

AN INTEGRATED DIGITAL MARKETING AND E-COMMERCE FRAMEWORK FOR SUSTAINABLE PERFORMANCE: SME PERSPECTIVE

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ABSTRACT

Background: Small and medium enterprises (SMEs) face a critical gap in understanding how to systematically integrate digital marketing and e-commerce capabilities to create competitive and sustainable value. While digital transformation presents significant opportunities for SMEs, a comprehensive theoretical framework addressing both operational integration mechanisms and strategic performance outcomes within a sustainability lens remains underdeveloped in the literature.

Purpose: This study develops and proposes a comprehensive theoretical framework for integrating digital marketing and e-commerce capabilities within SMEs to achieve sustainable performance, specifically addressing how these capabilities can be coordinated to influence customer experience and marketing performance among both business-to-business and business-to-consumer SMEs.

Design/Methodology/Approach: This study employs a systematic literature review and conceptual synthesis (PRISMA 2020), drawing from digital business strategy, dynamic capabilities theory, and sustainable business model literature. The framework development follows a structured theoretical grounding process, integrating insights from 82 sources, comprising a core corpus of peer-reviewed journal articles and a smaller set of background references (books, seminal texts, and one standards document) across digital marketing, e-commerce, and SME strategy domains.

Findings/Results: This study develops an integrated framework comprising five core components: digital marketing, e-commerce integration, technology infrastructure, organizational capabilities, and strategic capabilities, all converging toward sustainable performance. The framework identifies four integration mechanisms, namely data integration, process integration, technology integration, and customer journey integration, as proposed enablers of SME digital transformation. These mechanisms are proposed, from synthesis of the reviewed literature, to shape customer perceptions of value, trust, and journey consistency in ways that plausibly support conversion and retention.

Conclusions: The framework is conceptual and requires empirical validation across different SME contexts and industries. Nevertheless, it offers SME managers, consultants, and policymakers a systematic roadmap for digital transformation, intended to guide capability development, resource allocation, and performance measurement for sustainable digital growth. It is also intended to inform SME resilience and competitiveness in digital economies.

Originality/value (State of the art): Existing frameworks address single capability domains in isolation without integrating them. Prior work has identified this integration gap. This framework's distinct contribution is specifying the mechanisms through which digital marketing and e-commerce capabilities jointly shape outcomes for resource-constrained SMEs. This contribution is theoretical and, comprises propositions pending empirical testing.

Keywords: digital marketing, e-commerce integration, SME strategy, sustainable performance, digital transformation, dynamic capabilities

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INTRODUCTION

Small and medium enterprises (SMEs) face unprecedented challenges in navigating digital transformation while simultaneously managing resource constraints and competitive pressures (Kraus et al. 2021; Verhoef et al. 2021). The rapid acceleration of digitalization, particularly following the COVID-19 pandemic, has made the integration of digital marketing and e-commerce capabilities a critical survival mechanism for SMEs (Donthu & Gustafsson, 2020; Pantano et al. 2020). This integration extends beyond technology adoption to include strategic alignment, organizational capability development, and sustainable value creation (Matt et al. 2015; Vial, 2019). The global digital economy has fundamentally altered the competitive landscape for SMEs, compelling these organizations to review their strategic orientations and operational models. SMEs collectively represent the backbone of most national economies, accounting for most of the employment and a significant share of GDP across both developed and emerging markets (Kraus et al. 2021; OECD, 2023). However, their capacity to harness digital technologies for competitive advantage remains constrained by structural limitations, including capital scarcity, limited managerial bandwidth, and inadequate digital expertise (Ramdani et al. 2022). These limitations make it imperative to develop purpose-built frameworks that address SME-specific needs rather than simply downscaling large-enterprise models.

Digital marketing and e-commerce represent two of the most transformative domains in contemporary business strategy, yet their integration within the SME context has received insufficient scholarly attention (Kwarteng-Amaniampong & Tait, 2026). Digital marketing encompasses the full spectrum of online customer engagement activities, from content creation and social media management to search engine optimization and data-driven campaign analytics. E-commerce, by contrast, refers to the infrastructure and processes that enable online commercial transactions, including platform architecture, secure payment systems, supply chain management, and post-purchase customer service (Laudon & Traver, 2016). When aligned strategically, these two domains create compounding value by enhancing customer reach, reducing transaction costs, and enabling data-informed decision-making across the customer lifecycle.

Existing literature predominantly focuses on large enterprises or treats digital marketing and e-commerce as separate domains, leaving a significant gap in understanding how SMEs can systematically integrate these capabilities for sustainable performance (Hanelt et al. 2021; Ramdani et al. 2022; Kwarteng-Amaniampong & Tait, 2026). The fragmented nature of prior studies has produced limited theoretical frameworks addressing SME-specific needs. More specifically, Kannan and Li (2017) model digital marketing capabilities without addressing e-commerce infrastructure; Trainor et al. (2014) examine social CRM as a relationship-building capability rather than a cross-functional integration mechanism; and Lemon and Verhoef (2016) map the customer journey without specifying the underlying digital marketing and e-commerce capabilities that develop it. Kwarteng-Amaniampong and Tait (2026) identify the resulting integration gap but do not construct a framework to fill the gap. This study addresses this specific, unresolved boundary: how digital marketing and e-commerce capabilities, once integrated through defined mechanisms, translate into customer-level responses and SME performance. This study's novelty lies in repositioning digital integration as a strategic imperative rather than a purely technological undertaking, within a resource-constrained SME context. A critical review of extant literature reveals that digital transformation studies in the SME domain have largely adopted a technology-centric perspective, prioritizing adoption rates and tool utilization over strategic integration and capability development (Vial, 2019; Kraus et al. 2021). While studies such as Bharadwaj et al. (2013) and Nambisan et al. (2019) have advanced digital business strategy theory at the enterprise level, their applicability to SMEs, which are characterized by flat organizational structures, owner-managed operations, and limited slack resources, remains theoretically underdeveloped. The present study addresses this deficit by synthesizing insights from dynamic capabilities theory, digital business strategy literature, and sustainable business model research to construct an SME-specific integrative framework. Furthermore, existing frameworks have tended to evaluate digital performance through narrow financial metrics, neglecting the broader sustainability dimensions that increasingly shape stakeholder expectations and regulatory requirements (Elkington, 1997; Porter & Kramer, 2011). This study proposes embedding economic, social, and environmental performance indicators into its framework architecture, positioning sustainability not as a peripheral

consideration but as a central evaluative dimension of strategic value creation in the digital economy.

