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Digital Transformation and Business Model Innovation in Digital Business: A Review of Scopus Indexed Publications 2023-2025

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ABSTRACT

Main Objectives: To synthesize 35 Scopus-indexed publications (2023–2025) and explain how digital technology and digital transformation reshape firms' business models, particularly in small and medium-sized enterprises (SMEs).
Background Problem: Many firms fail to obtain proportional returns from digital investments (the digital paradox). Existing literature remains fragmented across leadership, external enablers, and cross-contextual perspectives.
Novelty: Provides an integrated conceptual framework connecting triggers, capabilities, digital leadership, BMI pathways, outcomes, and boundary conditions, complemented by six testable research propositions.
Research Methods: A thematic literature review analyzing abstracts, keywords, and metadata exported from Scopus across 35 recent journal publications (2023–2025).
Findings and Results: Digital transformation positively influences BMI and performance, with BMI acting as a key mediator. Organizational capabilities, dynamic learning, and digital leadership determine whether digital paradox is overcome.
Conclusion: Digital business value emerges when technology is translated into business model innovation through capabilities and leadership, rather than merely adopting technological tools.

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1. Introduction

Digital business has become a central arena of competition. Technologies such as the Internet of Things, cloud computing, big data, and blockchain change how firms create, deliver, and capture value (Ancillai et al., 2023). This shift places the business model, not just the technology, at the center of analysis. Yet many firms have not obtained the full benefit of their digital investments. This phenomenon is called the digital paradox: large investments that do not translate proportionally into value (Ancillai et al., 2023; Ancillai & Pascucci, 2023).

The pressure is heavier for SMEs because of limited resources and managerial capacity (Mai et al., 2024; Lamperti et al., 2024). Crises such as the Covid-19 pandemic have also accelerated digital redesign of businesses, for example in food retail (Mancuso et al., 2023). Understanding how digital transformation is translated into business model innovation (BMI) is therefore an important question for academics, practitioners, and policymakers.

The existing literature remains fragmented. First, research tends to adopt an inside-out perspective, for example on innovation processes and internal dynamic capabilities, so the role of external enablers receives less attention (Fielt, 2024). Second, the influence of the external environment on the relationship between digital transformation and BMI has rarely been tested (Ciacci & Penco, 2023). Third, the digital transformation literature has not been integrated with the leadership literature (Malik et al., 2025). Fourth, much of the empirical evidence comes from specific contexts, so the cross-context picture is incomplete.

2. Literature Review

2.1 Digital Business and Digital Business Models

A business model describes how an organization creates, delivers, and captures value. In a digital context, technological change does not merely automate processes; it also changes the architecture of value. Laudien et al. (2024) found that digital business models are characterized by a highly customizable value design, modular offerings, and near real-time value co-creation. At the conceptual level, Fielt (2024) argues that digital technologies also act as external enablers of BMI, while Capurro et al. (2024) place boundary management at the center of BMI in the digital and sustainable era.

2.2 Business Model Innovation (BMI) and Theoretical Foundations

BMI is a deliberate change in the elements of a business model. Systematic evidence shows that research on digital BMI is growing rapidly but remains fragmented (Ancillai et al., 2023). In practice, BMI can take the form of a shift toward digital services (Lamperti et al., 2024; Pizzichini et al., 2025) or scaling through growth hacking (Cavallo et al., 2024). The most frequently used theory is dynamic capabilities—the ability to sense, seize, and reconfigure resources (Chung et al., 2024; Ciacci & Penco, 2023; van Eechoud & Ganzaroli, 2023). Supporting theories include the resource-based view (Mai et al., 2024), social and human capital theory (Dat et al., 2025), institutional theory (Malik et al., 2025), and rational choice theory (Trabucchi et al., 2023). This diversity confirms that digital BMI is a multi-level phenomenon.

