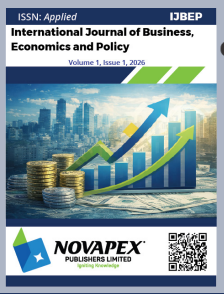

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# Exploring the interplay between corporate governance and business performance: A review of literature

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## ABSTRACT

This literature review examines the relationship between corporate governance and business performance by synthesizing the findings of 20 recent empirical studies released between 2020 and 2024. The review highlights a robust relationship between corporate governance mechanisms and firm performance; however, the strength and type of this interaction are context-, mechanism-, and measure-dependent. The expected governance mechanisms analyzed are board structure (size, independence, and composition), CEO duality, audit committee characteristics, ownership structure (insider holding percentage), and frequency of meetings. The findings reveal that board independence is positively related to performance, while higher ownership concentration and greater frequency of board meetings have positive impacts on firm performance. In contrast, excessive board size diminishes performance, and duality (the same person serving as both CEO and chairman) negatively relates to performance. The corporate governance and performance association is, nonetheless, moderated by factors including firm size, financial distress sector particulars, and geographical context. Our findings are important and have valuable implications for corporate policymakers, regulators, and investors looking to tailor governance mechanisms that enhance organizational effectiveness.

**KEYWORDS:** business innovation, digital transformation, innovation ecosystems, open innovation, organizational innovation, innovation capabilities, SMEs

## 1. Introduction

In today's rapidly evolving and highly competitive global economic environment, innovation is no longer merely a source of competitive advantage but a fundamental prerequisite for organizational survival and sustained growth. Between 2020 and 2025, unprecedented disruptions including the COVID-19 pandemic, accelerated digital transformation, and increasing sustainability pressures have significantly reshaped how organizations conceptualize and implement innovation strategies.

Business innovation is a multi-dimensional construct encompassing product, process, business model, organizational, and ecosystem-level innovation (Granstrand & Holgersson, 2020). Over time, scholarly discourse has increasingly recognized that innovation does not occur in isolation but is embedded within complex systems of actors, resources, and interactions. Contemporary research highlights the systemic and collaborative nature of innovation, emphasizing the roles of external partnerships, digital technologies, and innovation ecosystems in shaping innovation outcomes (Gu et al., 2021).

The growing complexity of innovation processes has led to an expansion of research across multiple domains, including innovation strategy, digital innovation, open innovation, innovation capabilities, and innovation management systems. However, despite the rapid growth of the literature, existing studies are often fragmented, focusing on specific aspects of innovation without providing an integrated perspective. This fragmentation limits the ability of both scholars and practitioners to fully understand how different dimensions of innovation interact within contemporary organizational contexts.

Against this backdrop, this study aims to provide a comprehensive review of recent research on business innovation, with particular emphasis on developments between 2020 and 2025. Drawing on 30 peer-reviewed articles published in leading journals, the review synthesizes key theoretical perspectives, identifies emerging trends, and examines the interplay between digital transformation, innovation ecosystems, and organizational capabilities.

This review makes several contributions. First, it integrates diverse strands of innovation research into a coherent framework that reflects the multi-dimensional and ecosystem-based nature of contemporary innovation. Second, it highlights the increasing importance of digital technologies and collaborative approaches in shaping innovation processes and outcomes. Third, it identifies critical gaps in the literature and outlines directions for future research, particularly in relation to innovation capabilities, sustainability, and the evolving role of innovation management systems.

## 2. Theoretical Foundations and Conceptual Frameworks

The theoretical backdrop for business innovation has grown over the years, incorporating a wide range of academics from the disciplines around strategic management, organizational theory, knowledge management, systems thinking, etc. In recent works, research has made significant progress with the basic building blocks out of which much of modern innovation research is established. Based on conceptual analysis Granstrand and Holgersson (2020) synthesised a definition of innovation ecosystems as complex systems composed of a dynamic assembly of actors, activities and artefacts. By conceptualizing their framework and presenting a methodology to analyze it, they are filling in existing conceptual gaps and providing better theoretical foundation for explaining innovation as a consequence of ecosystem level interactions.

The concept of innovation ecosystem caught the attention of the research community but the sophistication has increased with the distinction between business ecosystems, innovation ecosystems and platform ecosystems. Liu et al. (2024) performed a systematic review of studies of ecosystem service assessments combining bibliometric and content analyses to define such ecosystem types and find similarities and differences among them. The study found that although these ecosystems are similar in some aspects like openness and diversity they differ greatly in participants, goals, and interactions. This clarity facilitates more specific theory building and more targeted empirical testing.

