collaborations.</i></p> <p><b>Keywords:</b> Digital Innovation, Growth, Small and Medium, Enterprises.</p>
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<p>Copyright © 2026 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.</p> <p><b>Citation:</b> Dr. Nnadozie Walls Ozurumba &amp; Dr. Charity Oluwafemi Sadibo. (2026). The Role of Digital Innovation in the Growth of Small and Medium Enterprises (SMEs). UKR Journal of Arts, Humanities and Social Sciences (UKRJAHSS), 2(6), 49-57.</p>	

## Introduction

Small and Medium Enterprises (SMEs) occupy a central position in both developed and developing economies due to their contribution to employment generation, innovation, poverty reduction, and overall economic diversification (Enaifoghe, 2023). In many emerging economies, SMEs represent the majority of registered businesses and serve as critical drivers of grassroots economic activity. Despite their importance, a persistent challenge confronting SMEs is their limited capacity to scale, innovate, and compete effectively in increasingly digitalised global markets. This limitation has become more pronounced in the context of rapid technological advancement, where digital innovation

is reshaping how businesses operate, interact with customers, and create value.

Digital innovation, broadly understood as the integration and application of digital technologies to transform business models, processes, and services, has become a defining feature of contemporary economic systems. Technologies such as cloud computing, mobile applications, e-commerce platforms, artificial intelligence, and digital payment systems are no longer optional tools but essential enablers of competitiveness. For SMEs, these innovations present both an opportunity and a challenge. On one hand, they offer the potential to overcome

traditional constraints such as limited capital, narrow market reach, and inefficient operational structures. On the other hand, they introduce new complexities relating to skills requirements, infrastructure access, cybersecurity, and organisational readiness.

The increasing relevance of digital innovation in SME growth is further amplified by globalisation and the post-digital economy, where physical boundaries have become less significant in determining market participation (Ehis, 2024). SMEs can now access international markets, manage supply chains in real time, and engage customers across multiple platforms without necessarily having large physical infrastructures. However, the extent to which SMEs are able to harness these opportunities depends on a range of contextual factors, including digital literacy, institutional support, regulatory frameworks, and socio-economic conditions. In many developing economies, including Nigeria and other Sub-Saharan African contexts, the digital divide remains a significant barrier to full participation in the digital economy.

This study is grounded in the understanding that digital innovation is not merely a technological shift but a structural transformation that redefines how SMEs operate and grow. It moves beyond the adoption of digital tools to include changes in organisational culture, strategic orientation, and value creation processes. As such, SME growth in the digital era cannot be fully understood without examining the interplay between technology, organisational capability, and external environmental factors. While existing literature has acknowledged the importance of digitalisation, there remains a need for deeper conceptual exploration of how digital innovation specifically influences SME growth trajectories, particularly in resource-constrained environments.

The aim of this study is to explore the role of digital innovation in the growth of SMEs, with a focus on understanding the mechanisms through which digital tools and technologies contribute to business expansion, efficiency, and sustainability. It seeks to critically examine both the enabling factors and the barriers that shape digital adoption and utilisation among SMEs. By doing so, the study contributes to a more nuanced understanding of SME development in the context of technological change.

The significance of this research lies in its potential to inform policymakers, business owners, and development agencies on how best to support SMEs in leveraging digital innovation for sustainable growth. Given the increasing importance of digital economies globally, understanding these dynamics is essential for designing effective interventions that enhance SME competitiveness and resilience.

## Conceptual Clarifications

A clear conceptual foundation is essential for understanding the relationship between digital innovation and the growth of Small and Medium Enterprises (SMEs), as these terms are often interpreted differently across academic and policy contexts (Pelletier & Cloutier, 2019). This section therefore clarifies the key constructs underpinning the study, namely SMEs, digital innovation, and business growth, while also establishing the conceptual boundaries within which the discussion is situated.