2.3 Theoretical foundations

The most frequently used theory is dynamic capabilities, that is, the ability to sense, seize, and reconfigure resources (Chung et al., 2024; Ciacci & Penco, 2023; van Eechoud & Ganzaroli, 2023; Xiang et al., 2024; Zahoor et al., 2024). Supporting theories include the resource-based view (Mai et al., 2024; Giang & Dung, 2025), social capital and human capital theory (Dat et al., 2025), institutional theory (Malik et al., 2025), and rational choice theory for the user-adoption side (Trabucchi et al., 2023). This diversity of theories shows that digital BMI is multi-level: it is shaped by firm resources, managerial capabilities, and customer behavior.

2.4 The digital paradox and the role of capabilities

One of the main motivations of the digital BMI literature is the digital paradox. Ancillai et al. (2023) explain that firms invest heavily in

technology and digital transformation but struggle to obtain optimal results. Ancillai and Pascucci (2023) propose that digital servitization can unlock the value of digital investment, and that absorptive capacity, as a form of dynamic capability, strengthens the relationship between Industry 4.0 adoption and servitization. Their single case study shows that the BMI process begins with the value proposition, then affects value creation and value capture, and changes product and service development, human resource competencies, and relationships with customers and suppliers.

The corpus reviewed uses a variety of capability terms. These include sensing and seizing capabilities in digital circular BMI (van Eechoud & Ganzaroli, 2023), big data analytics capability (Ciacci & Penco, 2023), internet capabilities in the form of platform and web capabilities (Zahoor et al., 2024), digital platform capabilities (Aashish et al., 2025), digital capabilities in the form of sensing, operational, and resource collaboration (Xiang et al., 2024), and AI capacities that are perceptive, predictive, and prescriptive (Sjödin et al., 2023). This variety complicates comparison, but the underlying idea is the same: technology becomes valuable when firms are able to organize resources to exploit it.

2.5 Digital Servitization, Ecosystems, and Sustainability

Digital servitization means a shift from selling products to providing services based on digital technology. Lamperti et al. (2024) explain that smart, connected products change how firms compete and trigger the provision of services, up to the redesign of the entire business model. Paiola et al. (2024) highlight that this path demands new knowledge, so firms partner with knowledge-intensive service providers, while Pizzichini et al. (2025) fill a gap by studying car dealers, who have received less attention than manufacturers and supply chains. An ecosystem perspective sees BMI as the result of interaction among actors. Han and Ali (2025) note that earlier research tends to be static and does not explain well how value co-creation drives the continuous evolution of business models. Huy and Phuc (2025) position the digital business ecosystem as a mediator and emphasize ecosystem governance. On the sustainability side, Capurro et al. (2024) view digitalization and sustainability as two overlapping megatrends, while Sjödin et al. (2023) and van

2.6 Leadership and Internal Organization Factors

Digital leadership is seen as a factor that links technology with organizational change. Malik et al. (2025) note that the digital transformation literature has not been integrated with the leadership literature. Ramadan et al. (2023) and Faiz et al. (2024) provide empirical evidence that leadership influences BMI through organizational agility and managerial decision-making. Beyond leaders, human capital and social capital influence digital transformation and BMI (Dat et al., 2025), and the functional diversity of the top management team moderates the effect of strategic agility on digital BMI (Zahoor et al., 2024). Cultural and strategic internal factors are also emphasized by van Tonder et al. (2023).

2.7 The SME Context and The External Environment

SMEs are the main focus because of their limited resources and managerial capacity (Mai et al., 2024; Lamperti et al., 2024). SMEs are highly heterogeneous, so Merín-Rodrigáñez et al. (2024) use innovativeness as a boundary condition. Outside the firm, the environment shapes outcomes: environmental hostility can strengthen the impact of analytics capability (Ciacci & Penco, 2023), crises trigger digital redesign (Mancuso et al., 2023), and disruption pushes organizations to assess their readiness for transformation (Tomičić-Pupek et al., 2023). Analysis of digital BMI therefore needs to consider internal capabilities and external conditions together.