A second theoretical domain is represented by innovation management systems and standards. Idris et al. Specifically, a recent systematic literature review of more than 70 articles on Innovation Management Systems and Standards (IMS/St) by Yavercovski et al. (2021), indicates important research gaps and discloses the low level of maturity of the current state of the art. In addition to addressing practical development initiatives, they provided a theoretical framework for analysis of a solution-based strategy for implementing OCI and identified subject areas that highlighted future research opportunities in management literature. SantAna et al., in particular, have further elaborated the structure of innovation ecosystems. (2020), using bibliometric and content analysis to identify major categories including ecosystem life cycle (birth, expansion, leadership, self-renewal), ecosystem types (macroscopic, medium, microscopic), and layered models (core–periphery, triple-layer).

Vivona et al. (200) have also advanced theoretical perspectives on collaborative innovation. In 2022 Nevo et al proposed a new theory of cost which combines elements of transaction cost economics, game theory, and the knowledge-based view. Their framework recognizes the importance of governance, compactness, reliability and institutionalization as factors influencing the effectiveness of collaboration for innovation, thus filling an important gap in the evaluation of costs of different types of collaborative arrangements between sector actors.

**3. Innovation Strategy and Management Systems**

Innovation strategy is the intentionally coherent combination of innovation activities with organizational goals and competitive positioning. Two Related Constructs that Make Innovation Strategy a Multifaceted Domain and Linked to Higher-level Strategy López et al. We conducted a mixed-methods study by combining literature review with interviews of innovation managers from large companies and we identified nine key messages with respect to the integration of innovation strategy. (2023) In their report, the authors noted that since there is no agreed-upon global definition of innovation, it is not an equally relevant and integrative domain of the core business. The study suggested that the business strategy methodology would lead innovation strategy chain, which is oriented to firm diffusion of offerings, efficiency, and business plans.

Particularly, many types of innovation can be integrated into a business strategy: product, process, business model, organizational and open innovation. López et al. (2023) - identified both the internal and external drivers that affect the choice of innovation strategies and demonstrated that innovation outcomes depend on leadership, culture, human capital, financial resources and the interplay of actors and resources necessary for innovative systems to function. It acknowledges that innovation strategy is not created in a vacuum but must consider the context of the enterprise, the market, and the relationships with stakeholders.

One type of innovation that has proved especially important in sustaining competitive advantages is organizational innovation. Aggarwal et al. Organizational innovation as business strategy: A literature review and bibliometric analysis mapping the field and identifying research opportunities. (2024) The analysis led the authors to conclude that organizational innovation is the foundation for achieving a competitive advantage, highlighting the necessity of paying systematic attention to the organizational structures, processes, and cultures that allow for innovation. Meta-analysis performed by Juracka et al. (2024) also provided support for the critical role of organizational innovation because of the highest correlation coefficient of innovation category with innovation performance in small and medium-sized enterprises.

Innovation management systems provide the structural basis of systematic innovation. Yet studies show that these systems are still quite immature. Idris et al. Innovation management standards and systems are at a low maturity level (Wang et al., 2021) especially in terms of the gap between theoretic and practical development. The implications of this finding is that even though organisations acknowledge the need to have systematic innovation management, the academic field needs to be further

developed to enable development of sufficient frameworks and tools for practitioners (Tidd, 2011).

Innovation with a purpose includes sustainability and environmental, social, and governance (ESG) factors in an integrated way. Niu et al. A study model on digital leadership, ESG management, organizational innovation and sustainability by Moon et al. (2022) for Korean and Chinese companies between 2019 and 2020. Utilizing partial least squares structural equation modeling with 288 company samples, their study found in both countries together, that digital leadership significantly affects ESG management and organizational innovation, which together significantly contribute to organizational sustainability.

**4. Digital Innovation and Technological Transformation**

Now digital innovation is a major force transforming business models, processes, and value-generating processes. Abstract The incorporation of digital technologies within innovation processes is one of the most important changes in the domain of business innovation research and practice. Digital transformation is also a catalyst for various types of innovation such as product, process, and business model innovation. Bresciani et al. This type of research aims to investigate the critical and dynamic capabilities, both internal and external, that may influence the outcome of a firm's digital innovation and also to identify the capabilities that facilitate the development of digital innovation (Yadav et al. Journal of Business Research (2021)).