Small and Medium Enterprises (SMEs) are typically defined based on a combination of quantitative and qualitative criteria such as number of employees, annual turnover, asset base, and market reach. However, there is no universally accepted definition, as thresholds vary across countries and institutions. For instance, international organisations such as the World Bank and the OECD often classify SMEs as firms with fewer than 250 employees, while national frameworks may adopt more context-specific criteria reflecting economic realities. Beyond numerical definitions, SMEs are generally characterised by relatively simple organisational structures, limited access to capital, strong owner-manager influence, and a high degree of operational flexibility (Marconatto et al., 2022). In developing economies, SMEs are particularly significant because they absorb labour, stimulate local entrepreneurship, and serve as a buffer against unemployment and economic shocks.

Digital innovation, on the other hand, refers to the application and integration of digital technologies into business processes, products, and organisational models in ways that create new value or significantly improve existing systems. It extends beyond basic digitisation, which involves converting analogue information into digital form, and digitalisation, which refers to the use of digital tools to improve existing processes. Digital innovation encompasses a more transformative process that reshapes how businesses operate, interact with customers, and compete in the market. It includes technologies such as e-commerce platforms, cloud computing, artificial intelligence, big data analytics, mobile technologies, and digital payment systems. These technologies collectively enable businesses to streamline operations, enhance decision-making, and expand market reach in ways that were previously unattainable for resource-constrained firms such as SMEs.

Business growth in the context of SMEs is a multidimensional concept that extends beyond financial performance. While revenue growth, profitability, and market expansion remain core indicators, growth also includes improvements in productivity, innovation capacity, organisational efficiency, and customer base

diversification (Oyeyipo et al., 2023). For SMEs, growth is often incremental and influenced by both internal capabilities and external environmental conditions. It is not solely measured by size expansion but also by the ability to adapt, survive, and remain competitive in changing market conditions. In the digital era, growth increasingly reflects an enterprise's capacity to integrate technology into its core operations and strategic decision-making processes.

The interaction between these three concepts forms the basis for understanding the central argument of this study. SMEs operate within constraints that often limit their scalability and competitiveness, yet digital innovation offers a pathway to overcome many of these structural limitations. However, the extent to which this potential is realised depends on how well SMEs interpret, adopt, and embed digital tools within their operational and strategic frameworks. This conceptual alignment highlights the importance of viewing digital innovation not as an external add-on but as an embedded organisational capability that influences multiple dimensions of SME performance.

### **Theoretical Framework**

The Resource-Based View (RBV) of the company by Birger Wernerfelt, 1984, guides this study's analysis of how digital innovation helps SMEs grow. The Resource-Based View, articulated by scholars like Barney (1991), holds that internal resources and capabilities, not external market conditions, drive organisational success and competitive advantage. These resources must be rare, valuable, inimitable, and non-substitutable to preserve competitive advantage. This theory applies to SMEs since they often have limited resources and must strategically employ them to develop and survive.

RBV views digital innovation as a strategic organisational resource that helps SMEs succeed in dynamic marketplaces. E-commerce platforms, cloud-based systems, CRM software, and data analytics technology can alter how SMEs create and distribute value. Integrated digital resources help SMEs improve efficiency, decrease operational expenses, increase customer interaction, and expand market access. Digital innovation becomes a vital intangible resource that boosts SME capabilities. However, the RBV highlights that not all resources provide competitive advantage. How digital innovation is conceived, distributed, and incorporated within the organization determines its efficacy. This means that SMEs need managerial competency, digital literacy, and flexible organisational culture to use digital tools. Combining technical resources with human and organisational qualities helps firms grow sustainably. Internal alignment is crucial to transforming digital innovation into performance gains.

The RBV also explains why SMEs in identical contexts have different digital adoption outcomes. Some SMEs use digital innovation to prosper, yet others struggle despite having the same technologies. This diversity is due to resource endowments, especially intangible assets like knowledge, skills, and strategic vision. Digital resource integration and exploitation are easier for SMEs with superior management and digital skills.

