

DIGITAL PROCUREMENT, RESILIENCE AND INCLUSIVITY IN TOURISM MSME SUPPLY CHAINS: A COMPARATIVE CONCEPTUAL STUDY OF SOUTH AFRICA AND CAMEROON

Frinwei Njihy ACHU ¹, Portia Pearl Siyanda SIFOLO ¹, Uwe Peter HERMANN ^{1*}

¹Tshwane University of Technology, Faculty of Management Sciences, Center for Sustainable Tourism and Innovation, Pretoria, South Africa; AchuFNn@tut.ac.za (F.N.A.); SifoloPS@tut.ac.za (P.P.S.S.); HermannUP@tut.ac.za (U.P.H.)

Citation: Achu, F. N., Sifolo, P. P. S., & Hermann, U. P. (2026). Digital procurement, resilience and inclusivity in tourism msme supply chains: A comparative conceptual study of South Africa and Cameroon. *Geojournal of Tourism and Geosites*, 67(3), 2616–2626. <https://doi.org/10.30892/gtg.67368-1880>

Abstract: The tourism industry significantly contributes to economic growth, employment and inclusive development in Sub-Saharan Africa (SSA), with micro, small and medium enterprises (MSMEs) forming the backbone of tourism value chains. Despite their importance, tourism supply chains in the region remain fragmented and vulnerable to external shocks such as economic instability, health crises, climate-related disruptions and infrastructural constraints. Digital procurement has emerged as a strategic mechanism for improving operational efficiency, strengthening supply chain resilience, and promoting inclusive participation among historically marginalised groups, particularly women- and youth-led enterprises. However, limited research has examined digital procurement and its implications for supply chain resilience and inclusivity among tourism MSMEs in SSA from a comparative perspective. This conceptual paper comparatively examines digital procurement in tourism MSME supply chains in South Africa and Cameroon, focusing on its implications for resilience and inclusivity. Drawing on the Technology–Organisation–Environment (TOE) framework as an analytical lens, the study compares the technological, organisational, and environmental conditions that shape digital procurement opportunities and constraints in the two countries. The comparison highlights South Africa's more established digital ecosystem and Cameroon's developing but uneven digital environment, while recognising that MSMEs in both contexts continue to experience disparities in digital access, capabilities and institutional support. The analysis suggests that digital procurement's contribution to supply chain resilience and inclusivity is context-dependent and influenced by technological readiness, organisational capabilities, and the wider institutional environment. The study contributes to tourism supply chain and digital transformation literature by providing a context-sensitive comparative understanding of digital procurement in two distinct SSA settings. The findings offer practical insights for policymakers, tourism practitioners, and development agencies seeking to strengthen resilient and inclusive tourism MSME supply chains.

Keywords: digital procurement, supply chain resilience, inclusivity, tourism MSMEs, South Africa, Cameroon

* * * * *

INTRODUCTION

Tourism is globally recognised as one of the most rapidly expanding economic sectors, serving as a primary catalyst for socio-economic development in numerous Sub-Saharan African (SSA) nations. The sector significantly contributes to gross domestic product (GDP), employment generation, foreign exchange earnings, and poverty reduction.

Micro, small, and medium-sized enterprises (MSMEs) constitute the predominant force within tourism value chains (United Nations World Tourism Organisation [UNWTO] and United Nations Development Programme, 2017; World Tourism Organisation [UNWTO], 2018; 2023). In countries such as South Africa and Cameroon, tourism MSMEs are pivotal in providing accommodation, transportation, tour operations, food services, cultural experiences and ancillary services, thereby supporting local livelihoods and fostering economic diversification. Shaikha Al Nowais, Secretary-General Elect of the United Nations World Tourism Organisation (UNWTO) for the 2026–2029 term indicated that in 2024, the travel and tourism sector accounted for 10% of global GDP (Travel & Tourism News Middle East, 2025), while in Sub-Saharan Africa, the sector contributed 6.4% of regional GDP in 2025 (World Travel & Tourism Council, 2026).

Notwithstanding their crucial role, tourism supply chains in SSA confront substantial challenges. These include fragmented supplier networks, inadequate infrastructure, restricted access to financial resources, deficient organisational support and increasing susceptibility to systemic disruptions. Such disruptions encompass the COVID-19 pandemic, economic instability, climate-related events, and geopolitical uncertainties (Christie et al., 2014; Organisation for Economic Co-operation and Development [OECD], 2020; 2022).

These vulnerabilities underscore the imperative for tourism enterprises to cultivate resilient supply chain systems capable of anticipating, responding to, recovering from and adapting to disruptions.

* Corresponding author

Digital transformation has emerged as a critical strategic imperative for optimising organisational operations and supply chain management across diverse sectors (Shonubi, 2025). Within this paradigm, digital procurement is widely acknowledged as the application of digital technologies to streamline purchasing processes, enhance transparency, and improve supplier relationship management (Srai & Lorentz, 2019; Bienhaus & Haddud, 2018). Bienhaus & Haddud (2018) further posit that digital procurement tools, encompassing e-procurement platforms, electronic tendering systems, cloud-based procurement applications, and integrated enterprise resource planning systems, possess the potential to bolster coordination among supply chain actors and augment decision-making through enhanced visibility and data analytics capabilities.

Within the tourism sector, Bienhaus & Haddud (2018); Meyer et al. (2021); Zhao et al. (2023) observe that digital procurement practices can contribute significantly to supply chain resilience. This is achieved by facilitating quicker supplier identification, reducing transaction costs, enhancing communication flows and enabling more agile responses during periods of disruption through improved visibility, information sharing, and data-driven decision-making capabilities.

Furthermore, the International Trade Centre (2022) highlights that digital procurement may foster inclusivity by lowering market entry barriers and expanding participation opportunities for women- and youth-led enterprises, which frequently encounter structural impediments in accessing information, networks and formal procurement processes. As Dr. Hazel Gooding, United Nations (UN) Women South Africa deputy representative, articulated during the Women's Month 2025 celebration in South Africa, "When women have equal access to digital markets, entire communities thrive" (UN Women Africa, 2025). The integration of inclusivity considerations into digital procurement systems aligns with broader sustainable development goals aimed at mitigating inequalities and fostering equitable economic participation.

While the adoption of digital procurement has been investigated within broader MSME and public procurement contexts, existing scholarship predominantly focuses on technological adoption determinants and operational efficiency outcomes (Dumeh, 2025; Kaunda, 2025; Kalaba & Nakamba, 2026). Limited attention has been directed towards how digital procurement might influence both supply chain resilience and inclusivity specifically within tourism MSMEs in SSA. Crucially, comparative studies examining how disparities in digital infrastructure, organisational capabilities, and institutional environments shape digital procurement across African contexts remain scarce. This lacuna restricts a comprehensive understanding of whether the opportunities and constraints associated with digital procurement are uniform across countries or are shaped by their specific contextual nuances. To address these identified research gaps, this conceptual paper undertakes a comparative examination of digital procurement among tourism MSMEs in South Africa and Cameroon, with particular emphasis on its implications for supply chain resilience and inclusivity. South Africa is widely regarded as one of the continent's more digitally advanced economies, underpinned by relatively sophisticated information and communication technology (ICT) infrastructure and established digital business ecosystems (International Trade Administration, 2024). In contrast, Cameroon's digital development remains uneven across the country (World Bank, 2019; 2022), reflecting persistent infrastructural and institutional challenges that continue to influence digital participation. These contrasting contexts offer a valuable opportunity to investigate how differences in technological, organisational, and environmental conditions influence digital procurement adoption and its potential contribution to resilient and inclusive tourism MSME supply chains. The following objectives guide the present paper:

1. To examine digital procurement practices, opportunities, and challenges among tourism MSMEs in South Africa and Cameroon.
2. To compare the technological, organisational, and environmental conditions shaping digital procurement adoption among tourism MSMEs in the two countries.
3. To critically examine the implications of these similarities and differences for tourism MSME supply chain resilience and inclusivity.

