

Factors that contribute to digital innovation readiness: a state-of-the-art comprehensive scoping review with expert consultation

Journal of
Advances in
Management
Research

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Received 11 November 2024
Revised 26 September 2025
Accepted 15 November 2025

Abstract

Purpose – Although the significance of digital innovation readiness for organizations has been widely acknowledged, the factors that contribute to it remain underexposed and fragmented. Therefore, this scoping review aims to comprehensively map and synthesize the existing literature on factors contributing to digital innovation readiness.

Design/methodology/approach – This review uses Arksey and O'Malley's (2005) methodological framework to identify factors that contribute to digital innovation readiness. Five electronic databases were systematically searched, and to validate findings from that literature search and add insights that do not appear in the literature, six semi-structured interviews were conducted among senior digital innovation experts. Thematic analysis with a deductive and inductive approach was used to analyze interview transcripts.

Findings – Five factors and 13 sub-factors were identified from these studies. The interviews validated the 13 sub-factors and suggested one more – resource allocation. Thus, five main factors and 14 sub-factors were identified to contribute to digital innovation readiness.

Originality/value – Findings from this study offer clarity on factors that contribute to digital innovation readiness.

Keywords Digital innovation readiness, Digital innovation, Organizational readiness, Scoping review, Expert consultation

Paper type Literature review

Introduction

Contemporary organizations operate in a volatile, uncertain, complex and ambiguous (VUCA) context (Lin, 2024; Agarwal, 2021), in which digital technologies accelerate the speed of change (Ghezzi and Cavallo, 2020). Digital technology can be defined as “digital objects that



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Journal of Advances in Management
Research
Vol. 23 No. 4, 2026
pp. 691-716
Emerald Publishing Limited
e-ISSN: 2049-3207
p-ISSN: 0972-7981
DOI 10.1108/JAMR-11-2024-0423

have been assigned a socially agreed-upon meaning” (Hund *et al.*, 2021, p. 5), emphasizing their socio-technical character beyond mere technical affordances. This includes emerging digital technologies, such as artificial intelligence (AI), virtual reality (VR), augmented reality (AR) and mixed reality (MR) (Sharma *et al.*, 2023), as well as more established ones. When using digital technologies to develop new products, business processes or business models, the term digital innovation is commonly used (Nambisan *et al.*, 2017; Henfridsson *et al.*, 2014; Yoo *et al.*, 2010). To remain relevant and competitive in dynamic and digitally challenging contexts, organizations must innovate digitally (TNO, 2023), but success with digital innovation depends on multiple, deliberate factors that must be organized (Nasiri *et al.*, 2023; Mittermeier *et al.*, 2021). Since they lack organizational readiness, only 3% of organizations are capable of delivering their innovation aspirations (Boston Consulting Group, 2024). Vo *et al.* (2024) and Peiró-Signes *et al.* (2024) argue that despite digital technologies’ availability, scalability and ease of use, organizations continue to struggle with digital innovation and increasing readiness to innovate digitally is required to stay relevant and competitive in the digital age (Vo *et al.*, 2024; Weiner *et al.*, 2020; Kohli and Melville, 2019; Kane *et al.*, 2019). Digital innovation readiness is “an organization’s assessment of its state of being prepared for effective production or adoption, assimilation and exploitation of digital technologies for innovation” (Lokuge *et al.*, 2019, p. 446).

Constructing an organization ready to innovate with digital technologies is challenging (Holmsström, 2018). Due to the modular, layered architecture of digital technologies, organizations must collaborate in an open heterogeneous ecosystem with many temporary partners, such as customers, suppliers, specialized IT suppliers and academics (Füller *et al.*, 2022; Nambisan *et al.*, 2019; Lyytinen *et al.*, 2016), with which organizations experience difficulties (Kane *et al.*, 2019). Digital innovation evolves non-linearly and is in a perpetual state of incompleteness (Allataifeh and Moghavvemi, 2021; Berente, 2020). Consequently, it is unclear when an innovation stage begins and ends (Nambisan *et al.*, 2017) and thus getting ready for digital innovation requires new organizational necessities in comparison to traditional, general innovation (Allataifeh and Moghavvemi, 2021; Berente, 2020).

Organizations benefit from state-of-the-art knowledge concerning how to become ready to succeed with digital innovation. This study therefore assesses extant knowledge to identify factors that contribute to digital innovation readiness. Such literature already acknowledges the importance of digital innovation readiness (Vo *et al.*, 2024; Peiró-Signes *et al.*, 2024), but factors that contribute to it remain underexposed and fragmented (Masyhuri *et al.*, 2024; Lin, 2024; Cheng and Wang, 2022; Khin and Ho, 2019). Recent bibliometric research confirms that the field of digital innovation in business and management remains relatively underexplored and fragmented (Uršič and Čater, 2025). The current study answers Dąbrowska *et al.* (2022) call for more research on the foundations needed to innovate in the digital age. Much work is still needed to develop knowledge about factors that contribute to organizations’ digital innovation readiness, though no study uses a systematic review of the literature to provide a holistic view of such factors. We therefore conduct a state-of-the-art scoping review to do just that.

Methods

This scoping review follows Arksey and O’Malley (2005) methodological framework and using Levac *et al.*’s (2010) recommendations, we added expert consultation to confirm findings from the literature review and obtain/categorize additional insights that do not yet appear in the extant literature. Although extant literature consistently discusses the importance of integrating expert consultation during scoping reviews (Westphal *et al.*, 2021), studies that do so are rare (Pham *et al.*, 2014; Levac *et al.*, 2010). To ensure clarity, transparency and quality of reporting, PRISMA-ScR checklist was used as a protocol during reporting (McGowan *et al.*, 2020).

Stage 1. Identify a research question

According with the purpose of a scoping review, this review identifies, maps and categorizes factors that contribute to organizations' digital innovation readiness (Arksey and O'Malley, 2005; Levac *et al.*, 2010). This study does not focus on any specific sector, organization type or digital technology, but considers such readiness from a broad, general perspective.

Stage 2. Identify relevant studies

The research team discussed and developed a search strategy multiple times, which an experienced research librarian from Maastricht University later reviewed. The first literature search was conducted on 21 May 2023 using five electronic databases – Web of Science (WoS), Scopus, EBSCO Business Source Complete, Emerald Insight, and the Association for Information Systems eLibrary (AISEL). WoS and Scopus are large, heterogenous databases, and they thus represent the most extensive academic databases. EBSCO Business Source Complete and Emerald Insight were selected because they include studies about (digital) innovation that were published in management and innovation science journals. AISEL was included because it covers academic literature on information systems. During a preliminary search conducted during January 2023, digital innovation readiness was explored using Google Scholar and WoS to identify related concepts and terms. The topic appeared in diverse journals, and related terms were identified. The search strategy for all databases was based on the term *organizational readiness for digital innovation*. Relevant keywords and synonyms were identified for each word in the term, and the authors used AND and OR Boolean operators in search strings and the truncation function to include letter combinations. Using advice from the librarian, we adapted the search strategy to each database. We did not use the term *digital innovation* because it would exclude articles about innovation readiness in a digital context (i.e. *digital innovation* that did not mention the term explicitly). Reference lists of included articles were searched to identify additional studies for inclusion (i.e. snowball technique). The main search string appears in additional File 1. To ensure that the scoping review captured the most current state of the literature, a second search was conducted on 2 August 2024. This additional search aimed to identify studies published after the initial search (21 May 2023).