Additionally, the RBV emphasises path dependency in organisational development. SMEs that engaged in learning, innovation, and capability development are more likely to adopt and benefit from digital innovation. Firms without such basic capabilities may struggle to turn digital investments into growth. In emerging economies, education, infrastructural, and institutional support differences can greatly impact SME performance.

The Resource-Based View provides a cohesive theoretical framework for studying digital innovation and SME growth. It moves the focus from external environmental issues to internal organisational skills, providing a more nuanced view of how SMEs can use digital resources to gain a sustained competitive edge.

### **Digital Innovation and SME Growth Pathways**

Digital innovation affects SMEs' growth through multiple interconnected routes that change how they operate, compete, and create value. Digital innovation is a set of techniques that improve market access, operational efficiency, customer interaction, product innovation, and financial inclusion (Qureshi et al., 2021). When used properly, these channels reinforce each other and boost company performance.

Market access is one of the main ways digital innovation helps SMEs flourish. Geographical constraints, high distribution costs, and limited marketing reach have limited SMEs. SMEs can now access customers outside their immediate area thanks to digital channels like e-commerce and online marketplaces (Raji et al., 2023). This move allows small businesses to join regional and global value chains without costly infrastructure. Social media allows focused marketing and direct client communication, removing intermediaries and complementing this expansion.

Operational efficiency is another way digital innovation helps SMEs expand. SMEs may automate inventory management, accounting, payroll, and customer service with digital solutions. Real-time data access and collaboration in cloud-based systems improve decision-making speed and accuracy. These efficiencies lower operational costs and boost productivity, helping SMEs deploy precious resources. Efficiency enhancements can boost competitiveness in resource-constrained contexts.

Customer involvement and experience also drive digital SME growth. Customer interaction has changed due to constant, tailored, and interactive digital channels (Oumaima & Lamari, 2024). SMEs may better understand client preferences and respond faster to changing demands using social media, mobile apps, and digital feedback systems. This increased interaction boosts consumer happiness and brand loyalty, which is crucial for business longevity.

Digital innovation boosts product and service innovation as well as market and operational benefits. SMEs are using digital technologies to design, test, and improve goods based on real-time customer feedback and data analytics. This iterative innovation method helps organisations meet consumer needs and reduce product development risks. Co-creation on digital platforms lets customers shape products and services, improving relevance and market fit.

Financial inclusion is another way digital innovation helps SMEs develop. SME financing, especially in developing nations, has been a big issue (Ayyagari et al., 2018). Mobile banking, fintech platforms, and digital payment systems have increased credit access, cut transaction costs, and simplified financial management. SMEs may develop financial histories, acquire microloans, and better participate in formal financial institutions with these advances. Crowdfunding platforms connect SMEs with investors, expanding financing options. These pathways show that digital innovation is a multifaceted system that changes SME growth dynamics. The effectiveness of these pathways depends on how well SMEs integrate digital tools into their strategic and organisational frameworks.

### **Enablers of Digital Innovation in SMEs**

SMEs' adoption and gain from digital innovation are largely determined by enabling conditions that define digital tool access, usefulness, and sustainability. These enabling variables affect SMEs' ability to adopt digital technologies at infrastructural, institutional, organisational, and relational levels.

Digital infrastructure availability and dependability facilitate digital innovation (Malewska et al., 2025). This includes reliable internet, affordable data, and enough electricity. Digital tool use is limited without these core infrastructure pieces, especially in developing nations with infrastructure shortages. SME participation in online markets and digital ecosystems has been made possible by broadband penetration and mobile network expansion. However, infrastructural quality disparities continue to limit digital adoption across areas.