This study offers three principal contributions. Firstly, it extends existing research on tourism digitalisation by specifically focusing on digital procurement and its potential implications for resilience and inclusivity. Secondly, it employs the Technology–Organisation–Environment (TOE) framework as an analytical lens to investigate how technological, organisational, and environmental conditions shape digital procurement among tourism MSMEs. Thirdly, by comparing South Africa and Cameroon, the study elucidates how variations in digital development, institutional environments, and MSME conditions may influence digital procurement opportunities and outcomes. In doing so, the paper provides context-sensitive insights that can inform policy interventions and investment strategies aimed at fortifying resilient, inclusive, and sustainable tourism value chains across SSA. The subsequent section reviews the pertinent literature on tourism MSME supply chains, digital procurement, supply chain resilience, and inclusivity. It then discusses the TOE framework as the theoretical lens guiding the comparative analysis. The paper proceeds to examine the South African and Cameroonian contexts and comparatively analyses the technological, organisational, and environmental conditions shaping digital procurement in the two countries. The discussion then considers the implications of these similarities and differences for supply chain resilience and inclusivity. The paper concludes by highlighting theoretical and practical implications, limitations, and directions for future research.

LITERATURE REVIEW

Tourism MSME supply chains

MSMEs form the bedrock of tourism economies across SSA, constituting approximately 80% of tourism businesses (Chamboko-Mpotaringa et al., 2025). Nevertheless, tourism MSMEs operate within highly fragmented and interdependent supply chains, frequently under resource-constrained conditions characterised by limited access to finance, weak organisational capabilities, inadequate infrastructure and varying degrees of informality, particularly within developing and

SSA contexts (Zhang et al., 2009; Kimbu & Tichaawa, 2020; Muluh & Lekgau, 2023; Chamboko-Mpotaringa et al., 2025). Chhetri et al. (2026) further observe that tourism supply chains encompass an interconnected network of suppliers, service providers, and intermediaries that deliver tourism experiences, ranging from accommodation and transport to catering, guiding, and craft production. For MSMEs, participation in these networks can facilitate collaboration, resource access, and value creation; however, their limited financial and organisational resources can also heighten their susceptibility to supply disruptions and external shocks (Rastegar et al., 2023; Seow et al., 2024). Consequently, for MSMEs, these chains represent both sources of opportunity and vulnerability. Within the African context, tourism MSMEs confront distinct structural impediments that constrain their effective participation in formal tourism supply and value chains.

These include restricted access to finance, elevated borrowing costs, fragmented value chains, substantial market-entry barriers, and insufficient investment and business-readiness support (Adinolfi et al., 2018; South Africa National Department of Tourism, 2022; International Labour Organisation, 2022). These challenges are particularly pronounced among women- and youth-led enterprises, which frequently encounter additional financial, socio-cultural, institutional, and network-related barriers that impede their engagement in tourism entrepreneurship and formal value chains (Ribeiro et al., 2021; Tryphone & Mkenda, 2022; Mametja et al., 2023; Ofosu-Appiah et al., 2025). Digitalisation presents a potential avenue for addressing these fragmentation challenges. Evidence from South Africa indicates that digitally enabled and collaborative approaches can enhance coordination, connectivity, and visibility within tourism supply networks (Sifolo, 2025). However, the realisation of digitalisation's benefits is contingent upon the specific context in which tourism MSMEs operate.

Digital procurement in tourism MSMEs

Despite the increasing body of research on digital transformation within the tourism sector, digital procurement remains comparatively underexplored, particularly concerning tourism MSMEs and its implications for supply-chain resilience and inclusivity in SSA (Chamboko-Mpotaringa et al., 2025; Sifolo, 2025). Digital procurement is defined as the application of digital technologies and integrated electronic systems to support procurement activities, encompassing supplier identification, sourcing, purchasing, contract management, invoicing and payment (Bienhaus & Haddud, 2018; Srai & Lorentz, 2019). The evolution of procurement from traditional paper-based systems to interconnected digital systems has fundamentally altered how businesses manage supplier relationships, optimise costs, and enhance operational productivity (Shonubi, 2025). The transformative potential of digital procurement lies in its capacity to address inherent inefficiencies within tourism supply chains. Traditional and weakly digitalised tourism supply chain practices are often characterised by fragmented coordination, disconnected information flows, and limited visibility across supply networks (Sifolo, 2025). Digital procurement offers mechanisms to mitigate these limitations by integrating procurement activities, improving information exchange, and strengthening supplier coordination. Consequently, efficient procurement practices are essential as they can enable tourism MSMEs to reduce costs, enhance supplier coordination, improve service delivery, and strengthen long-term competitiveness and sustainability with their stakeholders (Kimbu & Tichaawa, 2020, p. 742; Sifolo, 2025). More recent evidence indicates that digitalised supply chains can support value co-creation, collaboration, and performance among South African tourism SMMES (Sifolo et al., 2026, p. 1).

Digital procurement tools, such as e-procurement platforms, electronic tendering systems, e-marketplaces, supplier relationship management systems, cloud-based procurement applications and enterprise resource planning (ERP) systems, provide tourism enterprises with opportunities to streamline purchasing processes and enhance transparency (Patrucco et al., 2021). Evidence from large-scale tourism operations illustrates these potential benefits.

For example, TUI Belgium's implementation of Nezasa's TripBuilder reduced the time to make a new tour bookable from about one business day to one hour, while increasing itineraries created and bookings (Nezasa, 2025). The COVID-19 pandemic accelerated digital transformation across the tourism industry, necessitating the adoption of digital solutions by many businesses to maintain operational continuity (Sigala, 2020). For MSMEs in SSA, however, the transition towards digital procurement presents a more intricate scenario. Adoption is influenced not only by the perceived benefits of digital technologies but also by organisational readiness, technological infrastructure, digital capabilities, financial resources and the broader institutional environment (Afolayan et al., 2015; Chamboko-Mpotaringa et al., 2025).

Evidence from South Africa demonstrates that an awareness of technological benefits does not invariably translate into adoption. Schoeman and Seymour (2022, p. 257), for instance, observed that managers possessed "a clear understanding of the benefits of AI adoption," despite persistent factors inhibiting actual adoption. Similarly, inadequate digital infrastructure, limited digital skills, financial constraints, and organisational resistance can impede digital transformation among MSMEs. The benefits of digital procurement are therefore unlikely to materialise automatically. Their realisation is contingent upon the technological, organisational, and environmental conditions within which MSMEs operate. The literature suggests that successful digital procurement adoption is predicated upon a supportive ecosystem characterised by enabling policy frameworks, robust digital infrastructure, capacity-building initiatives, affordable technological solutions, and strong public-private collaboration mechanisms (International Trade Administration, 2024; OECD, 2021; Shonubi, 2025; Tchoffo et al., 2026; UN Women Africa, 2025). Although research on digital transformation and technology adoption in tourism is expanding, limited attention has been specifically devoted to digital procurement and its implications for tourism MSMEs in SSA. Comparative research, in particular, is scarce. This results in an insufficient understanding of how differences in digital infrastructure, organisational capabilities, and institutional environments shape digital procurement opportunities and constraints across various African contexts. A comparative analysis of South Africa and Cameroon therefore offers an opportunity to examine how these contextual differences may influence digital procurement and its implications for supply chain resilience and inclusivity.