Recent Literature: Attracting Scholarly Attention Digital innovation has received considerable scholarly attention across a variety of disciplines, and the role of digital innovation in knowledge management systems is no exception. Vaio et al. Ho et al. (2021) Paper title: Mapping digital innovation in knowledge management systems through a systematic literature review: an exploration of the role of knowledge management systems in the context of digital innovation processes. Digital technologies support the creation, storage, transfer, and application of knowledge more effectively, thus improving the organizational innovation capabilities (Lopez et al., 2009) as noticed by their research. The link between digital innovation and knowledge management emphasizes the role of information and knowledge flows in the contemporary processes of innovation.

Digital service innovation is a unique area of digital transformation that is characterized by significant alterations to what is offered by organizations and how it is delivered. Kowalkowski et al. In three digital shifts of service innovation: a conceptual framework for business-to-business markets (2023) More specifically, IoT technologies can convert physical resources into reprogrammable service products; intelligent automation can enhance and replicate service processes; and digital platforms generate an ecosystem for composing resources and stakeholders. This paper by Al-Debei et al recommended an extensive research agenda focussing on the new subscription/repeating revenue models and service innovation in new digital environments.

The nature of the connection between digital platforms and innovation has been explored through a variety of lenses. Arfi et al. An exploratory longitudinal study of three Tunisian small- and medium-sized enterprise (SME) cases in the dairy products sector (2021) observed the digital platform as a motivation-opportunity-ability schema that opens corporate entrepreneurship processes, enhances climates of knowledge sharing, establishes organizational learning and helps to optimize absorptive capacity. The results suggested significant effects of corporate entrepreneurship through proper digital platform capabilities on the product innovation as a result.

Organizations wishing to succeed in innovation in digital environments must develop capabilities oriented toward experimentation with the digital innovation approach. Mariani et al. (2021) examined online review platforms as digital innovation platforms to facilitate digital innovation experimentation, facilitating effectiveness of innovation and business transformation. This work illuminated emerging research-driven online review platforms as experimental and learning contexts and helped explain the ways organizations could systematically test and iterate on digital innovations.

Digital Innovation within the New Venture Context also received some attention. Felicetti et al. A systematic literature review of 185 papers identified six relevant topics in digital innovation within entrepreneurial firms — start-ups collaboration networks, business-model innovation, digital platforms, digital ventures, digital entrepreneur profile and digital-innovation ecosystems (C. B. S. M. M. P. A. M. M. Soares et al. Altogether, their research provided a framework for studying innovation in entrepreneurship contexts and identified three research avenues:- multi-level research, interdisciplinary research, and more specific theories for digital innovation.

**5. Open Innovation and Collaborative Approaches**

They have been focused with open innovation as a leading paradigm of modern open innovation management, because if this a paradigm that emphasises the importance of knowledge which is opened through the boundaries of the organisations. Considering the business-to-business nature of the context, a few challenges and opportunities are aligned with the implementation of open innovation. Markovic et al. At the project level, (2021) explored managing business-to-business open innovation and also highlighted managerial implications for B2B open innovation projects. Their work in this area shows how difficult open innovation can be in a B2B situation, because in working with business partners, there are big challenges of knowledge sharing, and of system integration.

Open innovation in complex projects requires multi-stage process models with sophistication. Gurca et al. To address the challenges of business-to-business open innovation in complex projects, Lekkerkerk et al. However, their research revealed that knowledge sharing and system integration are two key obstacles to working with business partners on these innovation projects, and need to be dealt with in a systematic way across all project levels.

Tests of open innovation in crisis time: The COVID-19 pandemic as a natural experiment. Markovic et al. COVID-19 Business-to-Business Open Innovation Cases: A Challenge for Small and Medium-Sized Enterprises (2021) Case studies of COVID-19 business-to-business open innovations that offer practical advice, particularly on matching business partners for new collaborations with business customers and competitors. Through a qualitative case analysis, they identified the ways SMEs rapidly partook in B2B open innovation during the pandemic and adapted their collaborative strategies best suited to meet their greatest challenges presented by the unprecedented situation.