3. Method, Data, and Analysis

This study conducts a thematic literature review of 35 English-language Scopus-indexed journal articles exported in October 2026, covering publication years 2023 (10 articles), 2024 (17 articles), and 2025 (8 articles). The methodology involved four steps: (1) screening titles, abstracts, keywords, and metadata; (2) coding design, context, theories, and main findings; (3) thematic grouping through constant comparison; and (4) synthesizing an integrated conceptual framework and research agenda.

Table 1. Categorizes the research designs in the corpus.

Research Design	Count	Representative Examples
Quantitative survey (SEM / Regression)	14	Merín-Rodrigáñez et al. (2024); Dat et al. (2025)
Case study, qualitative & action research	9	Sjödin et al. (2023); Santarsiero et al. (2024)
Review and conceptual articles	5	Ancillai et al. (2023); Fielt (2024); Malik et al. (2025)
Delphi, simulation & framework studies	4	van Tonder et al. (2023); Cavallo et al. (2024)
Mixed methods & field experiments	3	Huy & Phuc (2025); Trabucchi et al. (2023)

4. Result and Discussion

The analysis produced five themes. Nine quantitative studies use PLS-SEM or PLS-PM, and most samples come from SMEs.

4.1 Digital Transformation, BMI, and Performance

This theme is the most frequently tested empirically. In 434 innovative Spanish SMEs, BMI partially mediated the positive relationship between digital transformation and performance (Merín-Rodrigáñez et al., 2024). In 394 Vietnamese firms, digital transformation improved BMI and performance, with access to resources as a partial mediator (Dat et al., 2025). In 262 Chinese SMEs, dynamic capabilities influenced BMI and performance, BMI partially mediated that relationship, and digital transformation positively moderated it (Chung et al., 2024).

Similar patterns appear in other contexts. The effectiveness of digital accounting information systems improved sustainable BMI, with the digital business ecosystem as a partial mediator, in 723 SMEs (Huy & Phuc, 2025). Digital capabilities strengthened the impact of sharing-economy BMI on retailers' sustainable performance (Giang & Dung, 2025). Digital platform capabilities encouraged business model experimentation and competitive advantage in Indian craft-based firms (Aashish et al., 2025). In Vietnamese SMEs, government policy shaped IT infrastructure, which then supported dynamic capabilities and performance (Mai et al., 2024).

Another important finding is that the direct effect of technology is not always significant. Digital forensic accounting had no direct effect on accelerated internationalization of SMEs, but metaverse circular BMI mediated it (Huy & Phuc, 2024; Pham & Vu, 2024). In other words, BMI often acts as a "bridge" that turns technology into business outcomes.

Table 2. Summary of Quantitative Empirical Studies in the Corpus

Study	Context & Sample	Core Empirical Findings
Merín-Rodrigáñez et al. (2024)	434 innovative Spanish SMEs	BMI partially mediates digital transformation and firm performance.

Study	Context & Sample	Core Empirical Findings
Dat et al. (2025)	394 Vietnamese enterprises	Digital transformation drives BMI and performance; resource access mediates.
Chung et al. (2024)	262 Chinese SME managers	Dynamic capabilities drive BMI; digital transformation acts as a moderator.
Huy & Phuc (2025)	723 Vietnamese SMEs	Digital accounting systems improve sustainable BMI via digital ecosystem.
Giang & Dung (2025)	316 emerging market retailers	Sharing-economy BMI and digital capabilities enhance sustainable performance.
Aashish et al. (2025)	211 Indian craft-based firms	Platform capabilities spur business model experimentation and advantage.
Mai et al. (2024)	658 Vietnamese SMEs	Government policy shapes IT infrastructure, reinforcing dynamic capabilities.
Ciacci & Penco (2023)	200 Italian data-driven SMEs	Analytics capabilities drive BMI; environmental hostility strengthens impact.
Zahoor et al. (2024)	145 Pakistani new ventures	Internet capabilities affect digital BMI through strategic agility.
Xiang et al. (2024)	386 internet start-ups	Exploitative learning strongly impacts BMI via digital operational capability.
Faiz et al. (2024)	313 Pakistani founders	Digital leadership affects BMI via decision-making; grants act as a moderator.
Pham & Vu (2024)	783 accountants in SMEs	Metaverse circular BMI fully mediates digital accounting and internationalization.
Li & Sukpasjaroen (2024)	451 Chinese student enterprises	Digital opportunity discovery mediates digital capability and BMI
Ramadan et al. (2023)	270 employees of Lebanese SMEs	Digital transformation leadership improves agility, digital transformation, and BMI
Huy & Phuc (2024)	Employees of Vietnamese SMEs	Weak direct effect of digital forensic accounting; metaverse circular BMI mediates positively