Supply chain resilience in tourism

Supply chain resilience has emerged as a critical area of academic inquiry, driven by the escalating exposure to disruptions impacting global and localised supply networks. Resilience is generally understood as a system's capacity to anticipate, prepare for, respond to, recover from and adapt to unforeseen disturbances while sustaining essential functions (Ivanov & Dolgui, 2020). As previously established, tourism supply chains exhibit high vulnerability to disruptions due to their reliance on multiple interdependent actors operating across diverse geographical locations. Events such as pandemics, natural disasters, political instability, cyberattacks and economic crises can profoundly affect tourism operations and service delivery (Prayag, 2020). The COVID-19 pandemic starkly illuminated these vulnerabilities, exposing the inherent fragility of tourism systems globally and underscoring the imperative for resilience-building strategies (Buluk, 2023). Furthermore, climate-related disruptions exert additional pressure on tourism supply chains in SSA. Flooding, storms, and extreme weather events can impede accessibility, compromise infrastructure, disrupt logistics, and affect interconnected suppliers (Achu et al., 2026). Such disruptions reinforce the necessity for tourism MSMEs to cultivate capabilities for anticipation, response, recovery and adaptation.

The extant literature on supply chain resilience identifies several dimensions that enable organisations to withstand and recover from disruptions. Within the tourism sector, where businesses are acutely susceptible to disruptions, supply chain resilience has become a strategic imperative. Resilience is manifested through four interconnected capabilities: anticipation, which empowers organisations to identify risks and implement preventative measures prior to the occurrence of disruptions (Ponomarov & Holcomb, 2009); response, which facilitates flexible and coordinated actions during disruptive events (Hohenstein et al., 2015); recovery, which dictates the speed and efficacy of restoring operations post-disruption (Ponomarov & Holcomb, 2009); and adaptation, which enables organisations to learn from disruptions and reconfigure systems to enhance future preparedness (Chowdhury & Quaddus, 2017; Chowdhury et al., 2019). Collectively, these capabilities foster business continuity, operational stability, and long-term competitiveness in uncertain environments.

Digital technologies are increasingly recognised as pivotal enablers of supply chain resilience. Technologies that facilitate real-time information sharing, enhanced visibility, predictive analytics, and collaborative decision-making contribute significantly to strengthening organisational resilience (Bienhaus & Haddud, 2018; Ivanov & Dolgui, 2020; Zhao et al., 2023).

For tourism MSMEs in SSA, resilience is particularly crucial given the structural challenges characterising many operating environments, including infrastructure deficits, limited financial reserves, and increasing exposure to external shocks (South African National Department of Tourism, 2021, Mulu & Lekgau, 2023). Existing resilience research has predominantly concentrated on manufacturing and large organisational contexts, resulting in a knowledge gap concerning MSME experiences within developing tourism economies (Ivanov & Dolgui, 2020). Addressing this lacuna is vital because resilient tourism supply chains are indispensable for sustainable destination competitiveness, employment preservation, and community well-being. Consequently, understanding the mechanisms through which digital procurement may bolster resilience capabilities can furnish valuable insights for both researchers and practitioners.

Inclusivity in tourism supply chains

The concept of inclusivity has emerged as a salient discourse within tourism supply-chain research. This emphasis aligns with broader sustainable development objectives, particularly concerning the equitable distribution of tourism benefits (Scheyvens & Biddulph, 2018). Within the context of supply chains, inclusivity is defined by the active participation and equitable representation of marginalised enterprises and communities in both procurement and value creation processes (Scheyvens & Biddulph, 2018). Kimbu & Tichaawa (2020) posit that, in SSA, inclusive tourism necessitates the substantive involvement of MSMEs and historically marginalised groups, including women, youth and community-based enterprises. Nevertheless, tourism MSMEs frequently encounter impediments to meaningful engagement in established value chains. Adinolfi et al. (2018) observe that MSMEs in developing contexts experience "marginalisation or exclusion" and encounter difficulties in integrating into industry value chains. These challenges can be particularly acute for women-led enterprises. Empirical evidence from Ghana and Nigeria, for instance, underscores gender-based constraints that affect women's access to credit, markets, and other opportunities (Ribeiro et al., 2021). Similarly, in South Africa, women-owned tourism micro-enterprises confront limitations pertaining to financial resources, human capital, ICT infrastructure and institutional support (Mametja et al., 2023). Such barriers may impede their capacity for full participation in increasingly digitalised tourism supply chains. For digital procurement mechanisms to genuinely foster inclusivity, they must mitigate rather than perpetuate existing inequalities. Digital platforms possess the potential to enhance supplier visibility, expand market access, and diminish geographical barriers for smaller enterprises. However, the realisation of these benefits is contingent upon access to requisite infrastructure, affordable connectivity, appropriate skills, and robust institutional support (UN Conference on Trade and Development [UNCTAD], 2021; International Trade Center, 2022). Consequently, inclusive digital procurement necessitates a dual focus on both technological accessibility and the development of capabilities essential for MSMEs to participate effectively. Understanding the South Africa-Cameroon comparison necessitates an examination of the distinctive historical, economic, and institutional contexts that shape tourism supply chains and digital procurement opportunities in each country. The comparison is therefore instrumental in scrutinising context as a significant determinant influencing digital procurement, supply-chain resilience and inclusivity.

THEORETICAL FRAMEWORK

The TOE framework, posited by Tornatzky & Fleischer (1990), offers a robust analytical lens for comprehending organisational technology adoption. This framework postulates that decisions pertaining to technology implementation are

shaped by three interconnected contexts: technological, organisational, and environmental factors. The technological context encapsulates the characteristics of technologies accessible to an organisation, encompassing perceived benefits, compatibility, complexity, and relative advantage, all of which exert an influence on technology adoption decisions (Baker, 2012). Within the domain of digital procurement, technological considerations such as system usability, interoperability, cybersecurity, and perceived usefulness represent pivotal determinants of successful procurement digitisation (Bienhaus & Haddud, 2018). The organisational context pertains to internal characteristics that bear upon technology adoption, including organisational scale, leadership endorsement, financial provisions, technological proficiencies, and employee competencies (Baker, 2012).

MSMEs within the tourism sector frequently encounter organisational impediments linked to restricted financial capital, insufficient digital proficiencies, and a dearth of technical expertise, which may impede their preparedness to embrace digital procurement systems (Achieng & Malatji, 2022). The environmental context encompasses external factors such as industry characteristics, competitive pressures, governmental regulations, infrastructure availability and support from external stakeholders (Baker, 2012). In the context of Sub-Saharan Africa, disparities in digital infrastructure development, policy landscapes, and institutional support mechanisms may significantly influence the uptake of digital procurement among tourism MSMEs (Achieng & Malatji, 2022). The TOE framework has been extensively employed to elucidate organisational technology adoption across diverse sectors. Its multidimensional perspective renders it particularly apposite for the current study, given that the adoption of digital procurement among tourism MSMEs is unlikely to be solely contingent on technology. Rather, it is also shaped by organisational capabilities and the broader institutional and business milieu. Consequently, in this study, the TOE framework is deployed as an analytical lens to facilitate a comparative analysis between South Africa and Cameroon. The technological dimension will consider variations in digital infrastructure, accessibility, and technological readiness; the organisational dimension will examine MSME resources, skills, and capabilities; and the environmental dimension will address regulatory conditions, institutional support, and the wider business environment. This approach furnishes a structured foundation for investigating the potential divergence in digital procurement opportunities and constraints between the two nations.

Supply chain resilience and inclusivity as analytical outcomes

The TOE framework offers a valuable analytical lens for investigating the contextual factors influencing the adoption of digital procurement; however, this study extends beyond mere adoption conditions to critically examine the potential ramifications of such implementation. Consequently, supply chain resilience and inclusivity are conceptualised as primary analytical outcomes, rather than distinct theoretical constructs. Supply chain resilience is defined as the intrinsic capacity of a supply chain to anticipate, respond to, recover from, and adapt to disruptive events (Chowdhury & Quaddus, 2017). Within this operational context, digital procurement possesses the potential to bolster resilience through enhanced information visibility, improved supplier coordination and more effective communication channels. This, in turn, may empower tourism MSMEs to navigate and mitigate supply chain disruptions with greater efficacy (Ivanov & Dolgui, 2021).