This study addresses the identified gaps by developing a comprehensive framework that integrates digital marketing and e-commerce capabilities in an SME context, highlighting clear pathways to sustainable organizational performance. The approach draws on three theoretical traditions: digital business strategy literature, which provides the architecture for capability alignment; dynamic capabilities theory, which explains how SMEs reconfigure digital competencies in changing environments (Bharadwaj et al. 2013; Nambisan et al. 2019); and sustainable business model thinking, which balances operational efficiency with long-term value creation (Soto-Acosta, 2020; Soluk & Kammerlander, 2021). Methodologically, the study employs a systematic literature review informed by the PRISMA 2020 reporting guidelines, analyzing 82 sources to identify convergent themes, theoretical gaps, and practical integration pathways. This approach enables rigorous theoretical synthesis while maintaining contextual sensitivity to the distinctive challenges and opportunities confronting SMEs in varied digital environments. The framework development process adopts a deductive-inductive logic: grounded in established theoretical traditions while remaining responsive to emergent patterns and SME-specific dynamics identified through thematic analysis (Thomas & Harden, 2008). The problem-solving approach adopted in this study recognizes that SME digital transformation is not a single discrete event but a continuous, iterative process requiring sustained capability investment and adaptive management (Matt et al. 2015; Warner & Wäger, 2019). The IDM-EC framework presented herein provides a structured yet flexible architecture that accommodates this complexity, guiding SME managers through phased capability development while offering policymakers and consultants a theoretically grounded basis for a diagnostic tool for contextualized digital transformation support.

This study advances an SME-specific integration framework that addresses both the operational and strategic dimensions of digital capability development. It offers managers, consultants, and policymakers a systematic roadmap that balances technological advancement with sustainable performance outcomes (Westerman et al. 2014; Warner & Wäger, 2019). The review considers SMEs broadly, encompassing

both business-to-business (B2B) and business-to-consumer (B2C) firms, where integration mechanisms are likely to operate differently across these settings (for example, customer journeys and purchase cycles differ substantially between B2B and B2C contexts), this is noted rather than assumed away. The framework further distinguishes firm-level capabilities (what the organization builds and does) from customer-level perceptions and responses (what customers experience and how they behave as a result), and proposes, rather than assumes, links between the two. Specifically, the review is guided by three questions: (RQ1) which digital marketing and e-commerce capability dimensions are relevant to SME performance; (RQ2) through which mechanisms can these capabilities be integrated for resource-constrained SMEs; and (RQ3) how might such integration plausibly translate into customer responses and sustainable SME performance. Correspondingly, it aims to: (1) identify key digital marketing and e-commerce capability dimensions relevant to SME performance; (2) examine integration approaches for resource-constrained SMEs; and (3) develop a framework guiding SME digital transformation toward sustainable performance.

METHODS

This study relies exclusively on secondary data; specifically, academic and scholarly literature sourced from internationally recognized scholarly databases. Given its theoretical and conceptual orientation, no primary data were collected. The study draws on 82 sources in total, comprising a core review corpus of 60 peer-reviewed journal articles, from which the framework's components and mechanisms are derived, and 22 background references that provide conceptual grounding but were not subject to the same screening protocol as the core corpus. The background set comprises 15 books, one book chapter, three practitioner-oriented Harvard Business Review articles, two policy reports (African Union, 2020; OECD, 2023), and one technical standards document (Mell & Grance, 2011). The literature was retrieved from Scopus, Web of Science, Google Scholar, and EBSCOhost. Sources were selected across three core domains: digital marketing, e-commerce, and SME strategy, supplemented by foundational works in dynamic capabilities theory, sustainable business models, and digital business strategy. The temporal scope spans foundational contributions from the 1990s

to publications available up to 28 February 2026, with 42% of the core corpus (25 of 60 articles) published after 2015 to ensure contemporary relevance. Articles in the core corpus were required to be peer-reviewed, published in English, and focused on SMEs, digital marketing, e-commerce, or the theoretical foundations of the framework. Opinion pieces and non-scholarly commentary were excluded. The grey literature retained (two policy reports and one technical standards document) was used as background material only, to provide context on the economic role of SMEs and policy alignment and to define cloud computing and was not treated as part of the reviewed evidence base.

Data were collected through a systematic literature review informed by the PRISMA 2020 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) reporting guideline. The search strategy employed structured keyword combinations including “digital marketing,” “e-commerce integration,” “SME digital transformation,” “dynamic capabilities,” “sustainable performance,” and “digital business strategy,” applied across title, abstract, and keyword fields in Scopus, Web of Science, Google Scholar, and EBSCOhost, searched from May 19, 2025, to February 28, 2026. Boolean operators (AND, OR) were used to broaden or narrow the search as appropriate. An initial pool of over 400 articles was identified, subsequently screened by title and abstract for relevance, and further assessed for methodological quality and thematic alignment. A final core corpus of 60 peer-reviewed articles was retained for detailed thematic analysis and theoretical synthesis, supplemented by 22 background references (82 sources in total). Reference lists of key articles were also reviewed to identify additional relevant works not captured through database searches (backward citation chaining).

The retained literature was analyzed using thematic synthesis, a qualitative analytical technique suited to identifying patterns, relationships, and theoretical gaps across a body of literature (Thomas & Harden, 2008). The analysis proceeded in three stages. First, the author conducted line-by-line coding of key concepts, constructs, and theoretical propositions across all retained sources, using a codebook that combined theory-led codes (derived a priori from dynamic capabilities theory and digital business strategy constructs) with codes emerging inductively from the sources. Second, descriptive themes were developed by grouping related

codes into coherent conceptual clusters corresponding to the five framework dimensions and four integration mechanisms identified in this study. Third, analytical themes were generated through interpretive synthesis, enabling the development of higher-order theoretical propositions that extend beyond individual source contributions. Framework development followed a deductive-inductive logic: deductive in its grounding in established theoretical traditions (dynamic capabilities theory, digital business strategy, and sustainable business model literature), and inductive in its identification of emergent integration mechanisms and SME-specific performance pathways not previously specified jointly in the reviewed literature.

The study is structured as follows. The Methods section outlines the systematic literature review protocol. The Theoretical Framework Development section surveys research across digital transformation, digital marketing capabilities, e-commerce performance, and sustainable performance, and presents the dynamic capabilities foundation underpinning the framework. Subsequent sections elaborate the IDM-EC framework, detailing its components, integration mechanisms, and performance measurement approaches. The Results section synthesizes principal findings, followed by implementation guidance, managerial implications, theoretical contributions, limitations, and future research directions. The study makes four principal contributions. First, it advances dynamic capabilities theory (Teece, 2007; Helfat & Peteraf, 2009) by specifying how sensing, seizing, and reconfiguring dimensions translate into concrete digital marketing and e-commerce capability practices within resource-constrained SME environments. Second, it enriches digital business strategy literature by proposing a holistic integration architecture that simultaneously addresses operational efficiency and strategic value creation. Third, it extends sustainable business model research by embedding multi-dimensional performance measurement (spanning financial, customer, operational, and sustainability indicators) into the framework’s evaluation logic. This is intended to support the assessment of digital transformation outcomes against the full spectrum of stakeholder expectations and long-term organizational viability. Fourth, it extends customer experience literature by proposing how customer touchpoints across digital marketing and e-commerce channels can be integrated through the customer journey integration mechanism.