Table 2. Summary of quantitative survey studies (n = 15 articles; mostly regression or SEM, with Huy & Phuc (2025) using mixed methods).

This comparison shows three things. First, the largest samples come from SME studies (783, 723, and 658 respondents or firms), while studies with small samples, such as 145 firms in Pakistan, tend to examine specialized populations. Second, almost all studies test mediation or moderation rather than only direct relationships, so the questions of "when" and "through what" are more prominent than "whether". Third, outcome variables vary, from performance, competitive advantage, and internationalization to sustainable performance, so effect sizes cannot be compared directly across studies.

Among these studies, Merín-Rodrigáñez et al. (2024) show that the link between digital transformation and BMI is statistically significant in innovative SMEs, and they complement this with effect-size assessment (Cohen's f^2). Dat et al. (2025) add that social capital and human capital both strongly affect BMI and digital transformation, so digitalization is not only about technology but also about networks and skills.

4.2 Dynamic and Digital Capabilities

Capabilities explain why firms with the same technology achieve different results. In 200 Italian SMEs, externally oriented digital transformation and big data analytics capability both improved BMI, but digital transformation alone did not automatically build analytics capability; environmental hostility strengthened the effect of analytics capability on BMI (Ciacci & Penco, 2023). In Pakistani international new ventures, internet capabilities influenced digital BMI through strategic agility, with top management team functional diversity as a moderator (Zahoor et al., 2024). Entrepreneurial learning also plays a role. Exploratory and exploitative learning both influenced BMI in 386 internet start-ups, with exploitative learning stronger and digital operational capability as the largest mediator (Xiang et al., 2024). In Chinese student enterprises, digital opportunity discovery mediated the relationship between digital capability and BMI (Li & Sukpasjaroen, 2024). Qualitative studies add that sensing and seizing capabilities, supply chain collaboration, lean methods, and project management are important for digital circular BMI (van Eechoud & Ganzaroli, 2023), while absorptive capacity helps manufacturing firms overcome the digital paradox (Ancillai & Pascucci, 2023). AI capacities that are perceptive, predictive, and prescriptive also drive value discovery, value realization, and value optimization capabilities (Sjödin et al., 2023).

If the capabilities in the corpus are grouped by function, three layers appear. The first layer is sensing and opportunity discovery, for example digital opportunity discovery (Li & Sukpasjaroen, 2024), digital sensing capability (Xiang et al., 2024), and sensing capability in circular BMI (van Eechoud & Ganzaroli, 2023). The second layer is operational and technical capability, such as big data analytics (Ciacci & Penco, 2023), platform and web capabilities (Zahoor et al., 2024), and digital operational capability (Xiang et al., 2024). The third layer is orchestration and transformation, covering strategic agility (Zahoor et al., 2024), digital resource collaboration (Xiang et al., 2024), and value optimization capability (Sjödin et al., 2023). Interestingly, in internet start-ups, digital operational capability was the strongest mediator while sensing capability was relatively weaker (Xiang et al., 2024). In Italian SMEs, Ciacci and Penco (2023) describe externally oriented digital transformation as a less disruptive antecedent of BMI than analytics capability. These two findings suggest that the ability to execute and process data matters more for BMI than merely sensing opportunities or adopting technology, although this evidence is limited to specific contexts and has not been tested directly in a single model. Sjödin et al. (2023) also distinguish two classes of AI-enabled circular business models: augmentation models (for example, optimization solutions) and automation models (for example, autonomous solutions), which shows that AI capacity gives rise to different forms of business models.