Inclusivity pertains to the degree to which diverse stakeholder groups, particularly those historically marginalised from economic participation, can access and derive benefits from opportunities within tourism value chains (Scheyvens & Biddulph, 2018). Digital procurement may foster more inclusive participation by facilitating improved access to procurement information, market opportunities, and supplier engagement for MSMEs, including those spearheaded by women and youth (International Trade Centre, 2022). Nevertheless, the equitable realisation of these opportunities may be impeded by disparities in digital access, requisite skills, available resources, and the robustness of institutional support. Therefore, the TOE framework serves to structure the comparative analysis between South Africa and Cameroon, while resilience and inclusivity constitute the two principal outcomes through which the implications of digital procurement are rigorously scrutinised. This methodological approach enables the study to ascertain how variations in technological, organisational and environmental conditions across the two nations may influence the opportunities and constraints associated with digital procurement, and their consequent implications for fostering more resilient and inclusive supply chains within tourism MSMEs.

METHODOLOGY

This conceptual study employed an integrative literature review to examine existing knowledge on tourism supply chains, MSMEs, digital procurement, resilience and inclusivity in SSA, with particular attention to South Africa and Cameroon. An integrative approach was considered appropriate because it allows theoretical and empirical literature from related fields to be brought together and critically synthesised to identify key concepts, relationships and gaps in existing knowledge (Snyder, 2019). The review aimed to integrate multidisciplinary knowledge rather than aggregate empirical effects. It drew together scholarship from tourism supply chain management, digital procurement, resilience and inclusive development. Particular attention was given to comparing South Africa and Cameroon to examine how differences in technological, organisational and environmental conditions may shape digital procurement opportunities and its implications for resilience and inclusivity. Relevant literature was identified through targeted searches of Web of Science, Scopus and Google Scholar, supplemented by citation chaining and hand-searching of key journals in tourism, hospitality and supply chain management. Search terms and combinations used embodied tourism and hospitality, supply chains, value chains, procurement, MSMEs/SMEs, digitalisation, resilience, and inclusivity, with specific attention to Sub-Saharan Africa, South Africa and Cameroon. Boolean operators such as AND and OR, together with truncation where appropriate, were used to combine key concepts and broaden or refine searches. The review focused primarily on literature published between 2015 and 2026 to capture contemporary developments in digitalisation, tourism supply chains and MSME participation. Earlier seminal studies were retained where they provided important theoretical or conceptual foundations.

Literature was selected purposively based on its theoretical contribution, conceptual relevance and contextual applicability to SSA. The search prioritised studies providing substantive insights into tourism or hospitality MSMEs and on issues related to supply chains, value chains, procurement, digitalisation, resilience, inclusivity, and associated challenges and opportunities. Consideration was given to evidence from SSA, with specific attention to South Africa and Cameroon. Literature from other developing-economy contexts was also considered where it provides concepts and theories that can be transferred.

The selected literature was analysed thematically and synthesised iteratively to identify, compare, and integrate recurring concepts, patterns and relationships across the literature with the aid of ChatGPT and Rayyan. This methodology was considered appropriate for the integrative nature of the review because it brought together evidence from diverse theoretical and empirical studies to support conceptual development. The analysis focused on recurring themes relevant to the study, including tourism MSME supply chain challenges, digital procurement practices, technological and organisational capabilities, environmental conditions, supply chain resilience, inclusivity, and emerging opportunities. The study examined similarities and differences between the South African and Cameroonian contexts and drew on evidence from the broader Sub-Saharan African literature and other developing economy contexts to provide additional contextual and theoretical insights.

The literature was critically compared and integrated to identify relationships among the key concepts and to inform the development of the study's proposed conceptual framework and research propositions. The analysis followed a four-step interconnected process. Firstly, the literature was examined to identify and clarify the key constructs and their definitions. Second, emerging themes were compared across studies and contexts to identify similarities and differences. Then, relationships among the concepts were mapped and integrated to develop a preliminary conceptual framework that links the factors influencing digital procurement adoption with supply-chain resilience and inclusivity outcomes. The final stage involved integrating the identified themes into a comparative analysis of South Africa and Cameroon. The synthesis examined how technological, organisational and environmental conditions differ across the two contexts and how these differences may shape digital procurement adoption and its implications for tourism MSME supply-chain resilience and inclusivity.

RESULTS

The following section presents the results for the South African and Cameroonian contexts. South Africa provides a relatively established setting for tourism and digital business compared with many SSA economies. The country has an advanced ICT infrastructure and has established digital business systems, although access to these opportunities remains uneven across enterprises and locations (International Trade Administration, 2024). Tourism MSMEs operate within this relatively developed environment but differ considerably in their capacity to participate effectively in digital markets. Despite the availability of digital infrastructure, digital inequality remains relevant to South African MSMEs. Mbatha (2024: 65) finds that “a digital divide is hampering the adoption of technology by SMMEs”, with technology costs, limited financial resources and inadequate technical knowledge among the barriers to adoption. Tourism-specific evidence similarly indicates that digital transformation among MSMEs is shaped by infrastructure, skills, financial capacity and organisational readiness (Chamboko-Mpotaringa et al., 2025). South Africa can therefore be understood as a context where the challenge is not simply the availability of digital technologies, but whether tourism MSMEs possess the resources and capabilities required to participate effectively in digitally mediated supply networks. This provides an important basis for comparison with Cameroon, where the digital and institutional environment is at a different stage of development.

Cameroon represents an emerging digital context where tourism contributes to economic development, but where digital infrastructure development remains uneven (Zoa, 2026). The country has made digitalisation an important development priority, but significant structural and institutional constraints remain. A World Bank assessment identified high broadband prices, limited institutional capacity, and weaknesses in digital policy and regulation as constraints on the development of Cameroon's digital economy (World Bank, 2022). While mobile technology adoption has increased substantially, challenges relating to internet penetration, affordability, digital skills, and institutional support persist (World Bank, 2022, p. 48; World Bank, 2019). There are nevertheless signs of institutional change. Cameroon enacted a Personal Data Protection Law in 2024, indicating progress towards strengthening the governance of its digital environment. However, the World Bank's (2022) assessment reports that several reforms relating to telecommunications, cybersecurity and cybercrime remained under review, while some planned institutional capacity-building programmes had yet to commence. Thus, Cameroon should not be characterised simply as digitally “underdeveloped”. Rather, it represents an evolving digital ecosystem in which technological expansion is occurring alongside continuing institutional and regulatory development. Recent evidence shows growing adoption of digital financial services in Cameroon. World Bank Global Findex data indicate increasing use of mobile phones and computers for payments and transactions, though access remains uneven. Affordability persists as a barrier, with mobile data costs cited by non-smartphone owners as a reason for non-ownership (World Bank, 2025). These conditions matter for tourism MSMEs because digital procurement requires not only platform availability but also affordable connectivity, suitable devices, digital payment capabilities and an enabling institutional environment for trusted transactions. Examining Cameroon alongside South Africa provides valuable insights into how differing digital ecosystems shape procurement practices and resilience outcomes.

