

The Determinants of Organizational Agility; A Systematic Review

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Abstract: *Organizational agility has become a critical capability for organizations operating in uncertain, technology-driven, and highly competitive environments. Although previous studies have examined agility from different perspectives, the determinants of organizational agility remain fragmented across digital transformation, dynamic capabilities, leadership, knowledge management, technology, and contextual factors. This systematic review aims to identify, classify, and synthesize the key determinants of organizational agility and examine the major outcomes associated with agility in contemporary organizations. A systematic review approach was adopted to analyze 30 selected studies related to organizational agility. The review followed a structured identification, screening, eligibility, and inclusion process. The selected studies were analyzed using a literature review matrix and thematic synthesis to classify the main determinant categories and outcomes. The findings show that organizational agility is shaped by several interconnected determinants, including digital transformation, Industry 4.0, dynamic capabilities, leadership, organizational culture, knowledge management, organizational learning, IT capabilities, big data analytics, workforce agility, and contextual factors such as market turbulence and environmental uncertainty. The review also found that organizational agility is associated with improved performance, innovation, competitive advantage, resilience, sustainability, and market responsiveness. Organizational agility is a multidimensional strategic capability that depends on the interaction of behavioral, organizational, technological, and contextual determinants. Organizations seeking to remain competitive and resilient should develop integrated agility-building practices that combine digital capability, adaptive leadership, learning systems, knowledge sharing, and flexible structures.*

Keywords: Organizational agility; determinants; dynamic capabilities; digital transformation; organizational performance.

1. Introduction

Organizational agility has become a central concept in management research because organizations increasingly operate in environments characterized by uncertainty, technological disruption, market turbulence, supply chain instability, sustainability pressures, and changing stakeholder expectations. In such conditions, traditional organizational models based on rigid structures, slow decision-making, and stable routines are often insufficient for maintaining competitiveness and continuity. Organizations are therefore required to sense environmental changes, respond quickly to emerging

threats and opportunities, reconfigure internal resources, and adapt their strategies without losing operational coherence. Organizational agility reflects this broader adaptive capacity because it combines responsiveness, flexibility, speed, renewal, and strategic adaptability. It is not limited to reacting quickly, but also involves proactive sensing, learning, and capability development. Organizational agility allows firms to respond to market needs through sensing, renewal, adaptation, and success in turbulent environments (Motwani & Katatria, 2024). This makes agility a critical organizational capability for firms seeking to survive and perform effectively in complex and rapidly changing markets. However, the concept has been discussed across different streams of literature, including strategy, information systems, human resource management, supply chain management, and innovation studies. As a result, there is a need to synthesize the determinants that enable organizations to become agile and to clarify how these determinants contribute to organizational adaptation and performance.

The relevance of organizational agility has become more visible with the rise of digital transformation and Industry 4.0, where organizations must integrate advanced technologies while also changing their structures, cultures, processes, and capabilities. Digital transformation requires organizations to adopt technologies such as automation, big data analytics, cloud computing, smart systems, artificial intelligence, and cyber-physical systems, but technology alone does not guarantee agility. Organizations must also develop the managerial, operational, and human capabilities needed to convert digital resources into flexible and responsive action. Organizational agility helps firms adapt to Industry 4.0 changes, while digital technologies can further strengthen organizational responsiveness and flexibility (Mrugalska & Ahmed, 2021). In the context of digital transformation, organizational agility also functions as a mechanism that connects workforce readiness, operational adaptability, and network responsiveness to broader digital change (Gong & Ribiere, 2025). Dynamic capabilities are particularly important in this context because they enable firms to sense opportunities, seize them, reconfigure resources, and adjust strategies in response to environmental change. Strategic leaders support this process by shaping human capital, stakeholder relationships, and organizational resources in ways that foster agile strategies (Hitt et al., 2023). Therefore, organizational agility should be understood as both a response to digital disruption and a capability that enables organizations to benefit from technological transformation.

Previous studies show that organizational agility is shaped by several interconnected determinants, especially leadership, organizational culture, knowledge management, learning, technology capability, and workforce adaptability. Leadership is important because agile organizations require decision-makers who can guide change, encourage innovation, support employee flexibility, and create conditions for rapid adaptation. Leadership agility, organizational culture, and motivation have been shown to influence organizational agility by strengthening adaptability, flexibility, and effective decision-making (Arifin & Purwanti, 2023). Transformational leadership is also important in Industry 4.0 contexts because it supports intellectual stimulation, adaptation, and continuous innovation (Sasmita et al., 2025). In addition to leadership, knowledge management and organizational learning help organizations become agile by enabling employees and teams to acquire, share, process, and apply knowledge quickly. Knowledge management capabilities strengthen organizational agility by supporting knowledge infrastructure, knowledge processing, and business responsiveness (Rafi et al., 2022). Organizational learning culture can also enhance agility because learning-oriented organizations are better able to convert knowledge into adaptive capability and growth (Cetindamar et al., 2021). IT capability and knowledge management capability further support agility by improving information flow, coordination, and responsiveness under changing environmental conditions (Panda & Rath, 2021). These findings suggest that agility is not produced by a single determinant, but through the interaction of leadership, culture, learning, knowledge, and digital capability.