Conceptual foundation

The theoretical framework proposed in this study is informed by an extensive review of the extant literature spanning digital transformation in SME contexts, digital marketing capabilities, e-commerce integration, and sustainable performance. This body of literature collectively establishes the conceptual terrain from which the framework derives its architecture, components, and integration logic. The following synthesis organizes the literature thematically to illuminate the theoretical lineage underpinning each framework dimension.

Digital Transformation in SME Contexts

Digital transformation has become a pivotal strategic priority for organizations of all scales, fundamentally redefining the mechanisms through which value is created, delivered, and captured (Bharadwaj et al. 2013; Vial, 2019). SMEs often possess inherent advantages in navigating digital transformation, including organizational agility, expedited decision-making, and close customer proximity, which enhance their capacity to adapt and innovate in dynamic digital environments (Nambisan et al. 2019; Soluk & Kammerlander, 2021). Nevertheless, SMEs encounter distinct challenges, including limited resources, digital skill gaps, and the need for tailored strategic approaches aligned with their operational contexts (Soto-Acosta, 2020; Verhoef et al. 2021). The existing literature identifies several critical success factors for SME digital transformation. Foremost among these is digital leadership, where managerial roles are pivotal in fostering cultures of innovation and digital creativity (Matt et al. 2015; Hanelt et al. 2021). Equally important is strategic alignment — ensuring that digital investments are closely linked to overarching business objectives and complement core business models (Sebastian et al. 2017; Warner & Wäger, 2019). These findings directly inform the organizational and strategic capability components of the proposed framework, foregrounding digital leadership and strategic alignment as foundational determinants of integration effectiveness.

Digital Marketing Capabilities in SMEs

Digital marketing has shifted from a support function to a strategic capability driving customer acquisition and loyalty (Kannan & Li, 2017). For SMEs, it serves as a key competitive tool for market access, brand

visibility, and relationship building despite resource limitations (Tiago & Veríssimo, 2014; Charlesworth, 2018). The scholarly literature delineates a portfolio of relevant capabilities spanning content marketing for brand authority and engagement (Hollebeek & Macky, 2019), social media marketing for community building and brand advocacy (Kaplan & Haenlein, 2010; Trainor et al. 2014), search engine optimization (SEO) and paid advertising for traffic capture (Chaffey & Ellis-Chadwick, 2019), email marketing and automation for customer lifecycle management (Järvinen & Karjaluoto, 2015), and mobile marketing for real-time consumer engagement (Shankar et al. 2016).

Despite their strategic potential, these capabilities are frequently examined in isolation, limiting practical guidance for SME managers pursuing holistic digital transformation (Chaffey & Ellis-Chadwick, 2019). This fragmentation in the literature constitutes one of the primary justifications for the integrated framework proposed in this study and underpins the Digital Marketing component, which synthesizes these capabilities into a unified, strategically coordinated capability cluster.

E-Commerce Capabilities and SME Performance

The integration of e-commerce capabilities has emerged as a key driver of performance and competitiveness among SMEs, enabling expanded market reach, reduced transaction costs, and new revenue streams (Zhu & Kraemer, 2005; Oliveira & Martins, 2011). E-commerce adoption accelerated significantly in the wake of COVID-19 (Pantano et al. 2020; Donthu & Gustafsson, 2020), underlining the strategic imperative for SMEs to develop robust digital commerce infrastructures. Critical capability areas identified in the literature include platform capabilities (DeLone & McLean, 2003), payment and security systems (Kim et al. 2010), supply chain and logistics (Gunasekaran et al. 2004), customer service (Chang et al. 2009), and analytics and business intelligence (Chen et al. 2012). Many SMEs face challenges in developing robust analytics functions due to limited resources and personnel shortages (Mikalef et al. 2019; Raguseo, 2018). These findings directly inform the E-Commerce Integration component of the proposed framework, which consolidates platform development, payment processing, inventory management, order fulfilment, customer service, and business intelligence into a coherent capability cluster oriented toward seamless online selling.

Integration Challenges and Opportunities

Integration opportunities for SMEs include enhanced customer experience through consistent touchpoint management, improved operational efficiency through shared data and processes, and increased revenue potential through cross-selling and upselling (Verhoef et al. 2009; Lemon & Verhoef, 2016). Integration challenges are equally extensive, spanning technical dimensions such as system compatibility and data synchronization (Chen & Popovich, 2003), organizational dimensions including skills development and change management (Kotter, 2012; Sebastian et al. 2017), and strategic dimensions involving alignment of digital capabilities with business objectives and channel conflict management (Brynjolfsson & Hitt, 2000; Porter, 2001). These challenges are particularly acute for SMEs given their limited resources and need for rapid return on investment (Laudon & Traver, 2016; Turban et al. 2018). This body of evidence provides the theoretical rationale for the framework's four integration mechanisms (data integration, process integration, technology integration, and customer journey integration), each of which is specifically designed to address identified integration barriers while capitalizing on the documented opportunities for synergistic value creation.

Sustainable Performance in the Digital Context

Sustainable performance in an SME context refers to an organization's ability to sustain economic, social, and environmental outcomes over time in ways that contribute to long-term organizational viability and stakeholder value creation (Elkington, 1997; Porter & Kramer, 2011). This study distinguishes sustained commercial success (the durability of financial and customer performance over time, corresponding to the economic pillar) from social and environmental sustainability, which are additional, not automatic, outcomes. Digital marketing and e-commerce integration can plausibly sustain commercial performance without generating comparable social or environmental benefits, and the outcomes may occasionally trade off against one another. Economic sustainability involves achieving positive returns on digital investments while maintaining financial stability (Melville et al. 2004). Social sustainability encompasses employee development and community engagement, drawing on a stakeholder perspective (Freeman et al. 2010). Environmental sustainability involves the energy consumption, electronic waste, and carbon footprint implications of digital operations (Melville, 2010;

Watson et al. 2010; Malmudin & Lundén, 2018). The framework proposes distinct, only partially overlapping pathways to each pillar. Commercial performance is proposed to follow primarily from the integration mechanisms described in the Integration Mechanisms section, whereas social and environmental outcomes depend additionally on how digital operations are resourced and delivered (for example, data-centre energy use or last-mile delivery emissions) and are not guaranteed by commercial success alone. This tripartite conceptualization is the overarching outcome construct of the proposed framework. It is intended to support evaluating the integration of digital marketing and e-commerce capabilities against a broader standard than financial metrics alone.