The comparison therefore reveals different conditions for digital procurement adoption. South Africa provides a relatively more established digital and institutional environment, although inequalities in access, affordability, and MSME capabilities remain. Cameroon represents a more rapidly evolving but uneven digital environment, where connectivity, affordability and institutional capacity remain significant considerations. These differences suggest that digital procurement cannot be understood as a uniform process across SSA. Its adoption and potential contribution to resilience and inclusivity are likely to depend on the technological, organisational and environmental conditions within which tourism MSMEs

operate. The contextual differences between South Africa and Cameroon can be summarised across the technological, organisational and environmental dimensions relevant to digital procurement adoption. Table 1 highlights these differences and their analytical significance for understanding the potential contribution of digital procurement to resilience and inclusivity among tourism MSMEs. The comparison suggests that digital procurement opportunities cannot be separated from the contexts in which tourism MSMEs operate. South Africa and Cameroon differ in their technological readiness, MSME capabilities and institutional environments. These differences provide the basis for the comparative analysis of how digital procurement may contribute to resilience and inclusivity in the two contexts.

Table 1. Comparative Context of Digital Procurement in Tourism MSMEs in South Africa and Cameroon

Dimension	South Africa	Cameroon	Analytical significance
Digital infrastructure	Relatively more developed digital infrastructure	Developing but uneven digital infrastructure	Technological context: influences digital readiness
Internet and mobile connectivity	Relatively higher levels of connectivity and digital access	Expanding but uneven access with affordability and connectivity constraints	Technological context: influences access to digital platforms
MSME digital capabilities	Relatively stronger digital ecosystem but uneven capabilities among MSMEs	Greater constraints in digital skills and enterprise capabilities	Organisational context: influences readiness and effective technology use
Institutional and regulatory environment	More established digital business and regulatory environment	Developing digital institutional and regulatory environment	Environmental context: shapes enabling conditions for adoption
Digital procurement readiness	Greater enabling conditions for digital procurement adoption although uneven across MSMEs	Emerging opportunities but constrained by infrastructure and enterprise readiness	TOE interaction: influences adoption opportunities and constraints
Women and youth participation	Participation opportunities exist but structural and digital inequalities remain	Participation opportunities exist but structural and digital barriers remain	Inclusivity: determines who can access and benefit from digital opportunities
Urban-rural digital divide	Digital disparities remain between locations and enterprises	Geographic disparities in connectivity and access remain significant	Inclusivity and technology access: may limit participation of rural MSMEs
Tourism MSME environment	Relatively established tourism and MSME ecosystem	Developing tourism MSME ecosystem with greater informality and capacity constraints	Contextual difference: affects how digital procurement practices may be transferred between settings
Potential resilience implications	Stronger digital foundations may support information sharing, coordination and response to disruptions	Potential benefits depend more strongly on improvements in connectivity and MSME capabilities	Resilience: digital procurement benefits are context-dependent

Comparison between South Africa and Cameroon shows how differences in technological, organisational and environmental conditions shape digital procurement opportunities among tourism MSMEs.

Rather than viewing one country as digitally advanced and the other as digitally disadvantaged, the comparison portrays different levels of readiness and different limitations within changing digital environments. The TOE framework provides a useful lens for interpreting these differences.

Technological conditions

South Africa has a relatively advanced digital infrastructure and higher levels of digital maturity, providing a stronger platform for adopting digital procurement technologies. Nevertheless, access and effective use remain uneven particularly among smaller and rural tourism enterprises. Recent research confirms that South African tourism MSMEs continue to experience challenges in effectively adopting digital technologies despite recognising their potential benefits (Chamboko-Mpotaringa et al., 2025). Sifolo (2025) similarly demonstrates that digital adoption remains a challenge within South African tourism supply networks, although digitally enabled interventions can improve connectivity, coordination and market visibility. Cameroon's digital environment is developing but remains more uneven. Broadband expansion, increasing internet traffic and growing digital services demonstrate ongoing digital transformation. However, affordability, connectivity and access remain vital limitations, especially outside major urban areas (World Bank, 2021; World Bank, 2022). These differences suggest that technology readiness acts as an important contextual condition: whereas South African tourism MSMEs may be better positioned to adopt more sophisticated digital procurement practices, many Cameroonian MSMEs may first require stronger foundations in affordable connectivity and accessible digital services.

Organisational and MSME conditions

The organisational dimension revealed that technological availability alone does not guarantee effective adoption. Tourism MSMEs necessitate financial resources (encompassing the acquisition of digital systems, equipment, subscriptions, and implementation costs), digital proficiencies, managerial capabilities, and organisational readiness to integrate digital tools into their procurement activities. In the South African context, while a comparatively robust digital ecosystem offers increased exposure to digital technologies, considerable disparities persist in the capabilities of tourism MSMEs to utilise them

effectively. This is attributable to variations among enterprises in terms of financial resources, digital skill levels, technical capabilities and organisational readiness (Chamboko-Mpotaringa et al., 2025). These organisational constraints are potentially more pronounced in Cameroon, where the broader digital ecosystem remains in a nascent stage of development. Furthermore, evidence from women-owned tourism enterprises indicates that the availability of institutional support does not necessarily translate into enterprise-level awareness and subsequent utilisation (Njinyah & Pendati, 2021). The comparative analysis therefore suggests that organisational readiness is pivotal in translating digital access into meaningful procurement participation (Ntimane, 2025). Consequently, digital procurement initiatives that overlook MSME capabilities may inadvertently exacerbate, rather than mitigate, disparities between digitally capable and less-prepared enterprises.

Environmental and institutional conditions

The environmental contexts of the two countries also diverge significantly. South Africa operates within a comparatively more developed digital business and regulatory framework, notwithstanding persistent challenges related to regulation and digital access (World Bank, 2018). Conversely, Cameroon is in the nascent stages of reinforcing the institutional foundations requisite for comprehensive digital transformation. Notably, broadband affordability, regulatory evolution, and institutional capacity remain pivotal considerations within Cameroon's digital transformation agenda (Hurpy, 2021). These contextual disparities hold considerable implications, as digital procurement is contingent upon an enabling environment that transcends the individual enterprise. The efficacy of MSME participation in digital supply networks is influenced by reliable infrastructure, supportive regulatory frameworks, affordable connectivity, accessible digital payment systems, and robust institutional support. Consequently, the advancement of procurement digitalisation may be more readily achievable in environments where these enabling conditions are firmly established. In nascent digital environments, such as Cameroon, augmented focus may be necessitated on fortifying both technological infrastructure and institutional capacity. This observation corroborates the TOE framework, which posits that the external environment can either facilitate or impede technology adoption, even when individual enterprises acknowledge its potential advantages.

Implications for supply chain resilience

A comparative analysis suggests that digital procurement can enhance the resilience of tourism supply chains; however, its efficacy is context dependent. Digital technologies offer potential benefits through improved information accessibility, enhanced supplier visibility, and more effective coordination, thereby enabling enterprises to respond robustly to disruptions. Empirical evidence from South Africa provides some substantiation for this potential. Sifolo (2025), for instance pointed out that digitally enabled interventions augmented tourism supply-network coordination and connectivity within Gauteng and KwaZulu-Natal. It is important to note, however, that her study focused on broader digitalisation rather than digital procurement specifically. In the context of Cameroon, the potential resilience benefits may be more contingent upon advancements in connectivity, affordability and the digital capabilities of enterprises (Harilal & Tichaawa, 2026). Consequently, digital procurement should be conceptualised as a resilience enabling mechanism rather than an inherent source of resilience. Its contribution to the anticipatory, responsive, recovery, and adaptive capacities of tourism MSMEs is thus mediated by the prevailing technological, organisational and environmental conditions.

Implications for inclusivity

Digital procurement presents a dualistic landscape of opportunities and risks for the advancement of inclusive tourism. While digital platforms offer the potential to enhance the visibility of smaller suppliers, streamline access to procurement opportunities and connect MSMEs with wider tourism markets, their benefits are not uniformly distributed. Disparities in access to connectivity, digital literacy, and financial resources pose significant barriers, precluding certain enterprises from leveraging these opportunities. Digital divides persist across Africa, particularly affecting impoverished and remote communities, with gender-based discrepancies in internet usage representing an additional concern (World Bank, 2023).