Contextual forces also explain why organizational agility is necessary and why it produces strategic value. Market turbulence, technological turbulence, environmental uncertainty, crisis conditions, sustainability pressures, and competitive intensity increase the need for organizations to respond quickly and adapt continuously. Organizational agility improves radical innovation performance when firms operate under technological turbulence (Puriwat & Hoonsopon, 2022). IT governance can also influence organizational agility through IT and innovation capabilities, especially when market turbulence shapes the value of these capabilities (Elazhary et al., 2023). Beyond innovation and technology, organizational agility has been linked to several important outcomes, including organizational performance, market performance, competitive advantage, resilience, sustainability, and international competitiveness. Organizational agility strengthens the relationship between dynamic capabilities and market performance in SMEs (Akkaya & Qaisar, 2021). Organizational agility also contributes to superior performance in international markets when firms possess sufficient absorptive capacity (Cho et al., 2023). Furthermore, organizational agility mediates the relationship between technological innovation, knowledge management, and sustainable competitive advantage (Satar et al., 2025). Despite these contributions, the literature remains fragmented across different theories, sectors, and methodological approaches. Accordingly, this systematic review aims to identify, classify, and synthesize the determinants of organizational agility reported in previous studies, with particular attention to digital transformation, dynamic capabilities, leadership, knowledge management, technology capabilities, contextual factors, and organizational outcomes.

2. Methodology

This study adopted a systematic review approach to identify, screen, and synthesize previous studies on the determinants of organizational agility. A systematic review design was considered appropriate because the literature on organizational agility is broad, multidisciplinary, and distributed across different research streams, including strategic management, digital transformation, Industry 4.0, knowledge management, leadership, information technology, supply chain management, and workforce agility. The review followed a structured process involving identification, screening, eligibility assessment, and final inclusion of studies. This approach helped ensure that the selected literature was relevant to the research objective and directly connected to organizational agility determinants. Previous systematic reviews on organizational agility have emphasized the need to organize fragmented findings and clarify the antecedents, enablers, capabilities, and outcomes associated with agility (Walter, 2021). In addition, recent reviews have shown that organizational agility research requires clearer synthesis because studies differ in their theoretical perspectives, methodological approaches, and contextual focus (Motwani & Katatricia, 2024). Therefore, the present review was designed to provide a focused synthesis of studies that explicitly addressed organizational agility and its determinants.

The search strategy was developed to capture studies that examined organizational agility, its antecedents, enabling factors, contextual influences, and outcomes. The search terms included combinations such as “organizational agility and determinants,” “organizational agility and antecedents,” “organizational agility and dynamic capabilities,” “organizational agility and digital transformation,” “organizational agility and Industry 4.0,” “organizational agility and leadership,” “organizational agility and knowledge management,” “organizational agility and IT capability,” “organizational agility and big data analytics,” “organizational agility and market turbulence,” “organizational agility and workforce agility,” and “organizational agility and performance.” The search focused on peer-reviewed journal articles, systematic reviews, integrative reviews, and relevant academic book chapters that addressed organizational agility at the organizational, strategic,

technological, operational, or workforce level. Studies were included when they explicitly discussed organizational agility or closely related agility constructs and when they examined determinants such as digital transformation, dynamic capabilities, leadership, culture, knowledge management, IT capability, contextual factors, or performance outcomes. This focus is consistent with prior reviews that treated organizational agility as a multidimensional construct shaped by technological, organizational, strategic, and contextual conditions (Jaafar et al., 2026).

The inclusion and exclusion criteria were applied to ensure that the final studies were relevant to the purpose of the review. Studies were included if they focused on organizational agility, enterprise agility, strategic agility, supply chain agility, workforce agility, or related agility constructs that contributed to understanding organizational-level adaptability. Studies were also included when they examined determinants or outcomes of agility, such as digital capabilities, knowledge management capabilities, dynamic capabilities, leadership, organizational culture, market turbulence, technological turbulence, innovation, competitive advantage, resilience, or organizational performance. Studies were excluded if they discussed agility only in a narrow software development sense without connection to organizational-level agility, if they did not explicitly mention organizational agility or a closely related agility construct, or if they lacked sufficient relevance to the determinants of agility. The screening process also removed duplicated records, irrelevant titles, unrelated abstracts, and studies that did not fit the systematic review focus. This procedure reflects the need to distinguish organizational agility from related but different concepts such as flexibility, adaptability, leanness, and resilience (Patel & Sambasivan, 2022).

After the screening process, the eligible studies were reviewed in full to determine whether they directly contributed to the synthesis. Data were extracted using a literature review matrix that recorded the author, year, and the main concepts explicitly addressed in each study. The standard concept columns included organizational agility, digital transformation or Industry 4.0, dynamic capabilities, leadership or management, knowledge management or learning, technology or IT capabilities, and contextual factors. The matrix used a checkmark system in which ✓ appeared only when the concept was explicitly mentioned in the study, while blank cells indicated that the concept was not directly emphasized. This approach allowed the review to compare the selected studies consistently and to identify recurring determinant categories across the literature. The use of a concept-based matrix was suitable because organizational agility research includes multiple interconnected themes, including digital transformation, leadership, learning culture, IT governance, big data analytics, environmental turbulence, and performance outcomes (Gong & Ribiere, 2025). The extracted data were then synthesized thematically to identify the main determinant groups and to organize the results section around the most frequently discussed factors.