Digital innovation in SMEs is also enabled by government policy and regulation. Tax incentives for technology adoption, digital economy plans, and SME development

programmes might help enterprises embrace digital transformation (Chen et al., 2021). Building trust in digital systems requires regulatory settings that facilitate commerce, protect digital transactions, and secure data. If such policies are inadequate or inconsistent, SMEs may be uncertain about investing in digital technology. Another enabler is human capital development, especially digital literacy and technical abilities. SME owners and staff must be able to use and manage digital tools to successfully integrate digital innovation (Zhang et al., 2022). Data management, online marketing, cybersecurity, and digital communication skills are increasingly important for business competitiveness. Even well-intentioned digital investments may fail in situations with low digital capabilities. Access to finance affects SMEs' digital innovation. Despite falling prices, digital technologies still require initial investment, training, and maintenance, which can strain small firms. Financial institutions and fintech platforms that offer flexible lending, microloans, and digital financing help close this gap (Omowole, Urefe, et al., 2024). SME digital transformation can be accelerated by bespoke finance packages that assist technology adoption.

Digital innovation also benefits from strategic alliances and ecosystem collaboration. SME capacity to create and deploy complex digital systems is often limited. Partnerships with technology, telecom, training, and industry networks can provide expertise, infrastructure, and support for digital adoption (Onoja & Ajala, 2022). These collaborations help SMEs overcome resource constraints and better integrate digital solutions.

These enabling elements show that digital innovation in SMEs is strongly ingrained in socio-economic and institutional systems. Infrastructure, legislation, skills, cash, and relationships influence how much SMEs can gain from digital transformation.

### **Barriers to Digital Innovation Adoption**

Digital innovation offers many Small and Medium Enterprises (SMEs) opportunity, yet many still struggle to adapt and use digital technologies. These structural, financial, organisational, and socio-cultural impediments slow digital development. Digital adoption's high cost is a major obstacle. Digital technologies have grown more affordable, but many SMEs still need to spend in hardware, software, training, and system integration (Omowole, Olufemi-Philips, et al., 2024a). Maintenance, subscription fees, and system upgrades can strain small firms with limited money in addition to acquisition expenditures. This economic burden typically leads SMEs to favour short-term survival over long-term digital investment, limiting adoption.

Financial restrictions are linked to digital skills gaps. Many SME owners and staff lack the technical skills to implement and manage digital solutions. This skills gap affects technology uptake, use, and optimisation. Underuse or misuse of digital tools can have little influence on corporate performance without proper training and capacity development (Asgar & Zafer, 2025). Lack of digital literacy might also cause technology reluctance or anxiety, slowing adoption.

Cybersecurity and data protection issues also hinder digital innovation (Gardi & Eddine, 2023). Data breaches, fraud, and system hacking grow more likely for SMEs as they conduct more online transactions and data-driven activities. SME use of digital tools might be discouraged by perceived and actual hazards, especially in areas with insufficient cybersecurity infrastructure and regulatory compliance. Therefore, concerns about consumer or financial data loss might damage digital system trust.

SME digital adoption is also hindered by organisational change aversion. Traditional management and informal operating systems may make technological transition difficult in many small organisations. Entrenched habits, fear of unpredictability, and ignorance of digital innovation's benefits sometimes cause resistance (Mani & Chouk, 2018). Cultural and behavioural inertia in the organization may hinder technology adoption even when it is available and affordable. Poor institutional support and policy implementation exacerbate these issues. In many developing economies, SME digital transformation support is scattered or poorly planned. SME digitalisation is hindered by limited consulting services, weak digital policy enforcement, and low public investment in digital infrastructure (Idemudia et al., 2023). This institutional mismatch hinders government and business sector digital innovation endeavours. These obstacles show how complicated digital transformation is for SMEs. They show that adoption is influenced by economic capability, human capital, organisational culture, and institutional context, not only technology. Beyond technology, these issues require concerted interventions in skills development, legislative reform, financial support, and cultural change.

### **Impact of Digital Innovation on SME Sustainability**

In times of market instability, economic uncertainty, and rapid technological development, digital innovation is increasingly seen as crucial to the sustainability of Small and Medium Enterprises (SMEs). Sustainability includes firm survival, resilience, and adaptability, not only environmental issues. Digital innovation improves organisational flexibility, external shock response, and competitiveness.