This analysis therefore underscores a critical tension: digital procurement, while capable of fostering inclusion, also bears the potential to perpetuate existing inequalities. In both South Africa and Cameroon, the pursuit of inclusive digital procurement necessitates interventions beyond mere technological implementation. It requires affordable access, targeted skills development, robust institutional support and concerted efforts to facilitate the participation of smaller, rural, women-led, and youth-led enterprises. The variations observed between the two nations further indicate that such interventions must be tailored to specific local contexts, rather than being applied uniformly across SSA. In conclusion, the comparative analysis reveals that South Africa and Cameroon operate within distinct digital and institutional environments within SSA. South Africa, characterised by a relatively mature ecosystem, nonetheless contends with persistent inequalities in access and MSME capabilities. Conversely, Cameroon exemplifies an emergent digital ecosystem where connectivity, affordability and institutional capacity remain more pronounced constraints. The central finding of this comparison is therefore that the capacity of digital procurement to enhance resilience and inclusivity is intrinsically contextual. While technological availability is a crucial factor, its ultimate outcomes are shaped by organisational preparedness and the broader institutional framework.

CONCLUSION

This conceptual study critically examines the role of digital procurement within the supply chains of tourism MSME supply chains in South Africa and Cameroon, with a specific focus on its implications for resilience and inclusivity. Employing the TOE framework as an analytical lens, the study posits that the potential advantages of digital procurement are contingent upon technological readiness, organisational capabilities, and the broader institutional

milieu. In South Africa, the operational context is characterised by a comparatively more developed digital ecosystem; however, persistent disparities in access, digital literacy and MSME capabilities remain evident.

Conversely, Cameroon presents an evolving digital landscape where issues of connectivity, affordability, and institutional capacity continue to exert significant influence over digital engagement. The comparative analysis indicates that digital procurement possesses the capacity to enhance supply chain resilience through improved visibility, coordination, and information exchange, whilst simultaneously fostering opportunities for broader MSME participation. Nevertheless, the realisation of these benefits is not inherent.

Without sufficient digital skills, accessible and affordable connectivity, organisational preparedness, and robust institutional support, digitalisation risks exacerbating existing inequalities rather than mitigating them. Consequently, digital procurement strategies within SSA ought to be context-sensitive and complemented by targeted interventions aimed at supporting smaller, rural, women-led, and youth-led enterprises. Future empirical research could extend this comparative analysis by investigating the practical adoption of digital procurement among tourism MSMEs in South Africa and Cameroon and assessing its subsequent impact on resilience and inclusive participation.

This study contributes to the extant literature on tourism digitalisation and supply chains in three principal ways. Firstly, it demonstrates the utility of the TOE framework in elucidating contextual variations in digital procurement among tourism MSMEs, rather than focusing only on digital adoption. The comparative analysis reveals differential interactions among technological readiness, organisational capabilities and environmental conditions across distinct national contexts. Secondly, the study expands the discourse on digital procurement beyond conventional considerations of efficiency and cost reduction, by exploring its potential ramifications for supply chain resilience and inclusivity. The analysis posits that digital procurement may enhance coordination, visibility, and responsiveness, whilst concurrently fostering opportunities for broader MSME participation. Nevertheless, the realisation of these outcomes is contingent upon the specific conditions underpinning adoption. Thirdly, the comparative approach underscores the critical importance of context in the application of digital transformation concepts to SSA tourism. Findings and practices derived from digitally mature environments are not automatically transferable to nations characterised by divergent infrastructural, organisational, and institutional conditions. Consequently, this study offers a context-sensitive perspective on understanding digital procurement within African tourism supply chains. For policymakers and tourism practitioners, the findings suggest that digital procurement strategies ought to differentiate according to national and MSME readiness. In the South African context, a greater emphasis may be required on strengthening MSME digital capabilities, affordability, and the effective utilisation of extant digital infrastructure. Conversely, in Cameroon, priorities may encompass expanding affordable connectivity, fostering digital skills development, and fortifying the institutional environment that underpins digital business and MSME participation. Across both nations, digital procurement initiatives should integrate technological investment with MSME capacity building and inclusive participation. Particular attention should be directed towards smaller, rural, women-led, and youth-led enterprises, which may otherwise encounter difficulties in participating within increasingly digital tourism supply networks. Consequently, a context-sensitive approach is more likely to ensure that digital procurement contributes not only to operational efficiency but also to the development of more resilient and inclusive tourism supply chains.

Author Contributions: Conceptualization, A.F. and P.S. methodology, A.F. and P.S.; software, , A.F.; and P.S.; validation, , A.F. and P.S. formal analysis, , A.F. and P.S.; investigation, , A.F. data curation, A.F. and P.S. writing - original draft preparation, , A.F. and P.S. writing - Review and editing, P.S. and U.H.; visualization, , A.F. and P.S. supervision, P.S.; project administration, A.F. All authors have read and agreed to the published version of the manuscript.

Funding: The authors acknowledge the funding received for this study from the University of Johannesburg.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The data presented in this study may be obtained on request from the corresponding author.

Acknowledgements: The research undertaken was made possible by the equal scientific involvement of all the authors concerned.

Conflicts of Interest: The authors declare no conflict of interest.

Use of Generative AI: Generative artificial intelligence (GenAI) and AI-assisted tools were used during the preparation of this manuscript. ChatGPT (OpenAI) was used to assist with structuring and organising sections of the manuscript, summarising reviewed literature, rephrasing and editing text, and supporting the generation and refinement of concepts during the analysis and synthesis of the literature. DeepSeek was used to assist with identifying and searching for potentially relevant literature. Rayyan was used as an AI-assisted literature review tool to support article searching, organisation, screening, and management of records during the review process. The authors critically reviewed and verified all AI-assisted outputs against the original sources and made the final decisions regarding article inclusion, interpretation, analysis, and manuscript content. No AI-generated output was accepted as evidence without verification against the underlying scholarly sources. The authors take full responsibility for the accuracy, integrity, originality, interpretations, and conclusions presented in the manuscript.