Stage 3. Eligibility criteria and selection

To determine which studies to include in the review, the authors screened identified studies against the inclusion and exclusion criteria. Articles and conference papers were included if they discussed knowledge about digital innovation readiness, were available in full-text, were published in English and were peer-reviewed. Repetitive articles, such as literature reviews, were excluded. Conceptual, theoretical, opinion and scale-development studies were also excluded.

Using Endnote, results from the databases were merged and duplicates removed. Author TB screened all articles by title and abstract for eligibility. Authors RW and JS both screened, at random, 50 articles by title and abstract. The research team discussed the results of this assessment, resolving disparities through consensus. TB screened all of the full-text articles, and RW screened 10% randomly. Both authors divided the articles into one of three categories – included, questionable to include and exclude – with disparities again resolved through consensus. Author TB screened the reference lists of all included articles to identify relevant studies. All members of the research team (TB, RW and JS) discussed the included studies. This study-selection method was also used during the second search. Figure 1 shows the selection process according to the PRISMA-ScR 2020 flowchart.

Stage 4. Charting data

The entire research team developed a structured data-charting table that consisted of authors, publication year, study purpose, study design, research context, sector/industry and factors related to digital innovation readiness.

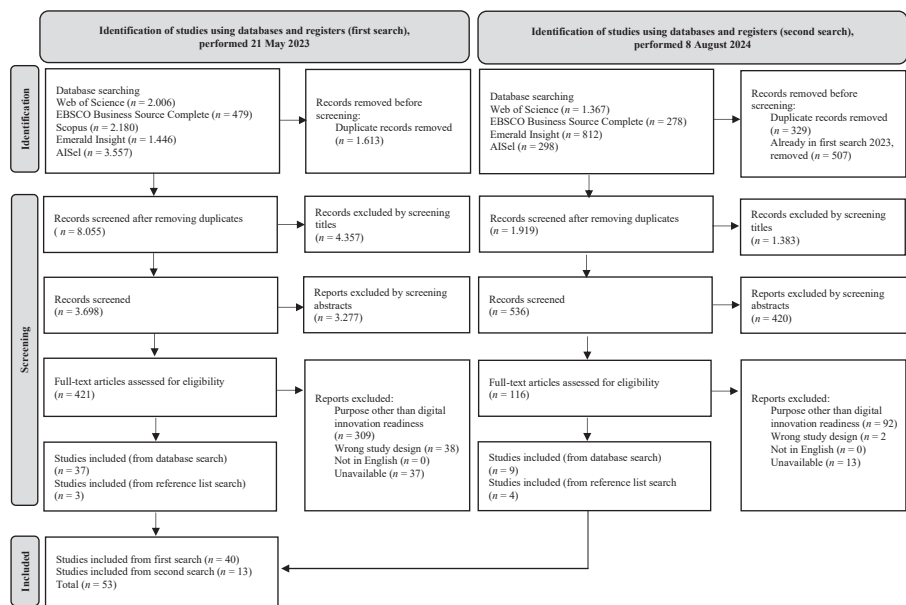


Figure 1. PRISMA-ScR 2020 flowchart

Stage 5. Summarizing and reporting results

The research question was addressed by extracting factors that influence digital innovation readiness from the included studies. The entire research team clustered these factors into sub-factors, and using an iterative process, the team resolved discrepancies through consensus. After agreeing on the sub-factors, the team grouped them into five main factors that contribute to digital innovation readiness.

Stage 6. Consultation with experts

We conducted six in-depth, semi-structured interviews among digital innovation experts, consisting of four steps – selection of participants, data collection, analysis and reporting results. Data collection for the review and expert interviews were conducted independently.

Step 1. Participant selection

We defined three inclusion criteria to ensure that participants were digital innovation experts. The participants must have had at least 10 years of experience with digital innovation, were currently working in a relevant position in digital innovation and worked in the Netherlands. Participants who met these criteria were contacted through LinkedIn, informed about the study and asked to participate, with six included in the study. Table 1 reports an overview of the participants. On average, they had 27.6 years of experience with digital innovation. Since we were developing a general framework, the companies at which the participants worked represented six industries and two sectors.

Step 2. Data collection

Data were collected using six individual, face-to-face, semi-structured interviews over Microsoft Teams. Before the start of each interview, participants were asked for their informed consent using Lime-Survey. All interviews were recorded with the permission of the participants. The average duration was 51 min, and all were conducted by TB. Participants

Table 1. Overview of included digital innovation experts

Expert	Industry	Sector	Function	Digital innovation experience (years)	Interview duration (minutes)
1	Recreation	Private	Senior Product Owner	20	66
2	Cultural	Public	CEO	31	50
3	Healthcare	Public	CIO and Director ICT	25	55
4	Mobility, Travel, and Tourism	Private	Business Innovation Consultant	10	47
5	Technical Services	Private	Director Innovation, Business Development, and Sales	22	45
6	Health, Nutrition, and Bioscience	Private	Program Director	30	43

reflected on a definition of digital innovation readiness, and they were asked to discuss factors that contribute to it, which subsequently guided the interviews.

Step 3. Data analysis

Transcriptions of the interviews were uploaded to Atlas.Ti for qualitative analysis, and we used [Verhoeven's \(2020\)](#) thematic analysis method to code the data. We used a deductive approach to validate results from the literature search, and we used inductive coding to discover new factors that were not found in the literature. Codes were designed by addressing the research question and/or patterns in the transcripts that were appropriate to results from the literature review. To ensure internal validity, two authors (TB, RW) coded the first two transcripts independently and discussed results until consensus was reached. TB coded the remainder of the transcripts, and the entire research team (TB, RW, JS) discussed results of the coding.

Step 4. Reporting results

Participants' quotes were used to validate the sub-factors from the literature review. We constructed a table that links the quotes to the sub-factors, and we describe additional sub-factors that respondents mentioned.

Results

Study characteristics

The literature search resulted in 9,974 unique articles, and after screening them using the inclusion criteria, 53 remained ([Table 2](#)). The 53 studies were published between 2015 and 2024, and some studies were conducted in one country or industry and others in multiple. Qualitative designs were used in 26 studies, and 24 used quantitative designs. Mixed methods were used in three studies. The studies used a variety of research methods, such as offline and online questionnaires, semi-structured and other types of interviews, single and multiple case studies, expert workshops, Delphi technique, observations of participants and meetings, secondary datasets, Q-sort methodology, fuzzy-set qualitative comparative analysis (fsQCA) and statistical analyses.

Factors that contribute to digital innovation readiness

TB and RW identified 13 sub-factors from the studies. Using a highly iterative process, TB, RW and JS clustered these sub-factors into five main factors – strategic guidance, orchestrating, climate, leadership and IT support for digital innovation.