The final synthesis was organized around the main determinant categories that emerged from the reviewed literature. These categories included digital transformation and Industry 4.0, dynamic capabilities, leadership and management, knowledge management and learning, technology and IT capabilities, and contextual factors. This thematic synthesis was selected because the reviewed studies used different research designs, including systematic reviews, integrative reviews, conceptual studies, survey-based quantitative studies, qualitative studies, and structural equation modeling approaches. A thematic approach was therefore more appropriate than statistical meta-analysis because the studies differed in measurement models, samples, contexts, variables, and outcomes. Similar methodological diversity has been observed in previous organizational agility reviews, where studies varied in their theoretical framing, empirical methods, and contextual applications (Nguyen et al., 2025). The synthesis aimed to identify how different determinants contribute to agility and how organizational agility is linked to outcomes such as innovation, performance, resilience, sustainability, and

competitive advantage. Figure 1 presents the PRISMA 2020 flow diagram used to summarize the study selection process.

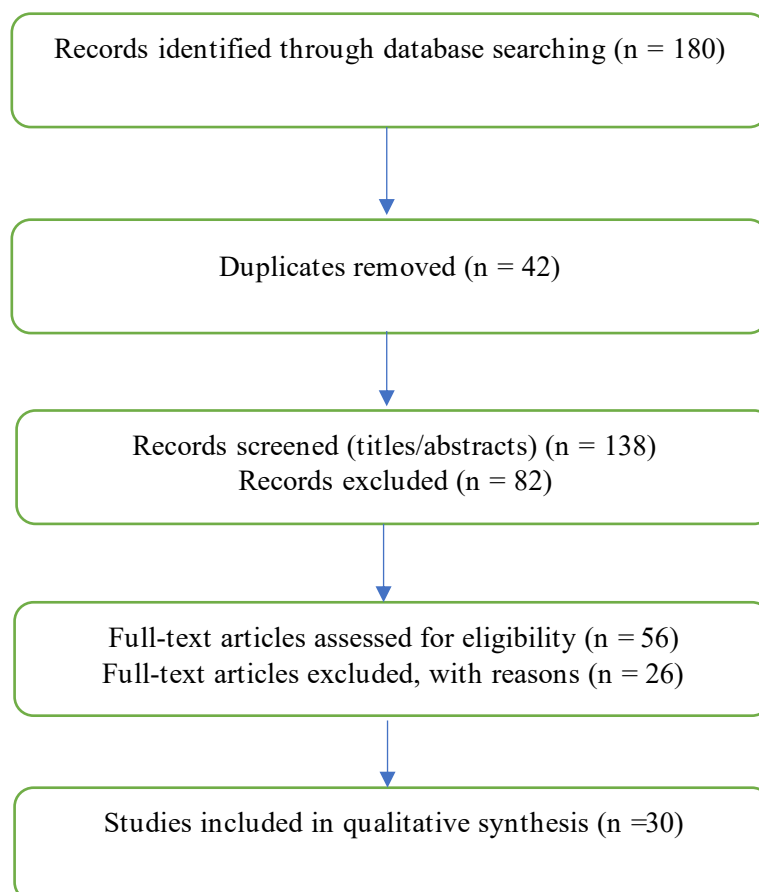


Figure 1: PRISMA 2020 Flow Diagram

3. Results

3.1 Study Selection and Characteristics

The systematic review included 30 studies that examined organizational agility, its determinants, related capabilities, contextual influences, and organizational outcomes. The reviewed studies represented a broad and recent body of literature, with most studies published between 2021 and 2026, reflecting the growing scholarly interest in agility in response to digital transformation, Industry 4.0, market turbulence, supply chain disruption, and post-pandemic uncertainty. The included studies covered several forms of agility, including organizational agility, strategic agility, supply chain agility, workforce agility, and enterprise-level agility. This variety was important because organizational agility is not limited to one managerial function, but extends across strategy, operations, technology, leadership, knowledge management, human resources, innovation, and sustainability. Several studies focused on conceptual clarification and systematic synthesis, indicating that organizational agility remains a broad and evolving concept that requires clearer classification of its antecedents, enablers, capabilities, and outcomes (Walter, 2021).

The selected studies used different methodological approaches, including systematic literature reviews, integrative reviews, conceptual papers, survey-based quantitative studies, structural equation modeling, qualitative interviews, and book chapters. This methodological diversity strengthened the review because it allowed the synthesis to capture both theoretical and empirical perspectives on organizational agility. Review-based studies contributed by organizing the field and identifying key research streams, while empirical studies helped explain how agility is influenced by dynamic capabilities, leadership, organizational culture, knowledge management, IT capability, digital capability, market turbulence, technological turbulence, and environmental uncertainty. The included literature also covered different organizational contexts, including SMEs, manufacturing firms, public sector agencies, exporters, infrastructure and technology companies, supply chains, and knowledge-intensive organizations. This range of contexts suggests that organizational agility is a general organizational capability that becomes especially important when firms face rapid change and competitive pressure (Motwani & Katatria, 2024). Table 1 presents the literature review matrix for the 30 included studies.