REFERENCES

- Adinolfi, M. C., Jacobs, M., & Tichaawa, T. M. (2018). Unpacking factors limiting and promoting black-owned SMMEs to participate actively within the tourism value chain in South Africa. *Africa Insight*, 48(3), 88–104. <https://doi.org/10.4314/ai.v48i3>
- Achu, F. N., Sifolo, P. P., & Herman, U. (2026). A supply chain resilience conceptual framework for climate-smart event enterprises. *African Journal of Hospitality, Tourism and Leisure*, 15(2), 606–617. <https://doi.org/10.46222/ajhtl.19770720.766>
- Achieng, M. S., & Malatji, M. (2022). Digital transformation of small and medium enterprises in sub-Saharan Africa: A scoping review. *The Journal for Transdisciplinary Research in Southern Africa*, 18(1), a1257. <https://doi.org/10.4102/td.v18i1.1257>
- Afolayan, A., Plant, E., White, G., Jones, P. & Beynon-Davies, P. (2015). Information technology usage in SMEs in a developing economy. *Strategic Change*, 24(5), 483–498. <https://doi.org/0.1002/jsc.2023>
- Tourism and Tourism News Middle East. (2025). Tourism makes up 10pc of global economy but faces challenges: Al Nowais. Available at <https://ttnworldwide.com/ArticleTA/329679/tourism-makes-up-10pc-of-global-economy-but-faces-challenges-al-nowais> (Accessed September 23, 2026)
- Baker, J. (2012) The Technology-Organization-Environment Framework. In: Dwivedi, Y.K., Scott, L.M., Schneberger, L. and Systems, I.S., Eds., *Information Systems Theory: Explaining and Predicting Our Digital Society*, University of Hamburg, Hamburg, 232-243. https://doi.org/10.1007/978-1-4419-6108-2_12
- Bienhaus, F., & Haddud, A. (2018). Procurement 4.0: Factors influencing the digitisation of procurement and supply chains. *Business Process Management Journal*, 24(4), 965–984. <https://doi.org/10.1108/BPMJ-06-2017-0139>
- Buluk E, B. (2023). The impact of coronavirus (Covid-19) pandemic: Digital transformation changes in tourism', *Journal of Tourism Theory and Research*, 9(1), 15–23. <https://doi.org/10.24288/jtr.1205828>
- Chamboko-Mpotaringa, M., Lekgau, R. J., & Tichaawa, T. M. (2025). Drivers and challenges of tourism small, medium and micro enterprises (SMMEs) technology adoption. *African Journal of Hospitality, Tourism and Leisure*, 14(5), 1088–1094. <https://doi.org/10.46222/ajhtl.19770720.698>
- Chhetri, P., Tsui, K. & Wu, C. (2026). Tourism supply chain resilience – towards theory, method, and policy integration. *Current Issues in Tourism*. <https://doi.org/10.1080/13683500.2026.2639590>
- Chowdhury, M. M. H., & Quaddus, M. (2017). Supply chain resilience: Conceptualization and scale development using dynamic capability theory. *International Journal of Production Economics*, 188, 185–204. <https://doi.org/10.1016/j.ijpe.2017.03.020>
- Chowdhury, M. M. H., Quaddus, M., Agarwal, R., & Khosravi, S. (2019). Supply chain resilience for performance: Role of relational practices and network complexities. *Supply Chain Management: An International Journal*, 24(5), 659–676. <https://doi.org/10.1108/SCM-09-2018-0332>
- Christie, I., Fernandes, E., Messerli, H. & Twining-Ward, L. (2014). *Tourism in Africa: Harnessing Tourism for Growth and Improved Livelihoods*. Africa Development Forum Series. Washington, DC: World Bank. <https://doi.org/10.1596/978-1-4648-0190-7>
- Dumeh, A. B. (2025). E-procurement adoption and digital inclusion in Sub-Saharan Africa: Evidence from hospitality SMEs in Ghana. *SSRN Working Paper*. <https://doi.org/10.2139/ssrn.5520770>
- Harilal, V. & Tichaawa, T.M. (2026). The impacts of climate variability and extreme weather events on the adaptive capacity and resilience of tourism businesses. *GeoJournal of Tourism and Geosites*, 65(2), 1246–1256. <https://doi.org/10.30892/gtg.65257-1762>
- Hohenstein, N.-O., Feisel, E., Hartmann, E. & Giunipero, L.C. (2015). Research on the phenomenon of supply chain resilience: A systematic review and paths for further investigation', *International Journal of Physical Distribution & Logistics Management*, 45(1/2), 90-117. <https://doi.org/10.1108/IJPDLM-05-2013-0128>
- Hurpy, C. P. M. (2021). *Cameroon: Acceleration of the digital transformation of Cameroon project*. World Bank. Available at: <http://documents.worldbank.org/curated/en/099350001182233236> (Accessed on August 21, 2026)
- International Labour Organization. (2022). *Drivers of risk and resilience in South Africa's tourism sector: A snapshot*. <https://www.ilo.org/resource/news/drivers-risk-and-resilience-south-africa%E2%80%99s-tourism-sector-snapshot>
- International Trade Administration. (2024). *South Africa country commercial guide: Digital economy*. U.S. Department of Commerce. Available online: <https://www.trade.gov/country-commercial-guides/south-africa-digital-economy>
- International Trade Centre. (2022). *Empowering women through public procurement*. <https://www.intracen.org/resources/publications/empowering-women-through-public-procurement>
- Ivanov, D., & Dolgui, A. (2020). Viability of intertwined supply networks: Extending the supply chain resilience angles towards survivability. *International Journal of Production Research*, 58(10), 2904–2915. <https://doi.org/10.1080/00207543.2020.1750727>
- Kalaba, V., & Nakamba, C. (2026). Assessing factors affecting e-procurement adoption among micro, small and medium enterprises trading in groceries in Lusaka District. *African Journal of Commercial Studies*, 7(3). <https://doi.org/10.59413/ajocs.v7.i3.27>
- Kaunda, A. L. (2025). Determinants of e-procurement adoption among small and medium enterprises (SMEs) in Tanzania: A case of catering businesses in Mbeya, Tanzania. *Nigerian Journal of Sustainable Development*. <https://doi.org/10.4314/ngjds.v18i3.8>
- Kimbu, A. N., & Tichaawa, T. M. (2020). Determinants of impact investing for tourism development in emerging destinations of sub-Saharan Africa. *Development Southern Africa*, 37(5), 742–757. <https://doi.org/10.1080/0376835X.2020.1724530>
- Mametja, T. R., Lebambo, M. M., & Tichaawa, T. M. (2023). The adoption of digital technologies by women-owned tourism micro-enterprises. *African Journal of Hospitality, Tourism and Leisure*, 12(2), 717–734. <https://doi.org/10.46222/ajhtl.19770720.395>
- Mbatha, B. (2024). Digital divide: A phenomenon of unequal adoption of technology by SMMEs in the agribusiness sector in South Africa. *Communicare: Journal for Communication Studies in Africa*, 43(2), 65–75. <https://doi.org/10.36615/vdjgg265>
- Meyer, A., Niemann, W., Weerheim, C., Bekker, M., & Oosthuizen, H. (2021). The role of information-sharing on supply chain resilience: A study in the South African retail industry. *The Retail and Marketing Review*, 17(2), 2–16. https://hdl.handle.net/10520/ejc-immr1_v17_n2_a2
- Muluh, N., & Lekgau, R. J. (2023). Static or dynamic tourism SMMEs' resilience? Adaptive strategies of formal and informal enterprises to multiple crises. *African Journal of Hospitality, Tourism and Leisure*, 12(4), 1345–1358. <https://doi.org/10.46222/ajhtl.19770720.435>
- Nezasa (2025). *TUI Success Story with Nezasa TripBuilder*. Nezasa. Available online <https://www.travolution.com/news/travel-sectors/tour-operators/nezasa-reveals-results-of-tui-tours-partnership/> (Accessed August 20, 2026)
- Ntimane, V. E. (2025). Predictors of digital maturity for accommodation small-and micro enterprises: A systematic review. *GeoJournal of Tourism and Geosites*, 63(4spl), 2830–2839. <https://doi.org/10.30892/gtg.634spl27-1642>
- Njinyah, S. & Pendat, M. (2021). Awareness and usage of government policies by women tourism entrepreneurs in Cameroon. In: *Women's Entrepreneurship in the Tourism Industry*. Manchester: Manchester Metropolitan University. <https://hdl.handle.net/10779/mmu.32459640.v1>
- Oforu-Appiah, S., Boahen, P. A. N., & Agbenyegah, A. T. (2025). Socio-ecological barriers to youth entrepreneurship in sub-Saharan Africa: A systematic review of empirical evidence. *Journal of Innovation and Entrepreneurship*, 14, 32. <https://doi.org/10.1186/s13731-025-00484-x>
- Organisation for Economic Co-operation and Development. (2020). *Tourism policy responses to the coronavirus (COVID-19)*. OECD Publishing. Available online: https://www.oecd.org/content/dam/oecd/en/publications/reports/2020/06/tourism-policy-responses-to-the-coronavirus-covid-19_d5946dea/6466aa20-en.pdf (Accessed on September 6, 2026)