Table 2. Overview of included studies

Reference	Country	Design	Purpose of data collection	Industry	Factors studied	Sub-factor
Ahmed <i>et al.</i> (2024)	France	Quantitative	Examine the impact of digital leadership perceptions on employees' innovative work behaviors	Automotive	Digital leadership	Leadership style
Allataifeh <i>et al.</i> (2021)	Malaysia	Qualitative	Explain how digital innovation unfolds in practice	ICT	Digital innovation process	Digital innovation process
Allataifeh and Moghavvemi (2021)	Malaysia	Qualitative	Demonstrate the importance of engaging market actors at each stage of innovation	ICT	Role of actors during digital innovation process	Digital innovation process
Bäcklund <i>et al.</i> (2024)	Sweden	Qualitative	Increase understanding of innovation and dynamic capabilities in real estate owner organizations	Real estate	Digital innovation process	Digital innovation process
Bockelmann <i>et al.</i> (2024)	The USA	Quantitative	Examine the impact of alliance portfolio configurations on firms' ability to create digital innovations	Industrial	Alliance portfolio configurations	Digital innovation networks
Cheng and Wang (2022)	China	Qualitative	Explore configurations of digital innovation attributes and IT infrastructure capability	Manufacturing and services	Configurations of digital innovation attributes and IT infrastructure capability	Digital innovation strategy
Coskun-Setirek and Tanrikulu (2021)	Multiple	Qualitative	Develop a process model of digital-innovation-driven business model regeneration	Multiple	Process model of digital-innovations-driven business model regeneration	Digital innovation strategy
Curzi <i>et al.</i> (2019)	Italy	Quantitative	Identify which characteristics of performance appraisal are likely to be perceived as promoting individual innovation at work	Multiple	Innovative work behaviors	Digital innovative workforce
Del Giudice <i>et al.</i> (2021)	Italy	Quantitative	Investigate how digital innovation is influenced by the three pillars of self-tuning models' agility, adaptation, and ambidexterity	Smart manufacturing	Self-tuning model	Organizational structure

(continued)

Table 2. Continued

Reference	Country	Design	Purpose of data collection	Industry	Factors studied	Sub-factor
Denicolai and Previtali (2023)	Italy	Qualitative	Explore how the design of an innovation strategy affects the execution of change and digital innovation	Healthcare	Design of innovation strategy	Digital innovation strategy
Duerr et al. (2018)	Germany	Qualitative	Explore the artifacts, exposed beliefs and values, and underlying assumptions of a digital organizational culture	Multiple	Digital organizational culture	Digital innovation culture
Erhan et al. (2022)	Turkey	Quantitative	Demonstrate the relationship between digitization of leadership and innovative work behaviors	Textile	Innovative work behaviors	Digital innovative workforce
Firk et al. (2022)	The USA	Quantitative	Explore the influence of TMT characteristics (i.e., needed knowledge, roles, and structures) of digital innovation	Industrial	Top management team characteristics	Management characteristics
Gonçalves et al. (2020)	Sweden, The USA	Qualitative	Understand how cultural aspects of organizational agility affect digital innovation capability	Automotive	Cultural aspects of organizational agility	Digital innovation culture
Gonçalves et al. (2022)	Sweden, The USA	Qualitative	Clarify how startups use digital tools to strengthen digital innovation capability	Automotive and mobility	Digital tools	IT infrastructure
Hanelt et al. (2021)	Multiple	Quantitative	Theorize about the link between digital mergers and acquisitions (M&A) and its consequences on digital innovation	Automotive	Digital M&A	Digital innovation strategy
Heubeck and Meckl (2022)	Germany	Quantitative	Examine the relationship between dynamic managerial capabilities and digital firms' innovativeness	Manufacturing	Dynamic managerial capabilities	Management characteristics
Holmström et al. (2021)	Sweden	Qualitative	Identify how academic units work as intermediaries in networks for digital innovation	Unknown	Heterogeneous networks	Digital innovation networks
Holotiuk and Beimborn (2019)		Qualitative	Analyze digital innovation labs' contributions to ambidexterity for digital innovation	Multiple	Digital innovation labs	Organizational structure
(continued)						

Table 2. Continued

Reference	Country	Design	Purpose of data collection	Industry	Factors studied	Sub-factor
Holotiuk (2020)	Unknown	Qualitative	Explain how a digital innovation lab helps firms balance exploration and exploitation, and how ambidexterity contributes to digital innovation success	Financial service	Digital innovation lab	Organizational structure
Iden et al. (2020)	Multiple	Quantitative	Investigate whether PRFs act as institutional arrangements for digital service innovation	Unknown	Institutional arrangements	Digital innovation culture
Khin and Ho (2019)	Malaysia	Quantitative	Examine the effect of digital orientation and capability on digital innovation	IT	Digital orientation	Digital orientation
Kő et al. (2022)	Hungarian	Quantitative	Discuss the role of digital agility and digital competitiveness in SMEs' innovative performance in the context of a digitally turbulent environment	Multiple	Digital agility	Digital innovation culture
Lee and Tan (2023)	Singapore	Qualitative	Scrutinize individual learning strategies and the enablers and challenges of using them during digital innovation	Multiple	Workplace learning strategies	Environment for learning
Leonhardt et al. (2017)	The UK, The USA	Quantitative	Examine the role of IT agility and ambidexterity on the IT function's digitization support	Multiple	IT function	IT function's role
Leonhardt and Hanelt (2018)	The USA	Quantitative	Investigate the relationship between digital institutional pressure on the power of IT departments and resulting impacts on digital innovation performance	Multiple	IT department	IT function's role
Leonhardt et al. (2018)	The USA	Quantitative	Explore digital innovation governance configurations that achieve high digital innovation performance	Multiple	Digital innovation governance	IT governance
Li and Long (2023)	China	Qualitative	Investigate the collective driving forces of employee-driven digital innovation behaviors	Multiple	Employee-driven digital innovation behaviors	Digital innovative workforce

(continued)

Table 2. Continued

Reference	Country	Design	Purpose of data collection	Industry	Factors studied	Sub-factor
Lin and Yi (2024)	China	Qualitative	Investigate factors of digitalization that empower firm innovation	High-tech	Factors that empower firm innovation (i.e., technology, organization, and environmental)	IT infrastructure
Liu et al. (2023)	China	Qualitative	Investigate whether combinations of organizational environments and work characteristics foster employees' innovative behaviors	Industrial	Innovative work behaviors	Digital innovative workforce
Mancha and Shankaranarayanan (2021)	The USA	Quantitative	Explore antecedents of individual digital innovativeness	Education	Digital innovativeness	Digital innovative workforce
Mann et al. (2019)	The USA	Qualitative	Provide insights into lessons learned from a digital design lab that supports digital health innovation	Healthcare	Digital design lab	Organizational structure
Mittermeier et al. (2021)	Unknown	Qualitative	Construct a conceptual model of digital innovation success	Multiple	Critical success factors during digital innovation process	Digital innovation process
Müller et al. (2019)	Denmark	Mixed methods	Investigate the relationship between organizational culture and digital innovation	Media	Organizational culture	Digital innovation culture
Nassani et al. (2023)	Unknown	Quantitative	Explore the impact of technology orientation on digital innovation and innovation performance	Electronic	Technology orientation	Digital orientation
Nassani et al. (2022)	Unknown	Quantitative	Explore how firms achieve innovation performance using innovation networks	Energy	Innovation networks	Digital innovation networks
Ngereja and Hussein (2021)	Multiple	Qualitative	Examine organizations' preconditions of learning when achieving innovation in digitalization projects	Multiple	Employee learning	Environment for learning
<i>(continued)</i>						