Introduction Open innovation (OI) Open innovation can be defined as "a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as they look to advance their technology" (Chesbrough etal., 2006:1). Open Innovation into business model innovation (Changewee etal., 2021) The composition of the business model [31] The mediating role of business model innovation The role of open innovation for business model innovation, particularly in the context of pandemic [18] 1. Jabeen et al. Specifically, Karadayi et al. (2022) conducted a qualitative multiple case study of six SMEs that were working in different traditional sectors and reported that the COVID-19 was found to be very impactful on the business model innovation and the open innovation management was found to be very impactful on the business model innovation transformation with digital transformation as a part of the transformation. The present study is one of a kind in analyzing the open innovation function in business model innovation using a challenging period. Open innovation within SMEs in a broader perspective has been studied focused from a process point of view toward business model innovation. Albats et al. Stutely et al. (2021) highlight that many small and medium size enterprises (SME) must adapt their business models in order to remain competitive and that this often requires collaboration with external partners as a means to mitigate the liability of smallness. To make the process perspective clearer on open innovation, their research investigated the extent of open engagement of SMEs with external partners during the innovation journey in realizing business model transformation.

A bibliometric analysis has mapped the development of open innovation research. Sikandar et

al. In a study, Martins, O. (2023) analyzed open innovation research using bibliometrics approaches in the business and management field for the period from 2003 to 2020 for mapping trends and identifying the evolution of the field. Through their systematic bibliometric mapping, research trajectories of open innovation research were revealed and a future research agenda for the field determined.

Sustainable business creation via open innovation approach has been explored in relation to strategic disruption and process digitisation. Allal-Cherif et al. (2023), exploring Patagonia using a more qualitative case study approach, they uncovered key managerial practices that establish sustainability entrepreneurship: transformative choices against industry norms, supplier integration as long-term partners, open sustainable product innovation for simplicity mastery and environmental activism. It mixed strategies disruption, open innovation, and process digitization to maximize to permanent companies.

**6. Innovation Capabilities and Organizational Dimensions**

Innovation capabilities are the organizational resources and competencies that allow broad efficacy in innovation activities. Systematic literature reviewed specific characteristics and needs of the innovation capacity in the context of the small and medium-sized enterprises in particular. In their systematic review, Saunila (2020) noted the lack of research investigating innovation capability in small businesses and outlined the characteristics of innovation capability in SMEs through a review of empirical studies and suggestions for future research. This research provided insights into innovation capability that are particularly pertinent to smaller organizations, which often experience resource constraints and face different organizational dynamics than large corporations.

The capability of process innovation is a stream of innovation capability that has been highlighted. Goni et al. Cottam et al. (2022) undertook a systematic literature review and report 26 peer-reviewed articles on a specific focus area of process innovation capability but in less-structured business processes. Their research described common kinds and domains of less-structured business processes, classified research opportunities, and provided guidelines. Researchers with experience in process capability and management proposed a theoretical framework that connected process innovation capability to performance outcomes, and they also identified six capabilities substantiated with empirical observation that fell within three pillars they classify as people, process, and technology.

Meta-analytic approaches have examined the link between innovation capabilities and firm performance. Juracka et al. Design/methodology/approachA meta-analysis was conducted to identify the relationship between innovation performance and innovation types related to SMEs. (2024) showed the significant relationship between the innovation type towards innovation performance and found moderate to strong correlation with the SME factors leading to innovation classification and subsequently performance linkages. In their research, organizational innovations provide the highest correlation coefficient indicating their strongest effect on innovation performance. This finding indicates the important impact of organizational innovations on innovation performance and enterprise issues for enterprises as if they are to succeed in business.

**Organizational Innovation**

Organizational innovation involves the implementation of new ideas workplace structures, processes and management approaches that can enhance innovation effectiveness. At the same time, the mediating role of organizational innovation has been explored in a number of areas. Zulkifli et al. Using data from 273 Islamic bank employees in Indonesia, (2023) applied structural equation modeling and concluded that competency and Islamic organizational culture have a positive and significant effect on organizational innovation and employee performance, and employee performance has a significant effect on organizational innovation. The effects of competency and organizational culture to the employee performance are mediated by organizational innovation according to their research.

The combination of digital leadership and organizational innovation within a sustainability framework has been explored. Niu et al. (2021), digital leadership significantly influences ESG management and organizational innovation, and they were found to completely mediate the relationship between digital leadership and organizational sustainability in South Korean and Chinese corporations [2]. Interestingly, the studies also showed some cultural differences: the research found partial mediating effects for ESG management and organizational innovation in Korea while the effects were found to be complete in China.