4.3 Leadership and Internal Organizational Factors

Leadership is a driver that is often overlooked. Digital transformation leadership increased organizational agility, which in turn supported

digital transformation and BMI, with a strong knowledge transfer system, among 270 employees of Lebanese SMEs (Ramadan et al., 2023). Digital leadership capabilities also drove BMI through managerial decision-making among 313 founders of new ventures in Pakistan, and grants strengthened this path (Faiz et al., 2024). Conceptually, leader characteristics (agility, participation, innovativeness, openness), democratic and transformational styles, and cognitive, social, technological, and digital skills are identified as enablers of BMI and organizational change (Malik et al., 2025). In comparison, leadership works through three paths in the corpus: organizational agility (Ramadan et al., 2023), managerial decision-making (Faiz et al., 2024), and cultural and organizational change (Malik et al., 2025). Ramadan et al. (2023) emphasize that a strong knowledge transfer system supports the agility path, while Faiz et al. (2024) show that grants, as an external resource, strengthen the managerial decision-making path.

In other words, digital leadership needs to be supported by resources and knowledge systems to affect BMI. Other organizational factors have been studied through varied approaches. A Delphi study across a developing and a developed economy (South Africa and the Netherlands) identified internal factors that influence the renewal of SMEs' business strategy and culture (van Tonder et al., 2023). Multiple case studies and action research in tourism show that innovation labs can democratize technology and innovation, particularly for SMEs (Santarsiero et al., 2024). Halar (2025) offers a digital business model canvas for the internal audit function and finds that its level of digital maturity varies. Social capital and human capital, as shown by Dat et al. (2025), complete the picture that human and network factors are as important as technology.

4.4 Digital Servitization, Ecosystem, and Sustainable Business Models

Many studies position digital servitization as a BMI pathway. A servitization model for manufacturing SMEs helps firms escape market disruption (Lamperti et al., 2024), while among car dealers, digital servitization drives sustainable BMI (Pizzichini et al., 2025). Relationships with knowledge-intensive service providers are influenced by firm size, digital readiness, internal commitment, and hiring programs (Paiola et al., 2024). The sustainability dimension is increasingly prominent. AI enables circular BMI for industrial manufacturers (Sjödin et al., 2023), and Capurro et al. (2024) propose a boundary-based approach to face the digital and sustainability megatrends. Ecosystems are also important: value co-creation in digital business ecosystems is proposed to drive business model restructuring through knowledge integration and collaboration (Han & Ali, 2025). At the design level, digital business models are characterized by a modular value architecture and high customization (Laudien et al., 2024), while in digital start-ups, growth hacking can be evaluated through simulation modeling before resources are committed (Cavallo et al., 2024).

Qualitative studies give a picture of the process. In digital servitization, BMI starts from the value proposition and then affects value creation and value capture (Ancillai & Pascucci, 2023). In the energy sector, eight Italian energy service companies show an archetypal BMI process enabled by digital technology (Franzo et al., 2024). In food retail, digital BMI unfolded in three phases during the pandemic (Mancuso et al., 2023). Laudien et al. (2024) add that digital business models are established together with stringent evaluation so that adaptation to market change is continuous. The emerging pattern is that digital BMI is iterative and gradual rather than a one-off change, in line with Han and Ali's (2025) note that a static view is inadequate.