Table 2. Continued

Reference	Country	Design	Purpose of data collection	Industry	Factors studied	Sub-factor
Pittenger et al. (2022)	Unknown	Quantitative	Examine the influence of IT transformational leadership on digital innovation	Unknown	Transformational leadership	Leadership style
Rincon et al. (2020)	Unknown	Mixed methods	Examine how IT governance shapes an organization's capacity to continuously innovate digitally	Oil and gas	IT governance	IT governance
Santarsiero et al. (2022)	Italy	Qualitative	Discuss the role innovation labs play as innovative management models to foster digital and continuous innovation in organizations of the digital ecosystem	Tourism	Innovation lab	Organizational structure
Schiffer et al. (2023)	Germany	Qualitative	Explore how to manage IT challenges to scale digital innovations	Insurer	Digital innovation process	Digital innovation process
Sedera et al. (2016)	Multiple	Quantitative	Understand how digital and enterprise system platforms attain innovation	Multiple	Enterprise system platform and digital platform	Digital infrastructure
Shao et al. (2024)	China	Quantitative	Examine leadership's impact on employees' job performance	Multiple	Transformational supervisory leadership	Leadership style
Shibeika and Harty (2015)	The UK	Qualitative	Understand how organizations mobilize resources and build capabilities to diffuse digital innovation	Engineering	Firm-project interface	Environment for learning
Sia et al. (2016)	Asia	Qualitative	Explore how a large bank responded to digital threats and opportunities using a digital business strategy	Banking	Digital business strategy	Digital innovation strategy
Silvestri et al. (2023)	Europe	Qualitative	Analyze how business networking during R&D affects the digital innovation of agro-food SMEs	Agro-food	Business networking	Digital innovation networks
Svahn et al. (2017)	Sweden	Qualitative	Explain how competing concerns emerge, manifest, and interrelate, and how firms manage them during digital innovation	Automotive	Strategic focus	Digital innovation strategy

(continued)

Table 2. Continued

Reference	Country	Design	Purpose of data collection	Industry	Factors studied	Sub-factor
Trabucchi and Buganza (2019)	The USA	Qualitative	Explore the role Big Data plays during innovation	App	Data-driven innovation process	Digital innovation process
van Looy (2021)	Four continents	Mixed methods	Explore how business process management plays an enabling role during digital innovation	Multiple	Digital business strategy	Digital innovation strategy
Wang et al. (2024)	China	Quantitative	Conceptualize ITI generativity and examine the social and technical antecedents of and their impact on digital innovation	Multiple	Information technology infrastructure	IT infrastructure
Wang and Shao (2024)	China	Quantitative	Explore the relationship between transformational leadership and employees' digital creativity	Unknown	Transformational leadership	Leadership style
Yousaf et al. (2021)	Pakistan	Quantitative	Explore the direct impact of digital orientation, Internet of Things, and digital platforms on sustainable digital innovation	IT	Digital orientation, digital platforms; Internet of Things	Digital orientation
Zhen et al. (2021)	Pakistan	Quantitative	Identify connections among organizational digital culture, digital capabilities, and digital innovation	ICT	Organizational digital culture	Digital innovation culture

Factor 1. Strategic guidance for digital innovation. Strategic guidance for digital innovation refers to a board that develops clear visions, goals, plans and activities regarding how the organization is preparing to become ready for digital innovation. It guides the organization in the right direction based on strategic considerations regarding changes to customer needs, market and digital technology developments and regulations. It is also about what an organization can do in terms of capabilities and resources. This factor comprises two sub-factors – digital orientation and digital innovation strategy.

Digital orientation. Digital orientation concerns commitment to using digital technologies during innovation. It provides an organization with strategic options when selecting and implementing digital technologies. Three studies mentioned digital orientation (Khin and Ho, 2019; Yousaf *et al.*, 2021; Nassani *et al.*, 2023). Yousaf *et al.* (2021, p. 3) define it as “the premeditated strategic placement of an enterprise to get the benefits of the bright opportunities smoked by the digital technologies.”. Their results suggest that organizations improve digital innovativeness when they are digitally oriented through use and application of digital platforms. Nassani *et al.* (2023) argue that relevant information about the newest technologies is necessary to innovate digitally, finding that technology orientation is essential to initiating digital innovation. Khin and Ho (2019, p. 181) define digital orientation as “a firm’s commitment toward application of digital technology to deliver innovative products, services, and solutions”. Digital orientation thus is not only about searching for opportunities to use digital technology for innovation, but commitment to the use of digital technologies when developing new solutions. Organizations must foster a digital mindset that expresses commitment to and acceptance of digital technologies, thus cultivating a digital orientation. Organizations that have digital orientations are more open to innovating digitally.

Digital innovation strategy. Digital innovation strategy represents an organization’s plan (i.e. actions and priorities) to solve existing and future challenges by supporting innovation with digital technologies. It aligns with an organization’s overall direction and is based on strategic assumptions that are evaluated continuously. Six studies assessed digital innovation strategy (Sia *et al.*, 2016; Svahn *et al.*, 2017; Hanelt *et al.*, 2021; van Looy, 2021; Cheng and Wang, 2022; Coskun-Setirek and Tanrikulu, 2021). Sia *et al.* (2016) study how to pursue a digital business strategy (DBS), which requires strong leadership, a scalable digital core, strategically leveraging increasing digital information, and continuous navigation of dynamic and emerging digital landscapes. Regarding strategy-making, Svahn *et al.* (2017) demonstrates that strategizing in the digital age requires more flexible, iterative processes, in which assumptions and the underlying overall direction are reconsidered continuously. For example, the executive team at Volvo Cars developed a clear, bold vision of the firm’s digital innovation, despite it not knowing the exact details (Svahn *et al.*, 2017). Van Looy (2021) demonstrates that three factors influence strategic decision-making – the external business environment (e.g. privacy concerns), technology (e.g. fast-changing technologies) and organizations (e.g. resources) – making strategic decision-making largely organization-dependent. For example, if a small organization has few resources (e.g. financing), it invests only in proven technologies or those that customers already accept. Denicolai and Previtali (2023) assess how the design of an innovation strategy affects the execution of digital innovation, finding that the clearer the definition of an innovation strategy (i.e. setting priorities when leading change), the more consistent and diversified the way organizations execute digital innovation projects. A clear innovation strategy supports a greater variety of digital solutions and more fluid implementation, consistent with organizational needs and environmental factors. Managers without a clear sense of what innovation can do understand digitalization as a desperate solution. Cheng and Wang (2022) argue that multiple ways exist to strategize digital innovation, including IT-enabled organization-product orchestration, IT-enabled product-organization orchestration and IT-dominated orchestration. When strategizing digital innovation, organizations must simultaneously consider digital innovation attributes and digital infrastructure capability because they represent the core of

all important configurations. To implement digital innovation strategies better, organizations should align products (i.e. user experience and value propositions) and the organization's degree of innovation (i.e. skills and improvisation). [Coskun-Setirek and Tanrikulu \(2021\)](#) propose a stage method for digital innovation-driven business model regeneration that helps organizations determine necessary digital innovation strategies. [Hanelt et al. \(2021\)](#) demonstrate that mergers and acquisitions (M&A) represent viable strategies (i.e. strategic considerations) to acquire necessary digital knowledgebases that drive digital innovation.