Digital technologies have unique innovative capabilities found in entrepreneurial firms. Felicetti et al. Megits (2023) noticed that digital innovativeness capabilities of entrepreneurial firms include collaboration networks, business-model innovativeness capabilities, platform utilization, and ecosystem engagement. Such capabilities allow entrepreneurial firms, despite being usually resource-constrained compared to established corporations, to exploit digital technologies to facilitate fast innovation and expansion.

**7. Innovation Ecosystems: Structure and Dynamics**

Innovation ecosystems has become one of the most important contemporary research aesthetics and widely used concept in innovation, that represents how innovation is increasingly viewed as the process of interaction between various actors, rather than as a separate process that takes place within a single organization. Systematic research has contributed to the refinement of the concepts underlying innovation ecosystems. Based on their conceptual analysis, Granstrand and Holgersson (2020) synthesized a definition of innovation ecosystems and identified a dynamic group of actors, activities, and artifacts that comprise innovation ecosystems. This laid clearer theoretical ground for identifying and understanding innovation dynamics at an ecosystem level.

Innovation ecosystems have been the subject of analysis from a variety of different angles. Sant'Ana et al. Using bibliometric and content analysis to categorize how innovation ecosystem structure is described in previous literature, Kales et al. (2020) further propose broad classifications of innovation ecosystem strcuture around ecosystem life cycle stages (birth, expansion, leadership, self-renewal), ecosystem levels (macroscopic, medium, microscopic), and layered structures including core-periphery, triple-layer, triple-layer core-periphery, and the 6C framework. These structural classifications assert their analytical frameworks relative to how ecosystems are structured and evolve.

Enterprise innovation ecosystems consist of a particular type of innovation ecosystem aimed at firm-level innovation activities. Feng et al. Akkermans et al.(2021) Keyword cluster analysis of systematic review of enterprise innovation ecosystems from 2011 to 2020.;Ekkens & Klerkx (2022) They also defined the enterprise innovation ecosystem concisely based on the essence of the entity, the types, as well as the dynamic mechanism and evolution mechanism of the enterprise innovation ecosystem. Emerging perspectives were analyzed to provide chances to integrate enterprise innovation ecosystem ideas.

Its constituents have been still methodically identified and described among innovation ecosystems. Yaghmaie et al. (2019) conducted a systematic literature review examining the wide array of studies on innovation ecosystems, focusing on innovation ecosystems: 30 papers were identified, and a comparison of approaches reflecting industry, level of analysis, ecological focus, framework generation, types of actors, company size, success factors, and orchestrators roles were covered. They have found different definitions & approaches for industrial innovation ecosystem - association to open innovation and value creating/capturing processes that were mostly published in Europe.

Systematic review of the literature and bibliometric analysis have been used to delineate some emerging trends and hot topics in innovation ecosystem research. Gu et al. Using a systematic literature review (combining bibliographic coupling and content analysis), Yamin et al. (2021) identified five streams of contemporary innovation ecosystem research: technology innovation, platform innovation

ecosystem, regional development, innovation ecosystem conceptualization and theorization, and entrepreneurship and innovation. They decoded the structure of knowledge on innovation ecosystem research and provided specific recommendations for further research.

Importantly, the comparison of different types of ecosystem has provided conceptual clarity. Liu et al. (2024) conducted a systematic literature review on business, innovation, and platform ecosystems, which integrated and synthesized existing definitions. They discovered similar commonalities such as openness and diversity, while also observing differences in the people and the purposes of the different ecosystems. This study further piqued interest by providing insights on interrelationships and interactions, while also establishing our understanding and foundation for future inquiries in this emergent field.

Digital innovation ecosystems are a new field for ecosystem researchers. Felicetti et al. (2023) analyzed various themes in digital innovation and designated digital-innovation ecosystems as one of six topics of relevance among entrepreneurial firms, indicating that digital technologies facilitate distinct structuring and interaction in ecosystem archetypes. Such digital ecosystems enable all stakeholders, including actors across geographies, to rapidly exchange information, share resources, and innovate in collaboration.

## 8. Synthesis and Critical Analysis

Research that synthesizes contemporary business innovation points out some major themes and trends that cut through the malaise. One aspect is that it is easy to see how we have moved from looking at innovation as an organizational activity to looking at it as happening in an ecosystem with different actors, resources and interactions at play. This systemic outlook is plain in diverse streams of research, from open innovation to innovation ecosystems capturing the changing technologically advanced commercial arrangements and relationships.