4.5 The External Environment, Policy and The User Side

External factors determine how far technology becomes innovation. Government policy shapes the IT infrastructure that supports SMEs (Mai et al., 2024), while environmental hostility strengthens the effect of analytics capability on BMI (Ciacci & Penco, 2023). Crises are also triggers: external disruption forces organizations to assess their readiness and willingness to transform (Tomičić-Pupek et al., 2023; Mancuso et al., 2023). Fielt (2024) summarizes this as the role of digital technology as an external enabler of BMI. On the user side, transparency of a data-driven business model

does not directly affect willingness to adopt a service, but a switch from a transparent to an opaque model reduces that willingness (Trabucchi et al., 2023). The implication is that digital BMI should be assessed not only by firm capabilities but also by user trust.

Several studies offer tools for dealing with external factors. Tomičić-Pupek et al. (2023) design a conceptual framework to assess readiness and willingness to change, then help management choose the most feasible change option, and test the framework in a case study. Fielt (2024) builds an external-enabler framework that explains the types, characteristics, mechanisms, and roles of digital technology in BMI. Han and Ali (2025) propose market competition as a moderator of the relationship between value co-creation and BMI. For SMEs, this means that a BMI strategy should be tailored to the external context rather than copied from other firms' practices.

4.6 Integrated Conceptual Framework

From the five themes above, this article proposes the following framework:

1. **Triggers:** digital technology, crises or disruption, and policy.
2. **Capabilities:** dynamic, digital, analytics, and absorptive capabilities, supported by learning and agility.
3. **Leadership and organization:** digital leadership, managerial decisions, culture, and innovation labs that activate capabilities.
4. **BMI pathways:** digital servitization, ecosystems and platforms, circular or sustainable models, and business model experimentation.
5. **Outcomes:** performance, competitive advantage, internationalization, and sustainable performance.
6. **Boundary conditions:** firm size, competition, environmental hostility, grants, and user trust.

The main flow is that triggers activate capabilities and leadership, which open BMI pathways, and BMI produces performance. Boundary conditions determine the strength of each relationship. The framework is conceptual and needs empirical testing.

Each relationship in the framework has a basis in the corpus. The link from triggers to capabilities and BMI is supported by the view that digital technology, crises, and disruption act as external triggers (Fielt, 2024; Mancuso et al., 2023; Tomičić-Pupek et al., 2023). The link from capabilities to BMI has been tested in Chinese SMEs, internet start-ups, student enterprises, and international new ventures (Chung et al., 2024; Xiang et al., 2024; Li & Sukpasjaroen, 2024; Zahoor et al., 2024). The link from leadership to BMI has been tested through organizational agility and managerial decision-making (Ramadan et al., 2023; Faiz et al., 2024). The link from BMI to outcomes is supported by studies of performance, sustainable performance, and internationalization (Merín-Rodrigáñez et al., 2024; Giang & Dung, 2025; Pham & Vu, 2024). The boundary conditions come from environmental hostility, grants, market competition, and transparency (Ciacci & Penco, 2023; Faiz et al., 2024; Han & Ali, 2025; Trabucchi et al., 2023). The causal order in the framework is theoretical because much of the data comes from cross-sectional surveys.

4.7 Discussion

Consistent findings: BMI as the translator of technology. Studies from different contexts (Spain, Vietnam, China, India) show the same pattern: digital transformation and digital capabilities improve BMI, and BMI channels part of their effect to performance (Merín-Rodrigáñez et al., 2024; Dat et al., 2025; Chung et al., 2024; Aashish et al., 2025). The mediation, which is generally partial, means that other paths exist, for example access to resources (Dat et al., 2025) and the digital ecosystem (Huy & Phuc, 2025). This cross-country consistency strengthens the argument that digital value comes from changes in how firms create and capture value, in line with the framework of Ancillai et al. (2023).