Table 1: Literature Review Matrix

No.	Author(s) & Year	Organizational Agility	Digital Transformation / Industry 4.0	Dynamic Capabilities	Leadership / Management	Knowledge Management / Learning	Technology / IT Capabilities	Contextual Factors
1	Motwani & Katatria (2024)	✓		✓				✓
2	Jaafar et al. (2026)	✓	✓		✓		✓	✓
3	Gong & Ribiere (2025)	✓	✓	✓				✓
4	Walter (2021)	✓		✓	✓			✓
5	Nguyen et al. (2025)	✓			✓			✓
6	Mrugalska & Ahmed (2021)	✓	✓	✓	✓		✓	✓
7	Akkaya & Qaisar (2021)	✓		✓	✓			✓
8	Bouguerra et al. (2024)	✓		✓				✓
9	Cho et al. (2023)	✓	✓			✓		✓
10	Satar et al. (2025)	✓	✓			✓	✓	✓
11	Puriwat & Hoonsopon (2022)	✓	✓				✓	✓
12	Bux et al. (2025)	✓	✓		✓	✓	✓	✓
13	Nosike et al. (2023)	✓	✓				✓	✓
14	Arifin & Purwanti (2023)	✓			✓	✓		✓
15	Sasmita et al. (2025)	✓	✓		✓		✓	✓
16	Hitt et al. (2023)	✓	✓	✓	✓		✓	✓
17	Carvalho et al. (2023)	✓			✓		✓	✓

No.	Author(s) & Year	Organizational Agility	Digital Transformation / Industry 4.0	Dynamic Capabilities	Leadership / Management	Knowledge Management / Learning	Technology / IT Capabilities	Contextual Factors
18	Vaszkun & Sziráki (2023)	✓			✓			✓
19	Cetindamar et al. (2021)	✓		✓		✓	✓	
20	Rafi et al. (2022)	✓		✓	✓	✓	✓	
21	Panda & Rath (2021)	✓				✓	✓	✓
22	Atobishi et al. (2024)	✓	✓		✓		✓	✓
23	Al-Darras & Tanova (2022)	✓	✓				✓	✓
24	Groenewald et al. (2024)	✓			✓		✓	✓
25	Kumkale (2022)	✓		✓	✓		✓	✓
26	Elazhary et al. (2023)	✓		✓	✓		✓	✓
27	Patel & Sambasivan (2022)	✓			✓			✓
28	Salmen & Festing (2022)	✓			✓			✓
29	Ajgaonkar et al. (2022)	✓		✓	✓			✓
30	Miceli et al. (2021)	✓	✓				✓	✓

3.2 Determinants of Organizational Agility

The reviewed studies show that organizational agility is influenced by several interconnected determinants rather than by a single organizational factor. Digital transformation and Industry 4.0 appeared as major determinants because organizations increasingly need flexible structures, responsive processes, and digitally enabled capabilities to cope with technological change. Organizational agility helps organizations adapt to Industry 4.0 technologies, while these technologies also strengthen agility across operational, workforce, information system, management, manufacturing, and technological areas (Mrugalska & Ahmed, 2021). In digital transformation contexts, organizational agility functions as a mechanism that connects workforce readiness, operational flexibility, and network responsiveness with broader digital change (Gong & Ribiere, 2025). Digital capabilities also enhance agility by improving data-driven decision-making, flexible automation, and responsiveness in public sector organizations (Atobishi et al., 2024). Big data analytics capability contributes to agility when organizations convert data resources into entrepreneurial orientation and adaptive strategic action (Al-Darras & Tanova, 2022). These findings indicate that technology becomes a determinant of agility only when it is supported by organizational flexibility, decision-making capacity, and adaptive capability.

Dynamic capabilities also emerged as a central determinant of organizational agility. The reviewed studies show that agility depends on the ability of organizations to sense environmental changes, seize opportunities, reconfigure resources, and renew routines in response to uncertainty. Dynamic

capabilities support organizational agility by enabling firms to design adaptive strategies and reshape internal resources when markets, technologies, or institutional conditions change (Hitt et al., 2023). Organizational agility also strengthens the relationship between dynamic capabilities and market performance, especially in SMEs that operate under environmental dynamism (Akkaya & Qaisar, 2021). Workforce agility can also be explained through a dynamic capability perspective because employees and human resource systems must support sensing, seizing, and renewal processes (Ajgaonkar et al., 2022). Strategic agility is similarly important in turbulent environments because it enables organizations to remain responsive, flexible, and resilient during crises and environmental change (Kumkale, 2022). These results suggest that dynamic capabilities provide the theoretical foundation through which organizations transform resources and routines into agile responses.