Secondly, the digital technologies have become one of the major enablers and also transformers of innovation processes. Embracing new technologies is only a part of digital innovation, which requires a fundamental rethinking of business models, processes, and how value is created. The research shows that digital transformation is an accelerator for multiple types of innovation through digital platforms, IoT and intelligent automation by driving the rise of new formats of innovation with respect to service offerings, processes, and ecosystems.

Third, the specificity of organizational innovation has been shown to be especially valuable to innovation performance in small and medium-sized enterprises. These results indicate that it is modification to organizational configurations, procedures and managerial practice having a greater impact on innovation performance than product or process innovations. Organizational innovation means that it emphasises the organizational context-what kind of context can support and facilitate innovation activities.

Fourth, for too many orgs, truly open innovation and new collaborative approaches are table stakes, not nice to have. The study illustrates the importance of leveraging partnerships to share knowledge and participate in ecosystems to address the lack of resources, access complementary capabilities, and attain innovation results. Of course, collaborating on innovation also introduces the costs and complexities around knowledge sharing, system integration, and partner selection.

Fifth, innovation (especially business model innovation and digital transformation) was fueled by the COVID-19 pandemic. For many organizations, the crisis has meant an evolution or distortion of their innovation strategy, most likely a move towards digital adoption and giving even more importance to open innovation practices. That the most the organisation can become inertia subjected is when disruption happens from outside, and it translates into the motivation that the organisation needs to innovate at once.

Sixth, one might argue that there are still a limited number of comparative maturity models and systems or standards for innovation management despite its critical role. This disparity between

the general recognition of need for systematic innovation management and our ability to create viable institutions and instruments offers a major topic for research as well as practice. This means that organizations need to embrace subtler methods to organize their innovation in a systematic manner, and they need to do it while remaining flexible and adaptive.

On the one hand, the literature reveals multiple tensions and contradictions. Despite the benefits of collaboration and openness, research has focused on the transaction costs, coordination challenges, and uncertainty about knowledge protection that are part of collaborative innovation. Just as digital technologies drive innovation, they also need strong organizational capabilities, cultural changes and strategic alignment of business objectives to deliver their full benefits.

The studies also point out those significant contextual differences. SMEs encounter unique innovation barriers and opportunities relative to large companies, which constrains their approaches to improving innovation capabilities and ecosystem connectivity. As evidenced by comparative research efforts on Korean and Chinese firms, cultural beliefs about innovation influence its practice, and cultural aspects can also mediate relationships between organizational characteristics and innovation performance.

## 9. Future Research Directions and Practical Implications

We synthesized directions for research on innovation in contemporary business, identifying multiple areas of important future research. More longitudinal research on evolution of innovation capabilities, strategies and ecosystems over time, first. A majority of contemporary studies use cross-sectional designs which depict static pixels of innovation phenomena but are not able to capture dynamic processes or longitudinal consequences. The future research agenda does indeed include longitudinal studies to understand innovation trajectories, learning processes, and the delayed economic effects of innovation investments.

Second, multi-level studies that combine individual, organizational, and ecosystem levels of analysis would yield a bigger picture of innovation phenomena. Most existing research focuses on only one level of analysis and I argue things need to be analyzed across multiple levels because innovation outcomes are driven by interactions across levels. So, understanding the interplay between enterprising, organizational, and ecosystem dynamics will be a considerable contribution to both theory and practice. We also need more research on the costs and trade-offs involved in innovation. Although there is extensive literature on the merits of innovation, open innovation, and participation in an ecosystem, there has been surprisingly little emphasis on the costs, risks, and drawbacks. To be more balanced and more directly usable by practitioners, research examining the conditions under which different approaches to innovation are most appropriate would help.

Fourth, there's a need to study the role of sustainability and ESG considerations in the context of innovation. Although a few studies have started exploring sustainable innovation and ESG management–innovation integration, it is still in a nascent stage. We encourage future research to look more closely at how sustainability imperatives drive change in innovation strategies, processes and outcomes, and how different organizational forms integrate environmental and social concerns into innovation activities.

Fifth, the actual channels of how digital technologies stimulate innovation need a deeper exploration. Although studies show that digital technologies are necessary enablers of innovation, there is far less clarity on how to appropriately leverage them for innovation—specifically, how digital technologies drive the processes, capabilities across the hierarchy, and organizational changes needed for effective innovation. Research that investigates the micro-foundations of digital innovation could provide practitioners with more actionable guidance.