Organisational resilience is one of digital innovation's biggest benefits to SME sustainability. Digital solutions help SMEs weather economic downturns, supply chain disruptions, and unexpected catastrophes. Digital platforms offer operations continuity through remote working, online sales, and automated service delivery. Operational continuity decreases susceptibility and helps SMEs stay in business (De Matteis et al., 2023). The COVID-19 pandemic showed that digitally equipped SMEs were more likely to survive than traditional ones.

Digital innovation helps SMEs run more efficiently and meet market demands, boosting their competitiveness. Data analytics and customer insight technologies help SMEs analyse consumer behaviour and alter their products (Omowole, Olufemi-Philips, et al., 2024b). This responsiveness boosts market relevance and helps enterprises stand out in competitive markets. In online marketplaces, where digital methods encourage exposure and engagement rather than physical scale, digital platforms lower market entry barriers, allowing SMEs to compete more equally with larger enterprises.

Business survival is another key aspect of sustainability, especially in SMEs where financial restrictions, restricted market access, and operational inefficiencies cause high failure rates. Digital innovation reduces operational costs, improves cash flow management, and diversifies digital revenue streams to help survive. Mobile payment systems and fintech solutions increase liquidity management, while e-commerce platforms expand sales to new customers. These elements boost long-term business continuity.

Digital innovation boosts adaptability. SMEs that utilise digital technologies can better adapt to market changes, technical advances, and customer expectations. Real-time data from digital technologies speeds up strategic decisions. Such adaptability is crucial in dynamic economic contexts where established business models may become outmoded without timely innovation. Pivoting operations, changing products, and entering new markets increasingly require digital competencies (Fu et al., 2025). Digital innovation also helps SMEs formalise and institutionalise. Organization and transparency improve as organisations implement structured digital accounting, reporting, and customer management systems. This formalisation boosts credibility, access to external capital, and partnerships with suppliers, consumers, and financial institutions. Over time, these improvements make businesses more stable and sustainable.

Digital innovation transforms SME sustainability by strengthening resilience, competitiveness, survival chances, and adaptive capacity. These benefits depend on how well digital tools are integrated into organisational

processes and the enabling environment in which SMEs operate.

### **Critical Analysis of Existing Literature**

Digital innovation and Small and Medium Enterprises (SMEs) scholarship is increasing to understand digital technology's transformative potential for corporate success. Despite this growing interest, the literature is still fragmented in theory, methodology, and context. The strengths, limits, and contradictions of existing studies are critically examined in this section to see how they affect SME digital transformation understanding.

A strength of extant research is its continuous recognition of digital innovation as a catalyst for SME performance improvement. Numerous studies show that digital technologies improve operational efficiency, market access, and consumer interaction, boosting corporate growth. Digital innovation has become a prominent issue in SME research due to this consensus. The literature has also expanded beyond technical viewpoints to address organisational and strategic aspects of digital transformation, including as leadership, skills, and internal capacities.

However, the literature overgeneralises across varied economic and institutional situations, a major shortcoming. Many empirical findings come from developed economies with extensive digital infrastructure, regulatory backing, and institutional stability. Thus, these conclusions may not apply to underdeveloped economies. In SMEs with infrastructure gaps, financial constraints, and poor institutional frameworks, digital adoption trends may differ. A contextual gap restricts existing models' explanatory power.

The contradictory evidence that digital innovation directly affects SME profitability and long-term growth is another major concern. Some research show that digital adoption improves business performance, whereas others argue that managerial capability, organisational preparation, and external support systems moderate the link. This mismatch suggests that digital innovation alone cannot guarantee growth, highlighting the need for more complex analytical frameworks that account for mediating influences.

The literature also emphasises technological adoption above post-adoption use and integration. Many studies analyse whether SMEs use digital tools, but few examine how they are integrated into organisational processes and evolve. This conceptual gap between acceptance and impact limits understanding of digital innovation's long-term value development. Adoption, adaptation, and strategic alignment inside the organization are necessary for digital tools to work.