Leadership, culture, knowledge management, and learning were also identified as important organizational determinants. Leadership contributes to agility by supporting innovation, fast decision-making, motivation, employee adaptability, and readiness for change. Leadership agility, organizational culture, and motivation have a positive influence on organizational agility by strengthening flexibility and adaptive behavior within organizations (Arifin & Purwanti, 2023). Transformational leadership improves organizational agility in Industry 4.0 contexts by encouraging intellectual stimulation, innovation, and continuous adaptation (Sasmita et al., 2025). Knowledge management capabilities also support agility by improving knowledge infrastructure, knowledge processing, and organizational responsiveness (Rafi et al., 2022). Organizational learning culture strengthens agility by helping organizations convert learning into adaptive capability and growth (Cetindamar et al., 2021). IT capability and knowledge management capability further enable organizational agility by improving information processing, coordination, and response capacity under changing environmental conditions (Panda & Rath, 2021). Therefore, the determinants of organizational agility include both technological and human factors, with agility emerging from the interaction between leadership, culture, learning, knowledge, digital systems, and environmental responsiveness.

3.3 Outcomes of Organizational Agility

The reviewed studies indicate that organizational agility is associated with several positive outcomes, including organizational performance, market performance, innovation, competitive advantage, resilience, sustainability, and international competitiveness. Agility contributes to performance because agile organizations are better able to adjust strategies, respond to customer needs, use resources effectively, and adapt to market changes. Organizational agility has a positive contribution to organizational performance across empirical studies, although agility-performance research still requires stronger theoretical and contextual development (Nguyen et al., 2025). Organizational agility improves superior performance in international markets by helping firms respond to complex and frequent global changes (Cho et al., 2023). In SMEs, organizational agility strengthens the link between dynamic capabilities and market performance by helping firms convert adaptive capabilities into market value (Akkaya & Qaisar, 2021). In the public sector, organizational agility mediates the relationship between digital capabilities and organizational performance, showing that digital systems produce stronger results when they are translated into flexible organizational action (Atobishi et al., 2024).

Innovation and competitive advantage were also major outcomes of organizational agility. Agile organizations are better positioned to recognize technological shifts, respond to changing customer expectations, and convert new ideas into products, services, or process improvements. Organizational agility improves radical innovation performance under technological turbulence because agile firms

can respond more effectively to uncertain technological conditions (Puriwat & Hoonsoapon, 2022). Organizational strategic agility also supports collaborative environmental innovation by enabling firms to work with supply partners in addressing sustainability challenges (Bouguerra et al., 2024). Organizational agility mediates the relationship between technological innovation, knowledge management, and sustainable competitive advantage, indicating that agility helps convert internal resources into strategic outcomes (Satar et al., 2025). These findings show that agility is not only a defensive response to disruption, but also a proactive capability that enables innovation, differentiation, and sustainable competitive positioning.

Resilience and sustainability were further outcomes identified in the reviewed literature. The link between agility and resilience is important because organizations increasingly face crises, discontinuities, technological disruption, and unpredictable external change. Digitalization and agility interact with sustainability and resilience by helping organizations respond proactively to crisis conditions and redesign business practices under pressure (Miceli et al., 2021). Digital transformation also supports organizational agility in the post-COVID-19 era by strengthening resilience, customer experience, and long-term organizational success (Nosike et al., 2023). Supply chain agility contributes to competitiveness by improving responsiveness, quickness, flexibility, and capability in turbulent business environments (Patel & Sambasivan, 2022). Employee agility also supports organizational adaptation because agile employees can respond to dynamic job demands and help organizations maintain fit with changing environments (Salmen & Festing, 2022). Overall, the findings show that organizational agility functions as a strategic capability that links technological, organizational, behavioral, and contextual determinants to improved performance, innovation, resilience, sustainability, and competitive advantage.

4. Discussion

4.1 Interplay of Behavioral, Organizational, and Contextual Determinants

The findings of this systematic review show that organizational agility is shaped by the interaction of behavioral, organizational, and contextual determinants rather than by isolated factors. Behavioral determinants refer mainly to leadership, motivation, employee adaptability, workforce agility, learning behavior, and readiness to respond to change. These determinants are important because agility depends on how individuals and teams interpret environmental signals, share knowledge, make decisions, and act under uncertainty. Leadership agility, organizational culture, and motivation strengthen organizational agility by creating a work environment that supports flexibility, collaboration, and adaptive behavior (Arifin & Purwanti, 2023). Transformational leadership also supports agility by encouraging intellectual stimulation, continuous innovation, and employee readiness for technological change (Sasmita et al., 2025). Workforce agility further contributes to organizational responsiveness because agile employees are better able to deal with dynamic job demands and changing organizational priorities (Salmen & Festing, 2022). Therefore, behavioral determinants provide the human foundation of organizational agility, because technology and strategy cannot produce agility unless employees and leaders are willing and able to adapt.