Factor 2. Orchestrating digital innovation. Orchestrating for digital innovation refers to organizing and aligning processes and structures required to become ready for digital innovation, comprising the sub-factors of the digital innovation process, networks and organizational forms.

Digital innovation process. Digital innovation process represents translating an idea into new sustainable goods, services or business models that create value while using digital technology. Six studies discuss such processes ([Trabucchi and Buganza, 2019](#); [Allataifeh and Moghavvemi, 2021](#); [Mittermeier et al., 2021](#); [Allataifeh et al., 2021](#); [Schiffer et al., 2023](#); [Bäcklund et al., 2024](#)). [Allataifeh et al. \(2021\)](#) show that stakeholder involvement in digital innovation processes is increasingly relevant, arguing that the customer's role has shifted from passive receiver to active reviewer, tester, decision-maker, initiator and co-creator. The organization's role has changed from initiator of digital innovation to cogitator by seeking and absorbing knowledge from customers. Market analysis is thus integral to the digital innovation process. The need-solution pairing approach is not a random process; since it is structured systematically, adapts to enterprises' contexts and depends on knowledge and capabilities, it is appropriate during the digital age. [Allataifeh and Moghavvemi \(2021\)](#) demonstrate the importance of engaging market actors (i.e. customers and users) in digital innovation. Innovation agents' role changed from authoritative to reflective, since they use digital tools across stages of digital innovation to remain in contact with market actors. [Mittermeier et al. \(2021\)](#) identify several actions that cluster into critical success factors (CSFs) within four stages of digital innovation – sensing through digital environment scanning, seizing strategic investments, transforming through digital and entrepreneurial skill development and controlled improvisation through digital innovation governance. During the implementation and exploitation phases, they identify transforming through planned reconfiguration, employee involvement and integrative capabilities as CSFs. Regarding contingency, strategy, structure, leadership and IT infrastructure flexibility are relevant during initiation and development, and strong IT and acceptance are needed during implementation and exploitation. [Trabucchi and Buganza \(2019\)](#) develop a process to foster digital innovation, with data a catalyst of the entire digital innovation process. They argue that organizations must treat data as a byproduct to be exploited, instead of something generated on request to answer an innovation problem. [Schiffer et al. \(2023\)](#) assess the scaling phase as part of digital innovation, suggesting three guidelines for success – making the necessary cultural change explicit, rearchitecting systems implemented during the exploring stage and replacing members of successful exploration teams. [Bäcklund et al. \(2024\)](#) propose several improvements to innovation, including improved coordination of cross-functional, bottom-up and top-down innovation, continuity of innovation from strategy to implementation, clarifying innovators' roles, introduction of new innovator roles and improvements to implementation of innovations in operational routines.

Digital innovation networks. Digital innovation networks concerns collaboration between organizations and how they enhance digital innovation readiness. Four studies assess such networks ([Nassani et al., 2022](#); [Holmström et al., 2021](#); [Silvestri et al., 2023](#); [Bockelmann et al., 2024](#)). [Holmström et al. \(2021\)](#) argue that acquiring new knowledge through external and internal resources stimulates organizations to integrate new knowledge with existing knowledge bases. They demonstrate how an academic unit initiated disparate activities (i.e. digital maturity assessment, digital clinics, labs and case studies) to enhance the capabilities required to cultivate digital innovations with partner organizations. [Nassani et al. \(2022\)](#) argue

that innovation networks help organizations acquire the information, methods and knowledge necessary to engage in digital innovation, with results suggesting that participating in innovation networks is a pre-condition of digital innovation. [Silvestri et al. \(2023\)](#) show that entering an innovation network benefits SMEs regarding knowledge and skills that derive from resource-sharing. [Bockelmann et al. \(2024\)](#) examine how organizations configure alliance portfolios to exchange, share and codevelop the capabilities needed to build digital innovation ability, demonstrating that creating partnerships through alliances reduces the gap between existing and needed digital capabilities. They mention four dimensions to consider during alliances – size, degree of exploration, internationality and competition.

Organizational structure. Organizational structure concerns the way a firm is organized to enhance digital innovation readiness. Five studies discuss such structures ([Holotiuk and Beiborn, 2019](#); [Holotiuk, 2020](#); [Santarsiero et al., 2022](#); [Del Giudice et al., 2021](#); [Mann et al., 2019](#)). In rapidly changing environments, organizations must reconsider their organizational structures due to the heterogeneous and decentralized aspects of digital innovation. [Del Giudice et al. \(2021\)](#) demonstrate that organizational structures must be agile (i.e. quick to respond to market changes), ambidextrous (i.e. learn by experimental approaches) and adaptive (i.e. balance knowledge and technological exploration and exploitation) to engage in digital innovation. Four studies discuss the development of separate organizational forms (e.g. specialized organizational units or labs) to create such an organizational structure ([Mann et al., 2019](#); [Holotiuk and Beiborn, 2019](#); [Holotiuk, 2020](#); [Santarsiero et al., 2022](#)). [Holotiuk and Beiborn \(2019\)](#) argue that organizational structures must incorporate digital technologies fluently when employees explore and exploit opportunities. Organizations must thus form separate organizational units in terms of location, mindset, collaboration and communication. Though separate, they link through the transfer of knowledge, exchange mechanisms and the people who move between a new unit and the main organization ([Holotiuk and Beiborn, 2019](#)). Studying digital innovation labs (DIL) as a way to manage ambidexterity (i.e. the trade-off between exploration and exploitation), results suggest that temporal ambidexterity is especially suited for digital innovation because it connects exploration and exploitation (e.g. the temporal transfer of people), enabling the cross-functional, intensive work collaboration required for digital innovation. Temporal ambidexterity transfers employees from the main organization, which has extensive knowledge on the existing business, to the exploration unit (i.e. Digital Innovation Unit), where they complement their knowledge with the unit's digital expertise. [Holotiuk \(2020\)](#) adds several DIL features that enable temporal ambidexterity and enhance digital innovation success – motivation and vision (e.g. exploration of digital business), setup and alignment (e.g. separate, dedicated units without interference), governance (e.g. a DIL committee aligns and orients projects), employees and staffing (e.g. people work in agile, autonomous, cross-functional teams), operations (e.g. work is organized based on daily meetings and feedback) and culture (e.g. an informal, direct and innovation-open culture that spreads). [Santarsiero et al. \(2022\)](#) discuss innovation labs as a management model that supports the organization during digital innovation challenges, demonstrating the activities of a successful innovation lab, including identifying challenges, outlining opportunities and defining/testing solutions using an iterative approach of continuous and validated learning. [Mann et al. \(2019\)](#) demonstrate how the Digital DesignLab, an enterprise-level, multidisciplinary, digital development team, broke down long-standing silos that were constraining digital innovation.