Existing research integrates socio-cultural and behavioural aspects poorly. Economic and technological elements are often studied, but organisational culture, trust, technology attitudes, and change resistance are not. These psychological and behavioural elements explain why SMEs with identical resources frequently have varying digital transformation outcomes.

The prevalence of cross-sectional studies limits the ability to capture dynamic changes across time. Longitudinal and qualitative techniques are underused despite their promise to reveal SMEs' digital innovation evolution. This methodological gap limits causality and process-oriented change comprehension.

Although contextual bias, theoretical fragmentation, and methodological limitations limit the literature on digital innovation and SME growth, it gives useful insights. These limitations indicate the need for more integrated, context-sensitive, and process-oriented research methods to better understand SME digital transformation difficulty.

### **Research Gaps**

Despite the growing literature on digital innovation and SMEs, several significant gaps warrant further study. These theoretical, methodological, and contextual shortcomings affect digital transformation in resource-constrained situations. These gaps must be identified to place the current work in academic discourse and clarify its contribution to knowledge.

Limited contextualisation of digital innovation studies in underdeveloped economies is a major gap in the research. Many studies are based in advanced economies with well-established digital infrastructure and strong institutional backing. Thus, SMEs in underdeveloped countries have specific issues like intermittent power supply, weak internet penetration, limited capital, and institutional instability, which are typically overlooked. This hinders comprehension of digital innovation under structural constraint and how SMEs adjust.

Another gap is the lack of attention to SME owners and managers' digital adoption experiences and perceptions. Most studies focus on adoption rates, performance indicators, and macro-level results through a structural or technological lens. How SMEs' decision-makers comprehend, negotiate, and respond to digital transformation pressures is rarely studied. This omission obscures the behavioural and cognitive aspects of digital innovation, which explain adoption outcomes.

Digital adoption and meaningful digital integration are also conceptually unclear in the literature. Many studies use adoption as a measure of digital innovation without considering how digital technologies are integrated into

fundamental business processes. This oversimplifies digital transformation by assuming technology improves performance. In reality, strategic alignment and integration depth determine outcomes more.

Existing research generally neglects sector-specific distinctions in SME digital innovation. SMEs in agriculture, retail, manufacturing, and services have different operational structures and digital needs. However, much of the literature lumps SMEs together, hiding substantial differences in digital technology adoption and use across industries. This hinders focused policy and managerial initiatives.

The lack of long-term sustainability research on digital innovation is another gap. Fewer studies examine how digital transformation affects long-term survival, resilience, and organisational flexibility than revenue growth or efficiency benefits. A short-term bias limits understanding of whether digital innovation leads to lasting competitive advantage or ephemeral benefits.

Finally, the prevalence of quantitative and cross-sectional techniques limits long-term process and experience research. Qualitative and longitudinal studies are scarce on how SMEs adapt to technology transformation and digital innovation.

These deficiencies suggest that context-sensitive, process-oriented, and multidimensional research is needed to understand the complexity of digital innovation in SMEs, especially in emerging economies.

## Conceptual Framework

This study is based on the idea that digital innovation drives Small and Medium Enterprises (SMEs) growth, but its effectiveness is moulded by internal and external factors. This approach views SME growth as a mediated and context-dependent process in which digital innovation interacts with organisational skills and environmental circumstances to achieve different outcomes.

Digital innovation, using e-commerce platforms, cloud computing systems, mobile apps, data analytics tools, and digital payment systems, is the framework's foundation. Technologies are the main factor affecting SME performance. How well digital innovations are integrated into business operations and strategic processes determines their worth.

The framework's main result is SME growth. This includes revenue growth, market expansion, operational efficiency, innovation capacity, and organisational resilience. Growth includes qualitative increases in competitiveness, flexibility, and sustainability as well as financial expansion (Prasanna et al., 2019). Digital innovation is likely to affect

all four aspects, but its quantity and direction rely on intervening factors.