Organizational determinants interact with these behavioral factors by providing the structures, systems, capabilities, and routines through which agility becomes embedded in organizational practice. Dynamic capabilities allow firms to sense opportunities, seize them, reconfigure resources, and develop adaptive strategies in uncertain environments (Hitt et al., 2023). Knowledge management capabilities also support agility by improving knowledge infrastructure, knowledge processing, and organizational responsiveness (Rafi et al., 2022). Organizational learning culture strengthens this

process because learning-oriented organizations are more capable of converting knowledge into adaptive capability and growth (Cetindamar et al., 2021). Technology and IT capabilities further reinforce organizational agility by supporting information processing, coordination, automation, and rapid decision-making. IT capability and knowledge management capability enable organizational agility, especially when organizations face changing external environmental conditions (Panda & Rath, 2021). This means that organizational agility emerges when behavioral readiness is supported by organizational systems that allow knowledge, technology, leadership, and capabilities to operate together.

Contextual determinants explain why agility becomes necessary and why some determinants become more important in particular environments. Market turbulence, technological turbulence, environmental uncertainty, sustainability pressure, supply chain complexity, and crisis conditions increase the need for organizations to respond quickly and reconfigure their resources. Technological turbulence strengthens the importance of organizational agility for product innovation performance because firms must respond to rapid technological change while maintaining creativity and innovation outcomes (Puriwat & Hoonsopon, 2022). Market turbulence also shapes how IT governance, IT capability, and innovation capability influence organizational agility (Elazhary et al., 2023). In sustainability-oriented contexts, organizational strategic agility supports collaborative environmental innovation and environmental sustainability performance within supply chains (Bouguerra et al., 2024). These findings suggest that contextual factors do not simply exist outside the organization, but actively influence how behavioral and organizational determinants function. Organizational agility is therefore best understood as a dynamic interaction between people, systems, technologies, capabilities, and external pressures.

4.2 Policy, Practical, and Theoretical Implications

The findings have several practical implications for managers and organizational decision-makers. First, organizations should treat agility as a strategic capability rather than as a temporary response to crisis or technological change. This requires managers to invest in leadership development, employee adaptability, knowledge-sharing systems, digital capabilities, and flexible structures. Digital transformation initiatives should not focus only on technology adoption, because digital tools produce stronger value when organizations also develop flexible processes and agile decision-making systems. Organizational agility helps firms adapt to Industry 4.0 changes, while Industry 4.0 technologies can also strengthen responsiveness and flexibility across organizational activities (Mrugalska & Ahmed, 2021). Managers should therefore align digital transformation with workforce readiness, learning culture, and knowledge management systems. Digital capabilities improve organizational agility and performance when they support data-driven decision-making, flexible automation, and adaptive capacity (Atobishi et al., 2024). This implies that organizations should integrate technology investment with change management, employee training, leadership support, and continuous learning.

From a policy and organizational governance perspective, the findings suggest that institutions and industry leaders should support agility-building through digital infrastructure, innovation ecosystems, workforce development, and adaptive regulatory environments. Organizations operating in Industry 4.0 contexts need policies that encourage technological adoption while also supporting skills development, ethical digital transformation, and strategic flexibility. A systematic understanding of organizational agility antecedents in Industry 4.0 can guide organizations in developing frameworks that support innovation, competitiveness, and adaptation (Jaafar et al., 2026). In supply chain and sustainability contexts, policy support is also needed to encourage collaboration, environmental innovation, and resilience across networks. Supply chain agility is important for competitiveness in

turbulent business environments because it supports responsiveness, quickness, flexibility, and capability (Patel & Sambasivan, 2022). Therefore, policymakers and organizational leaders should recognize that agility is not only an internal management concern, but also a broader capability shaped by digital ecosystems, labor skills, supply networks, and external institutional conditions.

Theoretically, this review contributes to the organizational agility literature by showing that agility is best explained through an integrated perspective that combines dynamic capabilities, resource-based views, knowledge management, leadership theory, digital transformation, and contingency perspectives. Dynamic capability theory is especially useful because it explains how organizations sense, seize, and reconfigure resources in response to uncertainty (Akkaya & Qaisar, 2021). However, the findings also show that dynamic capabilities alone do not fully explain organizational agility, because leadership, culture, knowledge sharing, IT capability, workforce agility, and contextual turbulence also shape agile capacity. Organizational agility also functions as an important mechanism through which organizations convert digital transformation into operational and strategic responsiveness (Gong & Ribiere, 2025). This supports the need for multidimensional models that treat agility as both an outcome of organizational determinants and a mediator between resources and performance. Future theoretical work should therefore avoid narrow explanations and develop integrated frameworks that connect behavioral, technological, organizational, and contextual dimensions of agility.

4.3 Comparison with Existing Reviews, Limitations, and Future Research

The findings of this review are generally consistent with existing reviews that describe organizational agility as a complex and multidimensional concept. Previous reviews have shown that organizational agility includes drivers, enablers, capabilities, and dimensions, and that these components must be clarified to reduce conceptual confusion (Walter, 2021). The present review supports this argument by showing that the determinants of organizational agility are distributed across several categories, including digital transformation, dynamic capabilities, leadership, knowledge management, technology capabilities, and contextual factors. The findings also align with broader review evidence showing that agility contributes positively to organizational performance, although agility-performance relationships remain shaped by theoretical, methodological, and contextual differences (Nguyen et al., 2025). Similarly, the current review supports the view that organizational agility is highly relevant in Industry 4.0 because organizations must adapt to technological change, digital systems, and increasingly dynamic competitive environments (Mrugalska & Ahmed, 2021). However, this review extends previous work by bringing together behavioral, organizational, and contextual determinants within one synthesis.