Factor 3. Climate for digital innovation. Climate for digital innovation concerns stimulating the organizational environment and commitment to contributing to digital innovation readiness. The main factor consists of three sub-factors – digital innovation culture, learning environment and digital innovative workforce.

Digital innovation culture. Digital innovation culture represents organizational members' common beliefs, assumptions and shared values regarding digital innovation readiness. Six studies covered this topic ([Duerr et al., 2018](#); [Müller et al., 2019](#); [Gonçalves et al., 2020](#); [Kö et al., 2022](#); [Zhen et al., 2021](#); [Iden et al., 2020](#)). [Duerr et al. \(2018\)](#) identify 16 characteristics of

an effective organizational culture when enhancing digital innovation – cross-functional teams, physical and virtual collaboration, dual structures, collaboration with startups, platform business with partners and competitors, customer integration, startup mentality, failure culture, embracing digital skills, power equality, mutual decision-making, IT as a business creator, perceived need for digital skills, increasingly demanding digital customers, necessity for increased agility and buoyant integration of IT into innovating. Müller *et al.* (2019) assess the influence of organizational culture on its ability to engage in digital innovation, demonstrating that results- and control-oriented cultures (e.g. market and hierarchy cultures) are detrimental to digital innovation because they limit the ability to manage control and flexibility. They highlight the role management plays in facilitating a more balanced approach. Gonçalves *et al.* (2020) argue that integration between a clan and adhocracy culture promotes digital innovation, calling the sum of such integration the agile culture. An agile culture enables organizational agility, which enhances digital innovation capability. Kô *et al.* (2022) demonstrate that an organization must develop a digitally agile culture to increase its capacity to innovate digitally. Digital agility encompasses the ability to change and a willingness to take risks. Zhen *et al.* (2021) also show that a digital organizational culture associates positively with organizational readiness. Iden *et al.* (2020) show that a process reference framework (PRF), such as the IT Infrastructure Library (ITEL), acts through norms, rules and practices as an institutional arrangement in service ecosystems, and in the context of digital innovation, it enhances the ability to innovate digitally.

Environment for learning. Environment for learning concerns physical and digital environments that motivate employees to share and acquire knowledge, skills and behaviors, contributing to digital innovation readiness. Three studies assess such environments (Ngereja and Hussein, 2021; Shibeika and Harty, 2015; Lee and Tan, 2023). Ngereja and Hussein (2021) evaluate learning conditions that improve innovation during digitalization projects, demonstrating that learning willingness, top management support, supportive work environments and the nature of a job/task enable learning for digital innovation. Shibeika and Harty (2015) highlight the importance of project-based learning during diffusion of digital innovation. Learning from previous and current projects, and the transfer of such learning into feature projects by facilitating a mix of formal and informal learning contributes to digital innovation diffusion. Lee and Tan (2023) show that people adopt multiple learning strategies (i.e. self-driven, social-leveraged, enterprise-oriented and information- and technology-enhanced) when experiencing digital innovation. Supportive learning environments (i.e. user-friendly software, online communication platforms, e-documentation and online resources) enable and support workplace learning across strategies through connectivity and accessibility (Lee and Tan, 2023).

Digital innovative workforce. Digital innovative workforce concerns employees' ability (i.e. mindsets, attitudes, competences, skills and behaviors) to contribute to digital innovation readiness. Five studies discuss this topic (Mancha and Shankaranarayanan, 2021; Curzi *et al.*, 2019; Erhan *et al.*, 2022; Liu *et al.*, 2023; Li and Long, 2023). In the digital age, organizations need a workforce capable of developing innovations using digital technologies. Instead of traditional innovators, organizations need digital innovators who believe in their capacity to use digital technologies for innovative purposes (Mancha and Shankaranarayanan, 2021). Entrepreneurial and digital technology self-efficacy contribute to employees' digital innovativeness (Mancha and Shankaranarayanan, 2021), and their digital innovative work behaviors are encouraged by perceptions of digital leadership (Erhan *et al.*, 2022), result and new competence appraisals (Curzi *et al.*, 2019), perceptions of work characteristics (e.g. job complexity), and pursuit of self-worth at work (e.g. career prospects; Liu *et al.*, 2023). Li and Long (2023) demonstrate ways in which employees can engage in digital innovative work behaviors. Organizations must provide resource support and strategic guidance to enhance employees' willingness and inclinations to engage in digital innovative behaviors (Li and Long, 2023).

Factor 4. Leadership for digital innovation. Leadership for digital innovation comprises top and middle managers' actions and behaviors that contribute to digital innovation readiness.

Leadership style. Leadership style represents the ways leaders lead the organization to become ready for digital innovation. Four studies assess such leadership (Wang and Shao, 2024; Shao *et al.*, 2024; Pittenger *et al.*, 2022; Ahmed *et al.*, 2024). Wang and Shao (2024) find that transformational leadership (i.e. inspiring, motivating and facilitating) stimulates digital creativity, which drives digital innovation (Wang and Shao, 2024). Shao *et al.* (2024) assess the supervisory level, finding that transformational leadership influences employees' digitally enabled innovative performance positively by increasing digital self-efficacy. Pittenger *et al.* (2022) demonstrate transformational IT leaders' positive effects on digital innovation, with such leaders encouraging employees to take greater risks. Doing so increases employees' trust and encourages them to align their behaviors with their leader's (Pittenger *et al.*, 2022). Ahmed *et al.* (2024) argue that a relationship exists between perceptions of digital leadership and employees' innovative work behaviors. Leaders cultivate innovation capabilities and shape such behaviors among employees.

Management characteristics. Management characteristics refer to managers' knowledge, skills, competences, behaviors and roles (i.e. management teams) that contribute to digital innovation readiness. Two studies assess these characteristics (Firk *et al.*, 2022; Heubeck and Meckl, 2022). Firk *et al.* (2022) assess top management teams (TMTs) regarding digital innovation, suggesting that digital knowledge among TMT members is important to realizing the team's tasks (i.e. recognizing a digital innovation's potential and supporting the implementation of it) when leading a firm's digital innovation. Their results also demonstrate that flat hierarchical structures at the top strengthen the coordination of the CDO. Heubeck and Meckl (2022) argue that only a complete portfolio of dynamic managerial capabilities (i.e. managerial human, social and cognition capital) facilitates digital innovation.