Digital innovation and SME growth are moderated by factors that govern how well digital technologies produce results. Digital literacy and management are key moderators. Technically and strategically competent SMEs are more likely to use digital tools in decision-making (Bhuiyan et al., 2024). However, poor abilities can drastically reduce digital innovation's benefits.

Infrastructure availability moderates too. SMEs' digital tool utilisation depends on reliable electricity, internet connectivity, and affordable digital services. Digital innovation is less effective in weak or insecure infrastructure, regardless of technology benefits.

Financial capability affects digital innovation and SME growth. Financially stronger SMEs can invest in digital tools, training, and system updates. However, financially restricted enterprises may struggle to maintain digital adoption, limiting long-term benefits. Financial inclusion strategies are crucial to digital change.

Digital innovation efficacy depends on institutional and policy settings. Government policies, regulatory frameworks, and SME development programmes can boost digital integration adoption (Landjohou, 2025). SMEs may be uncertain and less inclined to invest in digital technology without strong backing.

In conclusion, digital innovation drives SME growth, but human, infrastructural, financial, and institutional variables mitigate its effects. This relational view underlines that digital resources and contextual facilitators determine SME growth in the digital era, not technology.

## Conclusion

This study has examined the role of digital innovation in the growth of Small and Medium Enterprises (SMEs), positioning it as a transformative force that reshapes how businesses operate, compete, and sustain themselves in contemporary economic environments. The analysis has shown that digital innovation extends beyond the mere adoption of technological tools to encompass a broader process of organisational transformation. Through mechanisms such as market expansion, operational efficiency, enhanced customer engagement, innovation capacity, and improved access to finance, digital technologies significantly influence SME growth trajectories. However, the extent of these benefits is not uniform, as outcomes are shaped by contextual and organisational factors.

A key insight emerging from the discussion is that digital innovation does not automatically translate into growth unless it is supported by enabling conditions such as digital

literacy, infrastructural development, access to finance, and supportive institutional frameworks. Barriers such as high implementation costs, skills deficits, cybersecurity risks, and resistance to change continue to limit the ability of many SMEs, particularly in developing economies, to fully harness digital opportunities. The Resource-Based View further reinforces the argument that internal capabilities determine how effectively SMEs can convert digital resources into sustained competitive advantage.

Overall, the study highlights that SME growth in the digital era is a complex and multidimensional process influenced by the interaction between technology and context. While digital innovation offers significant potential for enhancing sustainability, competitiveness, and resilience, its impact is ultimately contingent on how well SMEs integrate these tools within their organisational structures and external environments. This underscores the need for more targeted policies and capacity-building initiatives that strengthen both the technological and non-technological foundations of SME development.

### Recommendations

1. Governments and relevant policy institutions should prioritise the development of robust digital infrastructure, particularly stable internet connectivity and reliable electricity supply, as foundational requirements for effective SME digital transformation. Without these structural enablers, the benefits of digital innovation will remain unevenly distributed across regions and sectors.
2. Targeted capacity-building programmes should be introduced to improve digital literacy among SME owners and employees. Such interventions should focus on practical competencies, including the use of digital marketing tools, e-commerce platforms, data management systems, and cybersecurity awareness, to ensure meaningful utilisation of digital technologies.
3. Financial institutions and development agencies should design tailored financing schemes that specifically support SME digital adoption. These may include low-interest loans, grants, and fintech-enabled microcredit facilities that reduce the financial burden associated with acquiring and maintaining digital tools.
4. SMEs should adopt deliberate organisational strategies that integrate digital innovation into core business processes rather than treating it as a peripheral tool. This includes investing in digital planning, aligning technology use with business

goals, and fostering a culture of adaptability and continuous learning within the organisation.

5. Stronger public-private partnerships should be encouraged to support SME digital transformation. Collaboration between governments, technology providers, telecommunications companies, and training institutions can help bridge resource gaps, improve access to expertise, and accelerate the diffusion of digital innovation across SME sectors.

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