Dynamic Capabilities Foundation

The proposed framework is grounded in dynamic capabilities theory, which emphasizes an organization's ability to sense opportunities and threats, seize strategic initiatives, and reconfigure resources to sustain competitive advantage in changing environments (Teece, 2007; Helfat & Peteraf, 2009). This theoretical lens offers a robust foundation for examining how SMEs can develop, deploy, and integrate digital marketing and e-commerce capabilities to remain agile and competitive in rapidly evolving digital landscapes. The dynamic capabilities framework operates across three interdependent dimensions, each of which maps directly onto specific framework components and integration mechanisms:

- Sensing dimension: Includes SMEs' ability to identify and evaluate digital opportunities and threats through market intelligence, customer analytics, and competitive monitoring (Teece, 2007; Kindström et al. 2013). These capabilities enable SMEs to detect evolving customer needs, emerging market trends, and technological advancements, informing proactive strategic adaptation. Within the proposed framework, the sensing dimension is operationalized through the Strategic Capabilities component, which incorporates strategic foresight, market intelligence, and competitive benchmarking, and is supported by the Data Integration Mechanism, which provides the informational infrastructure for continuous environmental scanning.
- Seizing dimension: Reflects SMEs' capacity to mobilize resources and capabilities in response to identified digital opportunities through strategic investments, partnerships, and organizational

restructuring (Teece, 2007; Teece et al. 1997). Running digital marketing and e-commerce activities is not, by itself, a dynamic capability; it becomes one only when the SME can deliberately alter these routines and reallocate resources as customer preferences or market conditions shift (Winter, 2003). This ability to change, rather than merely operate, digital marketing and e-commerce routines is what the seizing dimension specifically requires. The seizing dimension is enacted through the Digital Marketing component and the E-Commerce Integration component, which provide the operational capabilities through which identified opportunities are intended to be converted into market actions, with the integration mechanisms linking the two.

- Reconfiguring dimension: pertains to SMEs' ability to continuously adapt and restructure their resource base in response to evolving environmental conditions and performance feedback (Helfat & Peteraf, 2009; Ambrosini & Bowman, 2009). These capabilities enable iterative learning and improvement, sustaining competitiveness in dynamic digital contexts. The reconfiguring dimension is institutionalized through the Organisational Capabilities component, encompassing change management, skills development, and performance management, and is facilitated by the Technology and Process Integration Mechanisms, which provide the structural flexibility required for continuous realignment.

Thus, the three-dimensional dynamic capabilities structure serves as the theoretical spine of the framework, intended to ensure that each component and mechanism is theoretically grounded and analytically distinct, while collectively contributing to the overarching objective of sustainable SME performance.

Framework Architecture

Building on the dynamic capabilities foundation and informed by the preceding literature review, the integrated framework comprises five core components that collectively facilitate the effective integration of digital marketing and e-commerce capabilities within SMEs to support sustainable performance. These components are interdependent and mutually reinforcing, necessitating coordinated development and strategic management to support the intended outcomes. Each component is grounded in the empirical

and theoretical evidence reviewed in the preceding subsections.

- Digital Marketing: Consists of capabilities for driving awareness, acquisition, engagement, retention, and loyalty across digital channels, including content marketing, social media marketing, SEO, paid advertising, email marketing, mobile marketing, and marketing analytics. Grounded in the digital marketing capabilities literature (Kannan & Li, 2017; Chaffey & Ellis-Chadwick, 2019), this component addresses the documented fragmentation of channel-specific studies by providing an integrated capability architecture.
- E-Commerce Integration: Refers to the systematic development of digital commerce capabilities that enable effective online selling, encompassing platform development, payment processing, inventory management, order fulfilment, customer service, and business intelligence. Informed by e-commerce capability research (Zhu & Kraemer, 2005; DeLone & McLean, 2003), this component responds to the accelerated adoption imperative documented in the post-COVID-19 literature (Pantano et al. 2020).
- Technology Infrastructure: Serves as the foundational enabler comprising cloud computing, data management systems, cybersecurity, integration platforms, and data analytics tools, emphasizing scalability, reliability, and interoperability. This component addresses the technical integration challenges identified by Chen and Popovich (2003) and Ross et al. (2006), providing the connective architecture that enables the other four components to function as a coherent system.
- Organisational Capabilities: Refer to human and structural resources including digital leadership, change management, skills development, innovation culture, and performance management, emphasizing the strategic role of people and processes. Informed by digital transformation research (Matt et al. 2015; Hanelt et al. 2021) and change management scholarship (Kotter, 2012), this component addresses the organizational dimensions of integration identified as critical success factors in the SME digital transformation literature.
- Strategic Capabilities: Consist of advanced competencies in strategic foresight, market intelligence, competitive benchmarking, strategic partnerships, and business model innovation, ensuring alignment of digital initiatives with broader organizational objectives. Grounded in

the strategic alignment literature (Sebastian et al. 2017; Warner & Wäger, 2019) and the dynamic capabilities sensing dimension (Teece, 2007), this component ensures coherent value creation across the framework.

Table 1 presents a consolidated overview of the five core framework components, their key dimensions, and their strategic functions within the IDM-EC framework.

Integration Mechanisms

Drawing on the integration challenges and opportunities identified in the literature (Verhoef et al. 2009; Lemon & Verhoef, 2016; Chen & Popovich, 2003), the framework identifies four integration mechanisms intended to support coordination between digital marketing and e-commerce capabilities: data integration, process integration, technology integration, and customer journey integration. These mechanisms connect the framework's components and translate the principles of dynamic capabilities (Teece, 2007) into specific integration mechanisms. For the customer, they are proposed to operate through three pathways. Data integration and process integration are expected to support perceived journey consistency (fewer contradictory messages or repeated information requests); technology integration is expected to support perceived reliability and trust (fewer failed transactions

or broken handoffs between channels); and customer journey integration is expected to support perceived value across touchpoints by making the customer's path coherent. These perceptions are, in turn, proposed, not demonstrated, to influence conversion and retention. Other factors, such as product quality, price, and prior loyalty, plausibly also shape these outcomes and are not accounted for by this framework.

- **Data Integration Mechanism:** Involves the systematic collection, processing, and dissemination of customer and operational data across digital marketing and e-commerce functions, enabling holistic customer profiles and data-driven decision-making (Chen et al. 2012; Davenport & Harris, 2017). This mechanism directly operationalizes the sensing dimension of dynamic capabilities by providing the informational infrastructure for continuous opportunity identification and customer insight generation.
- **Process Integration:** Consists of the structured alignment of business processes across digital marketing and e-commerce operations to eliminate redundancies, reduce costs, and ensure customer experience consistency through streamlined workflows (Hammer & Champy, 2003; Davenport, 2018). This mechanism enacts the reconfiguring dimension by enabling iterative process improvement and adaptive workflow redesign in response to performance feedback.