Factor 5. IT support for digital innovation. IT support for digital innovation refers to IT's ability to support digital innovation readiness. The main factor consists of three sub-factors – IT infrastructure, governance and role.

IT infrastructure. IT infrastructure (ITI) concerns an organization's digital core, basing support for digital innovation readiness. ITI includes hardware, software, databases and networks, as assessed in four studies (Wang *et al.*, 2024; Gonçalves *et al.*, 2022; Sedera *et al.*, 2016; Lin and Yi, 2024). Wang *et al.* (2024) argue that organizations must reconfigure traditional ITIs to cultivate creativity and enable quick experimentation, showing that both dimensions of ITI generativity (i.e. system and application infrastructure [SAI] and data analytics infrastructure [DAI]) contribute to digital innovation. SAI generativity is associated positively with the use of digital application services platforms and IT human resources and DAI with the use of data analytics services platforms, service usability and human resources. Gonçalves *et al.* (2022) show that cloud-as-a-service offers organizations the flexibility to focus on core innovations and spend less time and money on developing parts unimportant to the organization. Sedera *et al.* (2016) demonstrate the importance of stability, reliability and actuality of enterprise systems (ES) and digital platforms as forms of existing ITI during digital technology innovation. Lin and Yi (2024) show that the ability to innovate in a digital context is the result of interactions across multiple factors, including digital infrastructures that represent the underlying support for digitalization that empowers firm innovation.

IT governance. IT governance refers to decision-making structures, rules and guidelines that enable an organization to accomplish tasks while supporting digital innovation readiness. Two studies discuss IT governance (Leonhardt *et al.*, 2018; Rincon *et al.*, 2020). Leonhardt *et al.* (2018) introduce six configurations for digital innovation performance, suggesting that in turbulent environments, decision rights are better allocated to the IT department. In stable environments, decision rights should be allocated to business departments. Their results also suggest that a chief digital officer (CDO) represents a core component across configurations. Establishing a CDO in a formal horizontal governance role is a valid option across environmental and decision-making structures. Rincon *et al.* (2020) argue that IT governance helps organizations maintain a required balance of control and flexibility over IT resources by

determining appropriate decision rights and mechanisms that approve and manage continuous digital innovations. Their results suggest that relational mechanisms are perceived as more effective and easier to implement than structures and processes and that a minimum baseline of IT governance is needed to increase an organization's capacity to innovate digitally.

IT function's role. The IT function's role concerns an IT department's responsibilities and motivation to support innovating readiness with digital technologies. Two studies address IT functions during digital innovations (Leonhardt *et al.*, 2017; Leonhardt and Hanelt, 2018). Leonhardt *et al.* (2017) show that IT must change from a traditional line function to a proactive, agile function that supports digital innovation by sensing new opportunities and responding quickly. To fulfill this role, IT departments require organizational (i.e. resource allocation) and structural (i.e. formal decision rights) support (Leonhardt and Hanelt, 2018).

Results of expert consultation

Table 3 reports results from the expert consultation. All 13 sub-factors identified during the literature review were largely supported during interviews with the digital innovation experts. Sub-factors digital innovation process ($n = 42$) and digital innovation strategy ($n = 40$) were coded most. The experts added a sub-factor not found in the literature – allocation of resources – which concerns strategic allocation of time, money and people that contributes to digital innovation readiness (coded 56 times). Results from the expert consultations and scoping review appear in Figure 2.

Table 3. Results of expert consultation

Main factor	Sub-factor	Example quote	Times coded
Strategic guidance for digital innovation	Digital orientation	"That's why I'm talking about, when we talk about technology, how does an organization deal with technology. What do they do with it. What is their orientation towards technology. Do they embrace new technology (R5)?"	11
	Digital innovation strategy	"In fact, it may well be the case that an innovation strategy is divergent here and there, that it explores new initiatives, as in, we are going to investigate new things (R2)."	40
	Allocation of resources	"If I provide my employees with good facilities and invest time and resources, then innovation will receive a much greater boost (R3)."	56
Orchestrating digital innovation	Digital innovation process	"So, the innovation method is that from thesis then to experiments to construction (R4)."	42
	Digital innovation networks	"What you should pay specific attention to, I think, is strategic collaboration with third parties these days. Many organizations simply can't do it on their own anymore. It's too complicated, too complex, too much, too risky and it's often too expensive. So do it together and don't think you have to do it all on your own (R2)."	27
	Organizational structure	"The innovation center was our ambidextrous organization. It was separate from the running business, and we could do all sorts of radical things (R6)."	26
Climate for digital innovation	Digital innovation culture	"It's mainly about values. What are the values that you stand for as an organization? Fine. That's one thing and that's always paper, but what behavior is it then. You could say what kind of culture do you need to be able to have a digital organization?(R6)."	21

(continued)

Table 3. Continued

Main factor	Sub-factor	Example quote	Times coded
Leadership for digital innovation	Learning environment	"We helped those people to make a pitch and then we had an internal 'Shark tank' or an internal 'Dragons Den' and then all the employees who were in the lead there, they were allowed to give a presentation (R1)."	26
	Digital innovative workforce	"You can develop technology to infinity, but if people don't accept what you've built, then you can't do anything with it (R2)."	26
	Leadership style	"At the moment that leadership does not show that they find is important. Yes, it is just like with children, you do what your father and mother demonstrate (R6)."	22
	Management characteristics	"ICT competencies of the managers. And they had, yes, it doesn't matter, because we don't have to do it, the rest of the organization has to do it. Yes, but the rest of the organization was looking at them like, yes, if you can't do it. Yes, bye (R6)."	14
IT support for digital innovation	IT infrastructure	"That means that both soft- and hardware are very important components and that goes a bit further than just a phone, an iPad, a computer or something like that. It's about bringing those two worlds together (R1)."	27
	IT governance	"Readiness of your application landscape. So, imagine you are in a company where everything is completely standardized with applications that you can do left, right, up, down and nothing else with it, then it becomes very complicated to innovate in that (R1)."	7
	IT function's role	"We are not going to change the ICT functions every three, five years, because they are by definition constantly changing. So, by definition our employees have to change with that too (R3)."	10