The research results have a number of important implications for practitioners. To start with, innovation performance is as much about ecosystem-level dynamics and partnerships as about internal capabilities, and so organizations need to take systemic views on innovation. This points to the

significance of ecosystem strategies, partner selection, and joint capabilities.

Second, companies ought to emphasize organizational innovation in addition to product and course of innovation. Organizational structural, process and management practice changes may have particular effects on innovation performance, especially in SMEs (Ammar, et al., 2020). This implies that organizational contexts the structures, cultures, and leadership conducive to innovation — need to be carefully created.

Third, instead of being siloed in companies, digital transformation should be treated as (a key) communication medium that enables various types of innovation, not as a (separate) objective itself. Organizations need to acquire digitalization capabilities to drive innovations in services, processes, and ecosystems but they need to keep in mind that digital transformation is not a result of simply building a set of individual capabilities but rather an organizational change which requires consistent development of capabilities.

Fourth, carefully implement open innovation and collaborative methods (e.g., partner selection, knowledge management, and cost management). Collaboration can be advantageous, but it comes with costs and challenges that need to be managed too. Organizations need to create capabilities for managing collaborative innovation projects and for choosing the right partners.

Fifth: Organizations should see disruptions with crises not just as a threat but an opportunity for innovation. And as we saw during the COVID-19 pandemic, even outside disruption can act as a catalyst for innovation and give organizations the thrust to make quick changes. But organizations that build these capabilities to adapt and innovate quickly in the face of uncertainty are likely to do better in turbulent environments.

## 10. Conclusion

This article conducts a non-time-constrained literature review that has fully synthesized a contemporary view of business innovation literature within the scope between 2020 and 2025, spanning the areas of business innovation strategy, digital business innovation, open business innovation, business innovation capabilities, business innovation management, and business innovation & organizational concerns. Our review uncovers how business innovation has moved from a hybrid intra-organizational level activity to an ecosystem level, one which is similar to a wicked problem — where different actors, digital technologies, and relationships are involved.

This synthesis uncovers several thematic insights. Moreover, the effect size found here for organisational innovation is also the largest of the three types when examining how instruments are often distributed amongst small and medium-sized enterprises, implying that organisational structure and process innovation may have a greater impact on innovation performance than product or process innovation. Digital technologies are core innovation enablers and transformers that drive new business models, processes, and value mechanisms in virtually every dimension. These collaborative practices and open innovation practices are great to improve external knowledge and capabilities but also are costly and create management issues that need to be tackled in a systematic way.

According to this research, external disruptions such as the COVID-19 pandemic have played a catalytic role in expediting the innovation of business models and the transformation to digital. This result implies that organizations that are able to agilely adapt and innovate during uncertain times, may have more sustainable opportunities in the long run. Innovation management systems and standards, however, are still fairly immature, meaning there is scope for stronger frameworks and tools to support systematic innovation management.

The idea of innovation ecosystems has moved into the center stage of the innovation research agenda where studies are combining more and more subtle understandings of the structures, dynamics, and evolution of ecosystems. Clarity on what constitutes business ecosystems, innovation ecosystems and platform ecosystems has been achieved to facilitate better theoretical advancement and empirical

testing. Innovation ecosystems have been characterized across different frameworks – life cycles stages, ecosystem levels, and layered structures.

This review offers a foundation for understanding modern business innovation that is comprehensive both for researchers and practitioners. The identified research gaps and future research directions provide guidance for the academic community to further develop research knowledge, while the practical implications provide practical insights for the organizations aiming to improve their overall innovation capabilities and outcomes. In the face of a continuing digital acceleration of all organizations due to the rise of the connected consumer, climate change and sustainability imperatives, supply and labor shocks, and instability, the ability to innovate on several axes clearly is going to be an important competitive differentiator going forward.

Examples of exciting new areas attracting interest for further research include sustainable innovation, digital innovation ecosystems, the integration of ESG (environmental, social, and governance) considerations with innovation strategy, and business model innovation. Further studies should take longitudinal and multi-level perspectives, investigate the costs and trade-offs of innovation more extensively, and provide greater insights into the mechanisms whereby digitalization and collaborative approaches can facilitate innovation outcomes. Hence, business innovation research will remain relevant in helping organizations address the complex challenges and opportunities that the contemporary business environment continues to present through both theoretical and prescriptive advances.

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