

Extended Abstract

Digitizing International Business: A Framework for SMEs' Global Expansion

1. Problem Statement.

Small and medium-sized enterprises (SMEs) have traditionally faced persistent challenges in their internationalization journey, including limited financial and human resources, insufficient foreign market knowledge, and structural constraints that inhibit scalability. While the digital economy presents new avenues to overcome these barriers, empirical evidence reveals that not all SMEs benefit equally from digitalization. The disparity in digital adoption, coupled with a lack of clarity on how digital technologies are strategically and operationally integrated into internationalization processes, exposes a critical research gap. Specifically, the literature lacks a comprehensive understanding of the mechanisms, boundary conditions, and enabling factors through which digitalization transforms SMEs' international trajectories. To address this void, this study asks:

1. What factors drive SMEs to digitalize?
2. Through what mechanisms does digitalization affect SME internationalization?
3. Under what conditions are these mechanisms effective?

2. Theoretical Framework

The study is grounded in a synthesized framework that integrates insights from several theoretical traditions—primarily the Resource-Based View (RBV), Dynamic Capabilities Theory, and institutional perspectives. It extends the Antecedent–Mediator–Outcome (AMO) framework by incorporating process mechanisms (P), resulting in an APMO model. This framework maps how internal and external antecedents influence digitalization strategies, which subsequently drive organizational change processes that shape internationalization outcomes. Furthermore, the study introduces boundary conditions (BCs) that either enable or constrain these relationships, capturing contextual heterogeneity at macro, meso, and firm levels.

Through this theoretical lens, the study shifts the conversation from static linkages between digitalization and internationalization to dynamic processes that evolve over time and vary across industries and geographies. Importantly, it challenges the one-size-fits-all assumption by recognizing that SMEs pursue different digitalization pathways depending on their resources, capabilities, and environments.

3. Methodology

To construct the framework, the study conducts a systematic literature review (SLR) of 70 empirical articles published between 2011 and 2023. These articles were selected through a rigorous multi-stage process that involved keyword searches in Scopus and Web of Science, reference list checking, and forward citation tracking. Only empirical studies focused on SMEs and the digitalization–internationalization nexus were retained, and journals were filtered using the Chartered Association of Business Schools (CABS) ranking to ensure quality. Studies were coded and analyzed

using a hybrid approach: deductive classification based on the APMO model and inductive thematic synthesis to identify emergent concepts and mechanisms.

Bibliometric tools (e.g., VOSviewer) were used to map the thematic evolution of the field, and content analysis followed the protocols of Mayring (2014) and Popay et al. (2006) to extract theoretical patterns and practical insights. The study categorizes digital technologies into five functional groups (planning, design, production, supply chain, and marketing/sales) and links them to organizational change mechanisms and internationalization outcomes such as speed, scale, scope, and performance.

4. Key Findings

The analysis reveals two distinct pathways through which digitalization shapes SME internationalization:

4.1. Deep Transformation Pathway:

SMEs adopt a high degree of digitalization across multiple business functions—planning, production, logistics, and marketing. This pathway is resource-intensive but enables strategic transformation through organizational learning, business model innovation, and enhanced firm-specific advantages. Key change mechanisms include the development of digital international entrepreneurship, market intelligence capabilities, and customer base expansion.

4.2. Lightweight Entry Pathway:

SMEs utilize low-barrier digital tools (e.g., social media, third-party platforms) without substantial changes to internal processes or structures. While this pathway offers immediate cost benefits and global reach, it rarely leads to sustainable competitive advantage unless complemented by organizational change.

4.3. Antecedents

Antecedents to digitalization fall into three categories:

- Macro-environmental factors: globalization, institutional voids, and foreign competition pressures
- Industry-level conditions: availability of a digital labor force and industry-specific digital infrastructure
- Organizational-level drivers: digital readiness, IT capabilities, and perceived environmental turbulence (e.g., corruption or regulation)

4.4. Organizational Change Mechanisms

Digitalization affects SME internationalization indirectly through several mediators:

- Digital International Entrepreneurship (IEO): enhances SMEs' ability to exploit new markets and adapt rapidly.
- Digital International Marketing: enables data-driven segmentation, localization, and brand building.

- Business Model Innovation: reshapes value creation and delivery through modular, scalable models.
- **Transformation of Firm-Specific Advantages:** creates digital resources (e.g., platforms, customer data) that are transferable across borders.

4.5. Boundary Conditions

The digitalization–internationalization link is moderated by multiple contextual factors:

- Macro-level: institutional support, policy incentives, and disruptive events (e.g., COVID-19)
- Meso-level: quality of digital ecosystems and partner platforms
- Micro-level: organizational learning capabilities and managerial digital orientation

The process model shows that SMEs navigating the deep transformation pathway are more likely to accelerate their internationalization when these boundary conditions are favorable. Conversely, under adverse conditions, even high digitalization may not yield strong performance outcomes.

5. Originality and Contribution

This study offers several contributions to both theory and practice:

Conceptual Innovation: The APMO-BC framework provides a novel process-oriented perspective on SME internationalization in the digital age. Unlike prior models that emphasize linear or static relationships, this framework incorporates complexity, feedback loops, and contextual variation.

Synthesis of Fragmented Literature: While several literature reviews exist, most are either technology-specific or lack a clear process model. This study integrates scattered empirical insights into a unified structure, revealing how antecedents, mechanisms, and boundary conditions interact.

Practical Guidance for SMEs: The study outlines strategic pathways for SMEs based on their capabilities and market environments. It offers diagnostic tools for evaluating digital readiness and selecting appropriate digitalization strategies to support internationalization.

Research Agenda: The study identifies multiple under-researched areas, including the role of digital ecosystems, the impact of managerial digital competencies, and the interaction between digitalization and global supply chain integration. It also highlights the need for multi-level, longitudinal research to unpack causal relationships.

6. Conclusion

By synthesizing a decade of empirical research, this study provides a comprehensive understanding of how digitalization enables, conditions, and transforms SME internationalization. Its findings are relevant not only to scholars of international business and entrepreneurship but also to policymakers and SME managers navigating digital globalization. The proposed framework and future research agenda serve as foundational tools for advancing knowledge and practice in this emerging domain.

Keywords: Digitalization; Internationalization; SMEs; Organizational Change; Process Model