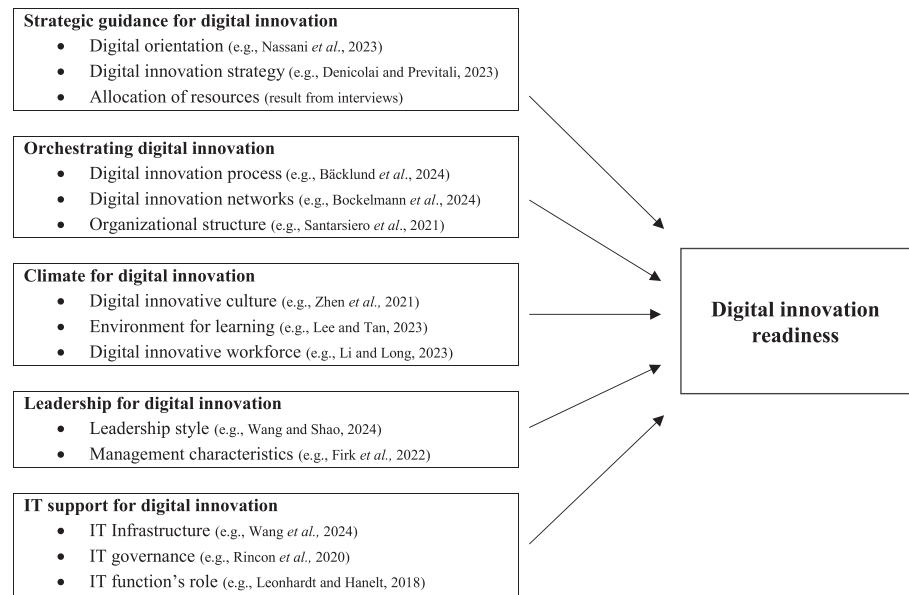


Figure 2. Factors that contribute to digital innovation readiness

Discussion

This study identified 14 subfactors that contribute to digital innovation readiness, clustered into five overarching factors – strategic guidance, orchestrating, climate, leadership and IT support for digital innovation (Figure 2). Most of the included studies ($n = 35$, 66%) were conducted since 2021, suggesting that digital innovation readiness is a new research topic. By synthesizing extant research strictly using the term *digital innovation readiness* (i.e. innovating with digital technologies), we address the nature and challenges of digital innovation (Yoo *et al.*, 2012), which is necessary for organizations to innovate in the digital age. This scoping review differs from similar reviews, such as van den Hoed *et al.* (2022), who conducted a scoping review on innovation in general within a specific sector (healthcare), whereas our review focuses specially on digital innovation readiness across sectors. The current study complements extant research on isolated aspects of digital innovation readiness, such as digital innovation strategy (Svahn *et al.*, 2017) and culture (Müller *et al.*, 2019). Recent bibliometric research confirms that the field of digital innovation in business and management remains relatively underexposed and fragmented (Uršič and Čater, 2025). It thus answers a recent call for research into how organizations should organize for digital innovation (Dąbrowska *et al.*, 2022).

Arguing that digital innovation readiness must be considered from a comprehensive viewpoint suggests interplay both within and between the identified factors and sub-factors. For example, Pittenger *et al.* (2022) shows that highly formal IT governance (i.e. a sub-factor) reduces transformational leaders' (i.e. another sub-factor) ability to innovate digitally. From this perspective, each factor plays a distinct yet interrelated role in shaping an organization's readiness for digital innovation. Although all of the factors and sub-factors are equally important, some are more important during certain stages of digital innovation (Mittermeier *et al.*, 2021). Building readiness is a precursor to an organization's ability to innovate with digital technologies (Lokuge *et al.*, 2019; Molla and Licker, 2005). Especially in the digital age, in which digital technologies are evolving rapidly, building readiness for digital innovation is pivotal. Organizations that lack readiness risk failure. Therefore, building readiness should be regarded as a continuous process rather than a discrete event.

Although this study primarily identified factors from an internal perspective, recent research also highlights the role of the external environment, including government policies, the competitive landscape and economic conditions (Rocha *et al.*, 2025; Chen *et al.*, 2024). Xia and Johar (2025) further demonstrate that elements of the external environment – such as digital infrastructure and the regulatory context – also contribute to organizational digital innovation. Yet, organizations have limited control over such external variables. As Jiang *et al.* (2025) argue, internal mechanisms drive digital transformation, whereas external factors function mainly as catalysts or enablers.

Practical implications and future research

This research offers valuable insights for various stakeholders. From an *internal perspective*, top-management, digital innovation managers and digital innovation ambassadors can strengthen readiness by addressing the five key factors in this study. Organizations should translate digital ambitions into a clear strategy and portfolio and facilitate it with dedicated resources. For example, top-management could allocate specific budget for digital innovation projects. Digital innovation managers can build digital innovation networks inside and outside the organization by establishing partnerships with start-ups, suppliers or universities, thereby gaining access to essential ideas and digital technologies. Internally, building cross-functional teams for digital innovation teams can ensure knowledge flows between departments. In developing a learning-oriented environment and a digitally innovative workforce, organizations can collaborate with educational institutions to design continuous learning programs and provide employees with hands-on workshops to experiment with emerging digital technologies. Furthermore, digital innovation ambassadors, who operate in the front-line, can play a key role in mobilizing colleagues, sharing best-practices and translate

innovation activities into daily practice. Management should adopt empowering leadership styles that foster experimentation and tolerate failure as obvious part of the digital innovation process. Leadership development programs can help managers in acquire digital literacy and adaptive skills, ensuring they can guide teams effectively through transformation. Finally, robust IT infrastructure and governance are prerequisites for digital innovation readiness. Organizations can invest in scalable cloud platforms, while establishing IT governance practices that strike a balance between security and flexibility, enabling experimentation without jeopardizing compliance.

From an *external perspective*, policymakers and researchers play a vital role in shaping the conditions under which organizations can build readiness. Policymakers can promote digital innovation readiness by funding workforce upskilling initiatives, incentivizing cross-sectoral digital innovation networks and developing flexible regulatory frameworks that encourage experimentation with emerging digital technologies. Although not directly examined in this review, we argue that such initiatives may further accelerate the translation of organizational readiness into tangible digital innovation outcomes. These implications remain tentative and require further empirical validation. Future research needs to test whether the suggested external interventions indeed interact with internal readiness factors as assumed here. Moreover, qualitative, quantitative and mixed methods could be employed to validate the proposed framework across different contexts and to examine the interplay between the identified factors and subfactors. Such efforts may generate actionable insights for practitioners and policymakers.

Strengths and limitations

This study has several strengths. First, it provides a comprehensively synthesized state-of-the-art knowledge reflected in empirical studies on factors contributing to digital innovation readiness. Second, it incorporates the consultation stage of the methodological framework from [Arksey and O'Malley \(2005\)](#), thereby enriching the findings with insights from digital innovation experts. Finally, the study applies a systematic, transparent, replicable and collaborative review process, which enhances the robustness and credibility of the results.

In addition to its strengths, this study also has several methodological limitations. First, because the term *digital innovation readiness*, is not used consistently in the literature, we relied on synonyms and related terms, which may have introduced selection bias, despite efforts to mitigate it through critical reflection. Second, the search was limited to five databases. Including additional databases might have yielded different results. Third, consistent with the nature of a scoping review, no formal quality assessment of the selected studies was undertaken, although only peer-reviewed articles were included. Fourth, the diversity of context and methods may limit the generalizability of the findings. Finally, the expert consultation was limited to individuals in (top) management positions. Including experts from multiple organizational levels could have provided a broader range of perspectives on digital innovation readiness.

Conclusions

This review synthesizes a substantial volume of empirical research into five factors that contribute to digital innovation readiness. Digital innovation readiness is a nascent topic, and it understandably lacks comprehensive and general theoretical frameworks to guide future research. This study thus contributes to an initial phase of theory development.

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