Table 1. IDM-EC framework: five core components of digital marketing and e-commerce integration for SME sustainable performance

Component	Key Dimensions	Strategic Function
Digital Marketing	Content marketing, SEO, social media, paid advertising, email, mobile marketing, analytics	Drives awareness, acquisition, engagement, retention, and loyalty across digital channels
E-Commerce Integration	Platform development, payment processing, inventory management, order fulfilment, customer service, business intelligence	Enables effective online selling with seamless connectivity to core business functions
Technology Infrastructure	Cloud computing, data management, cybersecurity, integration platforms, analytics tools	Foundational enabler ensuring scalability, reliability, and interoperability
Organisational Capabilities	Digital leadership, change management, skills development, innovation culture, performance management	Human and structural resources essential for navigating digital transformation
Strategic Capabilities	Strategic foresight, market intelligence, competitive benchmarking, partnerships, business model innovation	Aligns digital initiatives with broader organisational objectives for coherent value creation

- **Technology Integration:** Establishes technical interoperability and seamless connectivity between platforms, enabling automated processes, synchronized data flows, and enhanced resource efficiency (Ross et al. 2006; Bharadwaj et al. 2013). This mechanism addresses the system compatibility and data synchronization challenges identified in the integration literature (Chen & Popovich, 2003) and underpins the technology infrastructure component of the framework.
- **Customer Journey Integration:** Customer Journey Integration orchestrates touchpoints across digital marketing and e-commerce platforms to deliver cohesive experiences across the awareness, consideration, conversion, and post-purchase (retention and loyalty) stages, adapted from Lemon and Verhoef (2016) and Homburg et al. (2017). It operationalizes the seizing dimension (Teece, 2007) by converting digital investments into customer experiences that may support sustainable competitive advantage. It is distinguished from customer experience management within the E-Commerce Integration component, which governs service quality at individual online touchpoints such as checkout usability or support responsiveness. Customer Journey Integration instead concerns the sequencing and consistency of the customer's path across digital marketing and e-commerce touchpoints jointly, rather than the quality of any single touchpoint. To avoid double-counting, a capability is assigned to one component only, according to whether it primarily governs a single touchpoint or the journey.

Table 2 presents the four integration mechanisms alongside their descriptions and anticipated SME outcomes, synthesizing the evidence base informing each mechanism.

RESULTS

The PRISMA 2020 systematic literature review and theoretical synthesis yielded a comprehensive integrated framework, the *IDM-EC (Integrated Digital Marketing and E-Commerce) Framework*, comprising five core capability components, four integration mechanisms, and a multi-dimensional performance measurement architecture. The principal findings are organized around these three structural elements, elaborated in

the sub-sections that follow. First, the review identified five interdependent capability components as central to SME digital transformation success: digital marketing, e-commerce integration, technology infrastructure, organizational capabilities, and strategic capabilities. These components are not independent investments but mutually reinforcing dimensions of a coherent digital capability architecture. Second, four integration mechanisms were identified as enabling the coordination and alignment of these components: data integration, process integration, technology integration, and customer journey integration. These mechanisms are proposed to translate individual capability investments into synergistic, cross-functional value creation. Third, the review revealed that sustainable performance in the SME digital context can be evaluated across four interconnected dimensions: financial, customer, operational, and sustainability performance, each requiring dedicated measurement frameworks, as summarized in Table 3. Collectively, these findings underpin the IDM-EC framework and its four-phase implementation roadmap, as presented in the following sections.

Framework Components and Relationships

Digital Marketing Components

The digital marketing component consists of interrelated capabilities that empower SMEs to attract, engage, and retain customers across digital channels. Content marketing enables brand authority, search engine visibility, and lead generation through the systematic creation and dissemination of valuable content (Hollebeek & Macky, 2019; Kumar et al. 2019). Social media marketing facilitates brand development, customer engagement, and viral marketing dynamics across diverse platforms (Trainor et al. 2014; Kumar et al. 2016). Email and mobile marketing deploy coordinated communication channels for personalized messaging and customer retention (Järvinen & Karjaluo, 2015; Shankar et al. 2016). Paid digital advertising through SEM, social media advertising, and display advertising enables rapid and cost-effective customer acquisition (Chaffey & Ellis-Chadwick, 2019; Kumar & Reinartz, 2016). Brand digital identity development maintains consistent brand experiences across digital touchpoints, serving as a key differentiator that supports premium positioning and perceived value (Keller, 2013; Aaker, 2014).

E-Commerce Integration Components

The e-commerce integration component enables SMEs to effectively sell products and services through digital channels. Platform optimization, the ongoing development of e-commerce platforms for engaging, efficient user experiences, directly influences conversion rates, customer satisfaction, and operational efficiency (DeLone & McLean, 2003). Secure payment gateway capabilities foster customer trust and enhance

conversion rates (Kim et al. 2010; Ponte et al. 2015). Digital supply chain management optimizes inventory control, order fulfilment, and logistics to meet customer expectations for availability and delivery speed (Gunasekaran et al. 2004; Zhang et al. 2011). Customer experience management designs positive, consistent experiences across the e-commerce customer journey, differentiating SME offerings and fostering long-term loyalty (Chang et al. 2009; Rita et al. 2019).

Table 2. Integration mechanisms, descriptions, and SME outcomes of digital marketing and e-commerce alignment in resource-constrained environments

Mechanism	Description	Anticipated SME Outcome
Data Integration	Systematic collection, processing, and dissemination of customer and operational data across functions	Holistic customer profiles; data-driven decision-making
Process Integration	Structured alignment of workflows across digital marketing and e-commerce operations	Reduced redundancies; consistent customer experience
Technology Integration	Establishment of interoperability and seamless connectivity between platforms	Automated workflows; synchronised data flows
Customer Journey Integration	Orchestration of touchpoints across awareness, consideration, conversion, and post-purchase stages	Seamless omnichannel experience; improved lifetime value

Table 3. IDM-EC framework: performance measurement indicators across financial, customer, operational, and sustainable dimensions for SME digital marketing and e-commerce integration

Dimension	Category	Indicators
Financial	Revenue Growth	Total revenue expansion, digital revenue proportion, customer acquisition value, average order value improvement
Financial	Profitability	Gross margin enhancement, customer acquisition cost reduction, return on marketing investment, operational efficiency gains
Financial	Cost Optimisation	Operational expenditure reduction, automation-driven efficiency improvements, resource utilisation enhancement
Customer	Acquisition	New customer acquisition rates, acquisition cost trends, conversion rate performance, channel effectiveness
Customer	Engagement	Website traffic, social media interactions, email open rates, content consumption, brand interaction frequency
Customer	Satisfaction & Loyalty	Net promoter score, satisfaction ratings, repeat purchase behaviour, customer lifetime value, churn rates
Operational	Efficiency	Process automation levels, operational cost per transaction, inventory turnover rates, resource utilisation
Operational	Quality	Order accuracy, delivery reliability, customer service responsiveness, error reduction achievements
Operational	Capability Development	Digital skill advancement, technology adoption rates, innovation success rates
Sustainable	Economic	Cash flow stability, return on investment, growth sustainability indices, debt management efficiency
Sustainable	Social	Employee development, community engagement, stakeholder satisfaction
Sustainable	Environmental	Energy consumption efficiency, carbon emission reduction, waste minimisation, responsible practices adoption

Technology Infrastructure Requirements

Technology infrastructure underpins all digital marketing and e-commerce activities, ensuring operational scalability, reliability, and efficiency. Cloud computing enables SMEs to access enterprise-grade resources without substantial upfront capital, offering scalability and flexibility for rapid digital expansion (Armbrust et al. 2010; Mell & Grance, 2011). Data management and analytics platforms support evidence-based decision-making and continuous performance improvement, narrowing the competitiveness gap with larger enterprises (Chen et al. 2012; Wamba et al. 2015). API management facilitates seamless connectivity among marketing and e-commerce systems, reducing operational fragmentation and supporting automated workflows (Ross et al. 2006; Bharadwaj et al. 2013). Cybersecurity and data protection measures are indispensable for regulatory compliance and consumer trust (Bulgurcu et al. 2010; Crossler et al. 2013).