Inconsistencies and explanations. Several results seem contradictory. Digital forensic accounting has no direct effect on accelerated internationalization, but it has an effect through metaverse circular BMI (Huy & Phuc, 2024; Pham & Vu, 2024). Externally oriented digital transformation does not automatically build data analytics capability (Ciacci & Penco, 2023). Business model transparency does not directly

affect adoption, but its loss reduces adoption (Trabucchi et al., 2023). One consistent explanation is that the effect of technology is conditional, depending on capabilities, business model change, and user expectations. This explains why the digital paradox arises: investment without supporting capabilities does not generate value (Ancillai & Pascucci, 2023).

Capabilities: not only exploration. Exploitative learning turned out to influence BMI more strongly than exploratory learning in internet start-ups (Xiang et al., 2024), and digital operational capability was the largest mediator. This finding challenges the assumption that BMI always arises from radical exploration; digitally enabled operational improvement can also be an entry point. Because the sample consists of start-ups, generalization to established firms needs to be tested.

Leadership as a driver that is not yet well integrated. The evidence on leadership comes from surveys in Lebanon and Pakistan (Ramadan et al., 2023; Faiz et al., 2024) and from a conceptual review (Malik et al., 2025). All three agree that leaders influence BMI through agility or managerial decisions, but the sample contexts are narrow and the mechanisms differ. This shows the need for digital leadership models tested across many contexts.

Internal versus external perspectives. Most empirical studies focus on internal capabilities, while external triggers such as policy, crises, and environmental hostility have been tested in only a small number of studies (Mai et al., 2024; Ciacci & Penco, 2023; Mancuso et al., 2023). Fielt (2024) regards this imbalance as a major gap. Accordingly, the framework in 4.6 treats triggers and boundary conditions as separate components rather than as control variables.

Sustainability: a strengthening direction with thin evidence. The concepts of circular and sustainable BMI are widely discussed, but most of the evidence is in the form of case studies and qualitative studies (Sjödin et al., 2023; van Eechoud & Ganzaroli, 2023; Pizzichini et al., 2025). The available quantitative evidence, such as on sustainable BMI and retailers' sustainable performance, remains limited to specific contexts (Huy & Phuc, 2025; Giang & Dung, 2025). This means the claim that digitalization automatically supports sustainability has not been sufficiently tested.

A note of caution. Many results come from single-time-point surveys with perceptual data, and samples are concentrated in SMEs in a few countries. The reported effects should be read as consistent associations, not as causal evidence.

4.8 Comparison With Earlier Reviews

Ancillai et al. (2023) identified four thematic areas in the relationship between digital technology and BMI and built an interpretive framework and research agenda. This review does not re-map those four areas, but builds five themes from 35 publications in 2023–2025 with emphasis on three things: the role of leadership and organizational factors, the role of the external environment and policy, and the dimensions of servitization, ecosystems, and sustainability. This emphasis is in line with the gaps noted in the reviewed studies: integration of the leadership literature (Malik et al., 2025), an outside-in perspective (Fielt, 2024), and the influence of the external environment (Ciacci & Penco, 2023). The article can therefore be read as a complement to earlier systematic reviews, not a replacement.

5. Conclusion and Suggestion

Recent evidence shows that digital business value emerges when technology is translated into business model innovation, not when technology is merely installed. Dynamic and digital capabilities, leadership, and organizational readiness determine how effective that translation is, while policy, competition, and environmental conditions determine the strength of the relationships. Pathways such as digital servitization, digital ecosystems, and circular business models point to a new direction for BMI that unites digitalization and sustainability. Future research needs to strengthen causal evidence, broaden contexts, and test the integrated framework proposed in this article.

The article makes three contributions. First, it maps 35 recent publications into five themes and summarizes their designs and samples. Second, it builds an integrated conceptual framework that links triggers, capabilities, leadership, BMI pathways, outcomes, and boundary conditions. Third, it formulates six testable propositions. For practitioners, the main message is simple:

successful digitalization is digitalization that changes how the business creates value, and that demands capabilities and leadership, not only technological equipment.

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