Despite its contributions, this review has several limitations. First, the review was based on 30 selected studies, which provides a focused synthesis but may not capture all available literature on organizational agility. Second, the included studies used different concepts, methods, samples, and contexts, which makes direct comparison difficult. Some studies focused on organizational agility as a general capability, while others examined strategic agility, supply chain agility, workforce agility, or digital agility. Third, the review relied on thematic synthesis rather than meta-analysis because the selected studies differed substantially in research design, measurement scales, variables, and statistical models. This means that the review identifies recurring determinant categories but does not estimate effect sizes or compare the statistical strength of relationships across studies. Another limitation is that some included studies were conceptual or review-based, while others were empirical, which means that the level of evidence varied across the reviewed literature. These limitations suggest that the findings should be interpreted as a structured synthesis of existing research rather than as a final causal model of organizational agility.

Future research should address these limitations by developing stronger empirical models, clearer measurement tools, and more context-sensitive explanations of organizational agility. More longitudinal studies are needed to examine how agility develops over time and how organizations sustain agility after periods of crisis or digital change. Future studies should also examine how leadership, culture, workforce agility, knowledge management, and IT capability interact rather than treating them as separate predictors. Workforce agility research remains underdeveloped and requires stronger theoretical and operational clarity, particularly regarding the role of human resource management practices (Salmen & Festing, 2022). Future research should also investigate how organizational agility differs across sectors, firm sizes, public and private organizations, and national contexts. In addition, more research is needed on the role of emerging technologies, ethical digital transformation, artificial intelligence, sustainability pressures, and stakeholder collaboration in shaping agility. These directions would help move the field from broad conceptual discussion toward more precise and testable explanations of how organizational agility is developed and sustained.

5. Conclusion

This systematic review examined the determinants of organizational agility by synthesizing evidence from 30 selected studies. The findings show that organizational agility is a multidimensional capability shaped by several interconnected determinants rather than by a single organizational factor. Digital transformation and Industry 4.0 were identified as important drivers because they require organizations to develop flexible processes, adaptive structures, and digitally enabled decision-making systems. Dynamic capabilities also emerged as a central foundation of agility because they allow organizations to sense changes, seize opportunities, and reconfigure resources in response to uncertainty. In addition, leadership, organizational culture, knowledge management, organizational learning, IT capability, and workforce adaptability were found to be essential internal determinants that help organizations become more responsive, innovative, and resilient. The review also showed that contextual factors play a major role in shaping organizational agility. Market turbulence, technological turbulence, environmental uncertainty, supply chain disruption, sustainability pressures, and crisis conditions increase the need for agile responses. These external pressures influence how organizations use their internal resources, leadership practices, digital systems, and knowledge capabilities to respond effectively to change.

Therefore, organizational agility should be understood as a dynamic interaction between behavioral, organizational, technological, and contextual dimensions. This means that organizations cannot become agile only by adopting new technologies or changing structures; they must also build cultures, leadership systems, learning routines, and human capabilities that support continuous adaptation. Overall, the review concludes that organizational agility contributes to several important outcomes, including organizational performance, market performance, innovation, competitive advantage, sustainability, and resilience. Agile organizations are better positioned to respond to uncertainty, improve decision-making, manage technological change, and convert internal capabilities into strategic value. The findings also highlight the need for future research to develop clearer measurement models, stronger longitudinal designs, and more integrated frameworks that explain how agility develops over time across different sectors and organizational contexts. This review contributes to the literature by organizing the determinants of organizational agility into a systematic structure and by showing that agility is a strategic capability required for organizations seeking to remain competitive, adaptive, and resilient in rapidly changing environments.