Organisational and Strategic Capabilities

Organizational and strategic capabilities comprise the human and managerial resources essential for effective digital transformation. Digital leadership development, cultivating leadership competencies to steer initiatives, manage change, and drive performance, is particularly critical for SMEs where owner-managers directly shape strategic direction (Matt et al. 2015; Sebastian et al. 2017). Change management competencies and innovation-oriented cultures facilitate digital transformation while maintaining employee engagement (Kotter, 2012; Westerman et al. 2014). Strategic planning and market intelligence capabilities align digital investments with business objectives while remaining responsive to competitive dynamics, supporting returns and sustainable competitive positioning (Porter, 2001; Teece, 2007).

Integration Mechanisms and Success Factors

Data Integration Architecture

Effective data integration is a critical enabler of successful digital marketing and e-commerce implementation, facilitating unified customer views, integrated analytics, and coordinated decision-making (Chen et al. 2012; Davenport & Harris, 2017). A comprehensive data integration architecture comprises

three elements: customer data integration, which aggregates information from marketing channels, e-commerce transactions, and customer service to construct holistic profiles supporting personalized engagement; operational data integration, which links inventory, order histories, financial records, and performance metrics for real-time process monitoring and optimization; and analytical data integration, which consolidates diverse data sources for advanced customer segmentation, predictive modelling, and performance attribution, enabling data-driven decisions that narrow the competitive gap with larger enterprises.

Process Integration Framework

Process integration involves the systematic configuration of workflows to eliminate redundancies, reduce costs, and ensure customer experience consistency (Hammer & Champy, 2003; Davenport, 2018). A robust process integration framework addresses three core areas. Customer acquisition processes coordinate digital marketing with e-commerce conversion mechanisms to enhance lead generation and improve conversion efficiency. Customer engagement processes align content marketing, social media strategies, and e-commerce communications to deliver coherent brand messaging across touchpoints. Customer retention processes integrate email marketing, customer service platforms, and e-commerce functionalities to support lifecycle management, enhance loyalty, and maximize customer lifetime value.

Technology Integration Requirements

Technology integration facilitates automated workflows, synchronized data exchange, and operational optimization through unified systems (Ross et al. 2006; Bharadwaj et al. 2013). A well-structured integration architecture emphasizes three elements: API-based integration supporting flexible, modular connectivity between heterogeneous platforms while preserving system independence; real-time data synchronization ensuring that customer profiles, inventory levels, and performance metrics are consistently updated across platforms, minimizing errors, and enhancing efficiency; and scalable infrastructure design enabling SMEs to expand digital operations without substantial technology reinvestment, with cloud-based infrastructure offering cost-efficiency, adaptability, and operational resilience.

Customer Journey Integration

Customer journey integration facilitates the coordinated management of touchpoints and experience design across digital marketing and e-commerce channels to deliver seamless, coherent experiences throughout the engagement lifecycle (Lemon & Verhoef, 2016; Homburg et al. 2017). The framework encompasses four stages. At the awareness stage, integration aligns content marketing, social media, and SEO for consistent brand messaging. The consideration stage coordinates lead nurturing, product information, and support services to guide purchase decisions and reduce acquisition costs. The conversion stage optimizes e-commerce functionalities, payment systems, and support to enhance transactional efficiency. Post-purchase integration incorporates customer service, retention marketing, and loyalty programs to increase lifetime value and foster brand advocacy (Harris et al. 2021).

Performance Measurement and Success Metrics

The framework's performance measurement approach integrates financial, customer, operational, and sustainable performance indicators to provide a holistic assessment of digital transformation outcomes, as presented in Table 3.

Financial Performance Indicators

Financial performance measurement evaluates revenue growth, profitability enhancement, and cost optimization to assess the financial impact of digital marketing and e-commerce integration (Kaplan & Norton, 2004; Bharadwaj et al. 2013). Revenue growth metrics assess total revenue expansion, digital revenue proportion, and customer acquisition value. Profitability metrics focus on gross margin enhancement, customer acquisition cost reduction, and return on marketing investment. Cost optimization metrics encompass operational expenditure reduction and automation-driven efficiency gains, which are particularly relevant for resource-constrained SMEs.

Customer Performance Indicators

Customer performance indicators evaluate acquisition, engagement, satisfaction, and loyalty, each contributing to long-term sustainability and growth (Kumar & Reinartz, 2016; Verhoef & Lemon, 2013). Acquisition

metrics include new customer rates, cost trends, and channel effectiveness; engagement metrics cover website traffic, social interactions, and email open rates; and satisfaction and loyalty metrics encompass net promoter scores, repeat purchase behavior, and churn rates. Across these domains, indicators fall into two categories that should not be treated interchangeably. Activity metrics (e.g., website traffic, email open rates) record behavior but do not by themselves establish marketing effectiveness, whereas outcome metrics measure its financial consequence. The principal outcome metrics are customer acquisition cost, defined as total acquisition spend divided by new customers gained within a defined attribution window; customer lifetime value, the discounted net contribution a customer is expected to generate over a defined retention horizon (Gupta et al. 2006); and marketing return, incremental revenue attributable to marketing activity, net of cost, over the attribution window. Each of these measures depends on an attribution model and time window that this framework does not itself specify and that would need to be defined for any given SME application.

Operational Performance Indicators

Operational performance measurement encompasses efficiency, quality, and capability development metrics essential for sustaining competitive advantage in digitally enabled SMEs (Gunasekaran et al. 2004; Neely et al. 2005). Efficiency metrics include process automation levels and operational cost per transaction. Quality metrics assess order accuracy, delivery reliability, and customer service responsiveness. Capability development metrics reflect digital skill advancement, technology adoption rates, and innovation success rates.

Sustainable Performance Integration

Sustainable performance measurement integrates economic, social, and environmental indicators to assess long-term organizational viability and stakeholder value creation (Elkington, 1997; Porter & Kramer, 2011). Economic sustainability metrics include cash flow stability and return on investment; social sustainability metrics cover employee development and community engagement; and environmental sustainability metrics address energy efficiency, carbon reduction, and the adoption of responsible practices, which are increasingly relevant to regulatory compliance and

consumer trust. The economic indicators overlap conceptually with the financial performance indicators above; they are retained in this category only where the measurement horizon is long-term stability rather than short-term revenue or profitability, and this distinction should guide which category of Table 3 an indicator is reported under to avoid double-counting. Commercial gains do not automatically produce social or environmental benefits: for example, higher conversion driven by intrusive personalization may raise revenue while reducing customer trust, and faster fulfilment driven by increased delivery frequency may raise sales while increasing emissions. Social and environmental indicators should therefore be tracked as potentially independent, and occasionally competing, outcomes rather than assumed by-products of commercial success.