- Organisation for Economic Co-operation and Development. (2022). *OECD tourism trends and policies 2022*. OECD Publishing, Paris France. <https://doi.org/10.1787/a8dd3019-en>
- Ponomarov, S.Y. and Holcomb, M.C. (2009). Understanding the concept of supply chain resilience. *The International Journal of Logistics Management*, 20(1), 124–143. <https://doi.org/10.1108/09574090910954873>
- Patrucco, A. S., Luzzini, D., Ronchi, S., & Essig, M. (2021). Designing a public procurement strategy: Lessons from digital transformation. *Journal of Purchasing and Supply Management*, 27(3), 100699. <https://doi.org/10.1080/09540962.2017.1295727>
- Prayag, G. (2020). Time for reset? COVID-19 and tourism resilience. *Tourism Review International*, 24(2–3), 179–184. <https://doi.org/10.3727/154427220X15926147793595>
- Ribeiro, M. A., Adam, I., Kimbu, A. N., Afenyo-Agbe, E., Adeola, O., Figueroa-Domecq, C., & de Jong, A. (2021). Women entrepreneurship orientation, networks and firm performance in the tourism industry in resource-scarce contexts. *Tourism Management*, 86, 104343. <https://doi.org/10.1016/j.tourman.2021.104343>
- Rastegar, R., Seyfi, S., & Shahid, T. (2023). Tourism SMEs' resilience strategies amidst the COVID-19 crisis: The story of survival. *Tourism Recreation Research*, 428–434. <https://doi.org/10.1080/02508281.2023.2233073>
- Scheyvens, R., & Biddulph, R. (2018). Inclusive tourism development. *Tourism Geographies*, 20(4), 589–609. <https://doi.org/10.1080/14616688.2017.1381985>
- Seow, A. N., Choong, Y. O., Low, M. P., Ismail, N. H. & Choong, C. K. (2024). Building tourism SMEs' business resilience through adaptive capability, supply chain collaboration and strategic human resources. *Journal of Contingencies and Crisis Management*, 32(2), e12564. <https://doi.org/10.1111/1468-5973.12564>
- Shonubi, O. A. (2025). Innovation challenges of digital transformation: Transitioning legacy to the future. *Sustainable Futures*, 10, 100971. <https://doi.org/10.1016/j.sfr.2025.100971>
- Sifolo, P. P. S. (2025). Transformative transdisciplinary approaches to digitalisation in the tourism supply network: Enhancing resilience and collaboration in Gauteng and KwaZulu-Natal. *Tourism and Hospitality*, 6(2), 95. <https://doi.org/10.3390/tourhosp6020095>
- Sigala, M. (2020). Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. *Journal of Business Research*, 117, 312–321. <https://doi.org/10.1016/j.jbusres.2020.06.015>
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Srai, J. S., & Lorentz, H. (2019). Developing design principles for the digitalisation of purchasing and supply management. *Journal of Purchasing and Supply Management*, 25(1), 78–98. <https://doi.org/10.1016/j.pursup.2018.07.002>
- South Africa National Department of Tourism. (2022). *Transformation of the South African tourism value chain towards sustainable, resource-efficient and inclusive growth post-COVID-19*. Department of Tourism. Available at <https://tkp.tourism.gov.za/ResearchRepo/Shared%20Documents/Transformation%20of%20the%20south%20African%20tourism%20value%20chain%20towards%20sustainable%20and%20resource%20efficient%20and%20inclusive%20growth%20post%20covid-19.pdf> (Accessed August 27, 2026)
- South Africa National Department of Tourism. (2021). *Enabling small, medium and micro enterprises (SMMEs) survival and growth during post-COVID-19*. Department of Tourism. Available on <https://tkp.tourism.gov.za/ResearchRepo/Shared%20Documents/Enabling%20small%20and%20medium%20and%20micro%20enterprises%20%28smmes%29%20survival%20and%20growth%20during%20post%20covid-19.pdf> (Accessed August 27, 2026)
- Tornatzky, L.G., & Fleischer, M. (1990) *The Processes of Technological Innovation*. Lexington, MA: Lexington Books.
- Tryphone, K., & Mkenda, B. K. (2022). Determinants and constraints of women's sole-owned tourism micro, small and medium enterprises (MSMEs) in Tanzania. *Development Southern Africa*, 40(2), 329–349. <https://doi.org/10.1080/0376835X.2022.2028604>
- United Nations Capital Development Fund. (2026). *European Union-backed €15.5 million initiative to unlock investment in Uganda's tourism sector*. Available online: <https://www.uncdf.org/article/9214/european-union-backed-155-million-initiative-to-unlock-investment-in-ugandas-tourism-sector> (Accessed September 8, 2026)
- United Nations Conference on Trade and Development. (2021). *Digital economy report 2021: Cross-border data flows and development*. United Nations. Available online: <https://unctad.org/page/digital-economy-report-2021> (Accessed August 10, 2026)
- United Nations World Tourism Organization. (2022). *UNWTO launches Digital Futures Programme for SMEs*. Available online; <https://www.unwto.org/news/unwto-launches-digital-futures-programme-for-smes> (Accessed August 4, 2026)
- United Nations World Tourism Organization. (2023). *Tourism and the Sustainable Development Goals: Journey to 2030*. UNWTO.
- World Bank Group. (2019). *Digital Economy for Cameroon Diagnostic Report*. Washington, DC: World Bank. Available on <https://thedocs.worldbank.org/en/doc/379941605627277587-0090022020/original/DE4ACameroonCountryDiagnosticJun26.pdf> (Accessed September 23, 2026)
- World Bank. (2018). *South Africa Digital Economy Assessment*. Washington, DC: World Bank. <https://doi.org/10.1596/33632>
- World Bank. (2021). *Acceleration of the Digital Transformation of Cameroon Project: Project Appraisal Document*. Report No. PAD4082. Washington, DC: World Bank.
- World Bank. (2025). *The Global Findex Database 2025: Connectivity and Financial Inclusion in the Digital Economy: Cameroon, 2024*. Development Research Group, Finance and Private Sector Development Unit. <https://doi.org/10.48529/prf4-4w74>
- World Tourism Organization & United Nations Development Programme. (2017). *Tourism and the Sustainable Development Goals: Journey to 2030*. UNWTO. <https://doi.org/10.18111/9789284419401>
- World Tourism Organization. (2018). *Tourism for development: I: Key areas for action*. UNWTO. Madrid: World Tourism Organisation <https://doi.org/10.18111/9789284419722>
- World Travel & Tourism Council. (2026). *Sub-Saharan Africa travel & tourism economic impact factsheet*. Available online: <https://researchhub.wttc.org/product/factsheet-sub-saharan-africa-travel-tourism-economic-impact> (Accessed August 17, 2026)
- World Travel & Tourism Council. (2026). *Sub-Saharan Africa 2026 economic impact research (EIR): Key highlights*. Available online; <https://drive.google.com/file/d/1tOsF52hZ2ejhEShMYmrvN1uShXPfBRB7/view> (Accessed September 5, 2026)
- Zhang, X., Song, H. & Huang, G.Q. (2009). Tourism supply chain management: A new research agenda. *Tourism Management*, 30(3), pp. 345–358. <https://doi.org/10.1016/j.tourman.2008.12.010>
- Zhao, N., Hong, J. & Lau, K.H. (2023). Impact of supply chain digitalization on supply chain resilience and performance: A multi-mediation model. *International Journal of Production Economics*, 259, 108817. <https://doi.org/10.1016/j.ijpe.2023.108817>
- Zoa, J. (2026) Beyond Rhetoric: An Analysis of the Structural Obstacles to the Digital Transformation of Cameroonian Local Authorities. *Journal of Computer and Communications*, 14, 231–245. <https://doi.org/10.4236/jcc.2026.143012>