References

- Ajgaonkar, S., Neelam, N. G., & Wiemann, J. (2022). Drivers of workforce agility: a dynamic capability perspective. *International Journal of Organizational Analysis*, 30(4), 951-982.
- Akkaya, B., & Qaisar, I. (2021). Linking dynamic capabilities and market performance of SMEs: The moderating role of organizational agility. *Istanbul Business Research*, 50(2), 197-214.
- Al-Darras, O. M. A., & Tanova, C. (2022). From big data analytics to organizational agility: what is the mechanism?. *Sage Open*, 12(2), 21582440221106170.
- Arifin, R., & Purwanti, H. (2023). Examining the influence of leadership agility, organizational culture, and motivation on organizational agility: A comprehensive analysis. *Golden Ratio of Human Resource Management*, 3(1), 33-54.
- Atobishi, T., Moh'd Abu Bakir, S., & Nosratabadi, S. (2024). How do digital capabilities affect organizational performance in the public sector? The mediating role of the organizational agility. *Administrative Sciences*, 14(2), 37.
- Bouguerra, A., Hughes, M., Rodgers, P., Stokes, P., & Tatoglu, E. (2024). Confronting the grand challenge of environmental sustainability within supply chains: How can organizational strategic agility drive environmental innovation?. *Journal of product innovation management*, 41(2), 323-346.
- Bux, A., Zhu, Y., & Devi, S. (2025). Enhancing organizational agility through knowledge sharing and open innovation: The role of transformational leadership in digital transformation. *Sustainability*, 17(15), 6765.
- Carvalho, A. M., Sampaio, P., Rebentisch, E., McManus, H., Carvalho, J. Á., & Saraiva, P. (2023). Operational excellence, organizational culture, and agility: bridging the gap between quality and adaptability. *Total Quality Management & Business Excellence*, 34(11-12), 1598-1628.
- Cetindamar, D., Katic, M., Burdon, S., & Gunsell, A. (2021). The interplay among organisational learning culture, agility, growth, and big data capabilities. *Sustainability*, 13(23), 13024.
- Cho, H. E., Jeong, I., Kim, E., & Cho, J. (2023). Achieving superior performance in international markets: the roles of organizational agility and absorptive capacity. *Journal of Business & Industrial Marketing*, 38(4), 736-750.
- Elazhary, M., Popovič, A., Henrique de Souza Bermejo, P., & Oliveira, T. (2023). How information technology governance influences organizational agility: the role of market turbulence. *Information Systems Management*, 40(2), 148-168.
- Gong, C., & Ribiere, V. (2025). Understanding the role of organizational agility in the context of digital transformation: an integrative literature review. *VINE Journal of Information and Knowledge Management Systems*, 55(2), 351-378.
- Groenewald, C. A., Groenewald, E., Uy, F., Kilag, O. K., Rabillas, A., & Cabuenas, M. H. (2024). Organizational agility: the role of information technology and contextual Moderators-A systematic review. *International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRISE)*, 1(3), 32-38.
- Hitt, M. A., Holmes, R. M., & Mistry, S. (2023). Agility, strategies, dynamic capabilities, stakeholders, and strategic leadership in the new normal environment. In *Senior leadership teams and the agile organization* (pp. 336-362). Routledge.
- Jaafar, M., Khan, K. N., & Salman, A. (2026). A systematic review and framework for organizational agility antecedents towards industry 4.0. *Management Review Quarterly*, 76(1), 487-512.

- Kumkale, Ī. (2022). Organizational agility. In *Organizational mastery: The impact of strategic leadership and organizational ambidexterity on organizational agility* (pp. 37-52). Singapore: Springer Nature Singapore.
- Miceli, A., Hagen, B., Riccardi, M. P., Sotti, F., & Settembre-Blundo, D. (2021). Thriving, not just surviving in changing times: How sustainability, agility and digitalization intertwine with organizational resilience. *Sustainability*, 13(4), 2052.
- Motwani, J., & Katatria, A. (2024). Organization agility: a literature review and research agenda. *International Journal of Productivity and Performance Management*, 73(9), 2709-2754.
- Mrugalska, B., & Ahmed, J. (2021). Organizational agility in industry 4.0: A systematic literature review. *Sustainability*, 13(15), 8272.
- Nguyen, T., Le, C. V., Nguyen, M., Nguyen, G., Lien, T. T. H., & Nguyen, O. (2025). The organisational impact of agility: a systematic literature review. *Management Review Quarterly*, 75(3), 2709-2757.
- Nosike, C. J., Nosike, U. C., & Ojobor, O. S. N. (2023). Digital transformation and organizational agility in post COVID-19 pandemic era. *Journal of Global Accounting*, 9(4), 410-426.
- Panda, S., & Rath, S. K. (2021). Information technology capability, knowledge management capability, and organizational agility: The role of environmental factors. *Journal of management & organization*, 27(1), 148-174.
- Patel, B. S., & Sambasivan, M. (2022). A systematic review of the literature on supply chain agility. *Management Research Review*, 45(2), 236-260.
- Puriwat, W., & Hoonson, D. (2022). Cultivating product innovation performance through creativity: the impact of organizational agility and flexibility under technological turbulence. *Journal of Manufacturing Technology Management*, 33(4), 741-762.
- Rafi, N., Ahmed, A., Shafique, I., & Kalyar, M. N. (2022). Knowledge management capabilities and organizational agility as liaisons of business performance. *South Asian Journal of Business Studies*, 11(4), 397-417.
- Salmen, K., & Festing, M. (2022). Paving the way for progress in employee agility research: a systematic literature review and framework. *The International Journal of Human Resource Management*, 33(22), 4386-4439.
- Sasmita, Y., Aditya, K., Purnamasari, S., & Nor, N. A. M. (2025). Transformational leadership and organizational agility in the era of Industry 4.0. *Journal of Economics and Management*, 3(2), 69-76.
- Satar, A., Musadieq, M. A., Hutahayan, B., & Solimun, S. (2025). Creating a sustainable competitive advantage: the roles of technological innovation, knowledge management, and organizational agility. *Global Business and Organizational Excellence*, 44(3), 11-23.
- Vaszkun, B., & Sziráki, É. (2023). Unlocking the key dimensions of organizational agility: A systematic literature review on leadership, structural and cultural antecedents. *Society and Economy*, 45(4), 393-410.
- Walter, A. T. (2021). Organizational agility: ill-defined and somewhat confusing? A systematic literature review and conceptualization. *Management Review Quarterly*, 71(2), 343-391.