Figure 1 presents the integrated framework of digital marketing and e-commerce for sustainable performance, grounded in Dynamic Capabilities Theory (Teece, 2007).

Implementation Roadmap and Best Practices

The implementation roadmap comprises four phases: Phase 1 (Assessment and Planning), Phase 2 (Foundation Building), Phase 3 (Integration and Optimization), and Phase 4 (Scaling and Innovation), as presented in Table 4.

Phase 1: Assessment and Planning

The implementation process begins with a comprehensive evaluation of an SME's digital capabilities, market positioning, and organizational readiness for transformation (Matt et al. 2015; Sebastian et al. 2017). Digital maturity assessment establishes baseline performance levels and identifies priority development areas. Market opportunity analysis examines customer needs, competitive dynamics, and digital market trends. Organizational readiness evaluation examines leadership commitment, resource availability, and skill gaps. Strategic planning and resource allocation formulate a digital transformation strategy aligned with business objectives, including realistic timelines, budgets, and performance targets.

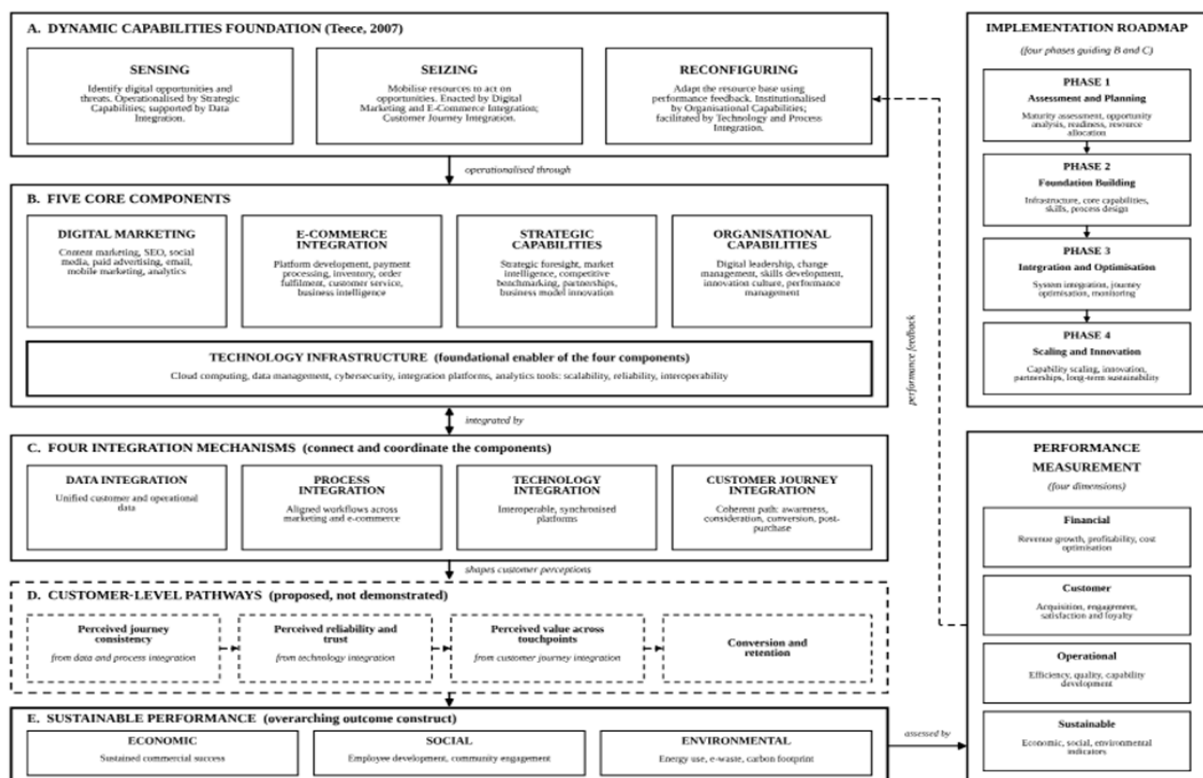


Figure 1. IDM-EC integrated digital marketing and e-commerce framework for SME sustainable performance: components, integration mechanisms, and implementation roadmap based on dynamic capabilities theory

Table 4. IDM-EC framework: four-phase implementation roadmap for sme digital marketing and e-commerce integration, from assessment and planning to scaling and innovation

Phase	Stage	Key Activities
Phase 1	Assessment & Planning	Digital maturity assessment; market opportunity analysis; organisational readiness evaluation; strategic planning and resource allocation
Phase 2	Foundation Building	Technology infrastructure development; core capability development; team building and skills development; process design and documentation
Phase 3	Integration & Optimisation	System integration implementation; customer journey optimisation; performance monitoring and analytics; continuous improvement processes
Phase 4	Scaling & Innovation	Capability scaling; innovation exploration; partnership development; long-term sustainability planning

Source: Author's own elaboration based on Matt et al. (2015) and Westerman et al. (2014)

Phase 2: Foundation Building

Foundation building establishes essential capabilities and infrastructure for effective integration (Westerman et al. 2014; Vial, 2019). Technology infrastructure development deploys cloud computing, data management, integration technologies, and cybersecurity measures, emphasizing reliability and scalability. Core capability development implements fundamental digital marketing and e-commerce functionalities focused on customer experience and operational effectiveness. Team building and skills development recruit key personnel and deliver targeted digital skills training. Process design and documentation create standardized procedures and quality assurance systems, ensuring efficiency, consistency, and scalability.

Phase 3: Integration and Optimisation

Integration and optimization align digital marketing and e-commerce capabilities through system integration and data-driven performance enhancement (Chen et al. 2012; Davenport, 2018). System integration implementation links platforms through API-based integration, real-time data synchronization, and workflow automation. Customer journey optimization analyses and refines interactions across digital touchpoints to improve conversion pathways and satisfaction. Performance monitoring and analytics implement measurement systems that generate real-time insights into customer behavior, operational performance, and financial results. Continuous improvement processes embed systematic optimization practices into daily operations, fostering data-driven innovation.

Phase 4: Scaling and Innovation

Scaling and innovation expand established digital capabilities and explore new competitive opportunities (Nambisan et al. 2019). Capability scaling extends successful functionalities to new markets, segments, and product categories while maintaining quality. Innovation exploration experiments with emerging technologies and novel marketing channels, requiring balanced risk management and resource allocation. Partnership development forms strategic alliances with technology providers and marketing agencies to enhance capabilities and optimize resources. Long-term sustainability planning crafts strategies ensuring continued competitive relevance, adaptability, and sustained innovation.

Theoretical Contributions and Practical Implications

Theoretical Contributions

This study makes four theoretical contributions. This study extends dynamic capabilities theory (Teece, 2007) by proposing a comprehensive integrative framework that explicates how SMEs can systematically develop and deploy digital marketing and e-commerce capabilities within resource-constrained environments, engaging directly with the distinctive structural, financial, and managerial challenges characterizing SME contexts. It advances the digital business strategy literature through a holistic approach to capability integration that simultaneously addresses the operational and strategic dimensions of digital transformation. Rather than treating digital marketing and e-commerce as parallel but disconnected investments, the framework theorizes integration mechanisms through which these capabilities can be

aligned and mutually reinforced, contributing insights into conditions enabling synergistic value from combined digital investments. Additionally, the study contributes to the sustainable business model literature by embedding sustainability as a core evaluative dimension within a digital transformation framework. By integrating economic, social, and environmental performance indicators, the study advances a more holistic, stakeholder-responsive conception of digital transformation success, positioning sustainability as a central evaluative dimension of strategic value creation. Finally, the framework extends customer experience literature by proposing an approach to integrating customer touchpoints across digital marketing and e-commerce channels. The customer journey integration mechanism connects channel-level integration practices to broader customer relationship outcomes, enriching theoretical understanding of omnichannel value creation in digitally enabled SME environments

Practical Implications

For SME managers, the framework is proposed as a structured, resource-sensitive roadmap for digital transformation, whose usefulness is conditional on the SME's available resources, digital maturity, and market context rather than guaranteed. The phased approach is intended to support incremental progress while building foundational capabilities for long-term competitive sustainability. Before a manager relies on it to time investment decisions, each phase would need explicit readiness checks (for example, evidence of consistent baseline digital traffic before scaling paid acquisition, or a working data-collection process before attempting cross-channel personalization) and a clear statement of the customer problems it is meant to resolve. The explicit attention to integration mechanisms may help managers align digital marketing and e-commerce investments more effectively under limited resource commitments. For consultants and digital transformation advisors, the framework offers a basis for a diagnostic instrument to assess SME digital readiness, design contextually appropriate transformation strategies, and set performance benchmarks. By encompassing both technical and organizational dimensions, it supports more integrated strategic guidance than narrow tool-selection advice. For policymakers and government agencies, the framework offers a theoretically grounded basis for designing targeted digital transformation support

programmes responsive to SME needs. Its explicit integration of sustainable performance outcomes (economic, social, and environmental outcomes) is consistent with continental digital transformation policy agendas (African Union, 2020).

Managerial Implications

The IDM-EC framework offers a set of targeted implications for SME managers seeking to pursue effective digital transformation within realistic resource constraints. The study suggests that managers should resist the tendency to adopt digital marketing and e-commerce tools in a piecemeal fashion. The framework proposes that sustainable performance gains are more likely to arise not from individual technology investments but from the deliberate integration of digital capabilities across data, process, technology, and customer journey dimensions. Managers should therefore prioritize integration planning as a distinct strategic activity, ensuring that new digital tools are selected and deployed with interoperability and cross-functional alignment in mind. The phased implementation roadmap (Table 4) offers managers a sequenced guide intended to help manage the risk of digital transformation failure by calibrating investment and capability development to the SME's current digital maturity level. Managers should begin with a rigorous digital maturity assessment before committing to technology expenditure, ensuring that foundational infrastructure, skills, and processes are in place before attempting more advanced integration activities. Additionally, managers should embed sustainable performance measurement into digital transformation planning from the outset, rather than treating it as a post-implementation audit activity. The multi-dimensional performance measurement framework (Table 3), which extends the balanced scorecard logic (Kaplan & Norton, 1992) with a sustainability dimension, is offered as a proposed diagnostic tool, not a validated instrument. It is intended to help managers track financial returns, customer outcomes, operational efficiency, and sustainable performance concurrently. For example, strong acquisition combined with weak retention may indicate a need for investment in journey consistency and post-purchase experience, whereas weak acquisition itself may indicate earlier-stage capability gaps. Used this way, the framework is intended to support balanced decision-making that avoids short-term revenue maximization at the expense of long-term organizational viability. Finally, the

framework highlights the central role of organizational and strategic capabilities, particularly digital leadership and change management, in determining transformation outcomes. SME owner-managers and senior leaders should invest in their own digital literacy and cultivate innovation-oriented organizational cultures that support experimentation, learning, and continuous improvement. Engagement with external partners, technology providers, and digital transformation consultants is also recommended as a mechanism for augmenting internal capability gaps, particularly in the early phases of the roadmap.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This study developed a theoretical framework integrating digital marketing and e-commerce capabilities within SMEs and proposed how such integration might contribute to sustainable performance outcomes. These are propositions derived from synthesis, not tested relationships. The IDM-EC framework agrees with Kannan and Li (2017), Trainor et al. (2014), and Lemon and Verhoef (2016) that digital marketing, social CRM, and customer journey management each contribute distinct capabilities. It extends this work by specifying how these capabilities interact across the digital marketing/e-commerce boundary for resource-constrained SMEs. Its incremental contribution beyond Kwarteng-Amaniampong and Tait (2026) is the structural framework and integration mechanisms that address the gap that earlier study identified but did not itself resolve. This should not be read as implying that all channels, customer segments, or SMEs benefit equally from integration. The reviewed corpus reports considerable variation by sector and resource base, and the framework's applicability is bounded accordingly pending empirical testing. The framework comprises five core components (digital marketing, e-commerce integration, technology infrastructure, organizational capabilities, and strategic capabilities) alongside four integration mechanisms. These are proposed to support, rather than guarantee, value creation and competitive positioning as capabilities are developed systematically. The central boundary condition is that these benefits depend on the integration mechanisms being enacted, which the review corpus does not itself verify. Theoretically, the framework draws on and

extends dynamic capabilities theory, digital business strategy literature, and sustainable business model research. It offers a basis for guidance to managers, consultants, and policymakers, and its phased approach is intended to balance immediate operational needs with long-term strategic objectives under resource constraints. Future research should empirically validate the framework across diverse industries and geographic markets, with construct specification and multi-level measurement (customer-level and firm-level) as the first validation priority. In doing so, it should preserve the distinction between sustained commercial performance and broader social and environmental sustainability outcomes.

Recommendations

This study has several limitations, which point to opportunities for future research. As a review of the secondary literature, its conclusions are bounded by the coverage of the retained corpus, by coding conducted by a single reviewer without an inter-coder reliability check, and by the heterogeneity of measures used across the original studies synthesized here. The framework may therefore not transfer uniformly across the customer and SME contexts represented by the studies. It also requires empirical validation across diverse SME contexts, industries, and geographic regions using quantitative methods, for which the constructs, proposed relationships, and level of analysis must first be specified. Customer-level constructs (perceived value, trust, and journey consistency) and firm-level constructs (financial and operational performance) require different measures and respondents; therefore, a single SME manager survey would not adequately capture both. A multi-level or multi-source design, for example, combining manager-reported firm data with customer-reported perceptions, is recommended over a single-source instrument. Once the constructs and relationships are specified, structural equation modelling can be used to test the proposed relationships. Longitudinal case study approaches would better capture implementation dynamics and provide more actionable practitioner guidance. Future research should develop and psychometrically validate measurement instruments for assessing the relationships between digital integration efforts and sustainable performance outcomes. Finally, the framework's applicability across varying cultural, regulatory, and market environments requires systematic examination, particularly in emerging markets and diverse regulatory contexts.

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