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Identifying the Dimensions and Components of Strategic Maturity in Digital-Oriented Organizations and Developing a Model for Enhancing Competitive Capabilities

Mojtaba Asili[1]*, Mohammad Akbari Arekamari[2]

1. M.A. Student, Department of Business Management, Payame Noor University, Mashhad, Iran
2. Faculty of Management and Economics, Payame Noor University, Tehran, Iran

*Correspondence: mojtabaasili@student.pnu.ac.ir

Abstract

The present study aimed to identify the dimensions and components of strategic maturity in digital-oriented organizations and to develop and empirically validate a model for enhancing competitive capabilities. This study employed an exploratory sequential mixed-methods design conducted among digital-oriented organizations in Tehran, Iran. In the qualitative phase, 18 experts in strategic management, digital transformation, information technology, and organizational development were selected through purposive sampling, and data were collected using semi-structured interviews until theoretical saturation was achieved. The qualitative data were analyzed through systematic thematic coding and category development. In the quantitative phase, the researcher-developed questionnaire derived from the qualitative findings was administered to 384 managers, strategic planning specialists, digital transformation personnel, information technology professionals, and senior organizational experts. Construct validity and reliability were evaluated using confirmatory factor analysis, Cronbach's alpha, composite reliability, and average variance extracted. Structural equation modeling was used to test the proposed relationships among strategic maturity dimensions and competitive capability development. The structural model demonstrated an acceptable fit to the data ($\chi^2/df = 2.13$, RMSEA = 0.054, SRMR = 0.051, CFI = 0.938, TLI = 0.931). All eight dimensions of strategic maturity had positive and statistically significant effects on competitive capability development. Organizational agility and adaptability showed the strongest effect ($\beta = 0.31$, $p < 0.001$), followed by digital innovation capability ($\beta = 0.29$, $p < 0.001$), data-driven strategic decision-making ($\beta = 0.26$, $p < 0.001$), strategic digital leadership ($\beta = 0.23$, $p < 0.001$), strategic–digital alignment ($\beta = 0.19$, $p < 0.001$), digital infrastructure and technological readiness ($\beta = 0.18$, $p < 0.001$), organizational learning and knowledge capability ($\beta = 0.16$, $p = 0.001$), and strategic governance and performance management ($\beta = 0.14$, $p = 0.003$). The model explained 68.40% of the variance in competitive capability development. Strategic maturity in digital-oriented organizations is a multidimensional capability architecture in which agility, innovation, data-driven decision-making, leadership, alignment, learning, technological readiness, and governance collectively strengthen competitive capabilities. The findings provide an integrated framework for diagnosing maturity gaps and prioritizing organizational development initiatives aimed at sustaining competitiveness in dynamic digital environments.

Keywords: Strategic Maturity; Digital-Oriented Organizations; Competitive Capabilities; Digital Transformation; Organizational Agility; Digital Innovation; Data-Driven Decision-Making

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1. Introduction

The accelerating diffusion of digital technologies has fundamentally altered how organizations formulate strategy, allocate resources, interact with markets, design value propositions, and sustain competitive advantage. Digital transformation is no longer confined to the adoption of information technologies or the automation of operational processes; rather, it increasingly represents a multidimensional strategic transition through which organizations redesign structures, capabilities, decision systems, leadership practices, and competitive models. In digitally oriented organizations, competitive performance depends not merely on access to advanced technologies but on the organization's ability to integrate technological resources with strategic intent, organizational learning, innovation, and adaptive action. This shift has intensified scholarly attention to concepts such as digital capability, digital maturity, dynamic capabilities, technological readiness, and strategic resilience. Contemporary research indicates that digital capability should be understood as a multilevel organizational construct encompassing technological, managerial, cognitive, and relational capacities whose interaction shapes organizational outcomes and transformation trajectories (Widianto et al., 2026). Similarly, the growing strategic relevance of artificial intelligence has demonstrated that digital technologies create value only when they are embedded within coherent organizational strategies, decision architectures, and capability-development systems (Zambonino-Torres et al., 2026). Consequently, the central challenge facing digital-oriented organizations is no longer whether they should adopt digital technologies, but whether they possess sufficient strategic maturity to convert these technologies into enduring competitive capabilities.

Strategic maturity can be conceptualized as the degree to which an organization has developed systematic, integrated, repeatable, and adaptive strategic capabilities across leadership, governance, decision-making, learning, technological infrastructure, innovation, and environmental responsiveness. While digital maturity typically focuses on the extent of digital adoption and integration, strategic maturity is broader because it concerns the organization's ability to align digital resources with long-term strategic priorities and competitive objectives. Existing maturity research has shown that organizations progress through different levels of development in terms of digital infrastructure, process integration, management systems, and organizational readiness, yet the pathways through which these maturity dimensions translate into competitive capabilities remain insufficiently integrated. Reviews of Industry 4.0 assessment instruments demonstrate that current digital transformation maturity models vary considerably in their dimensions, measurement criteria, and intended applications, and many emphasize technological implementation more strongly than strategic capability formation (Iribarren et al., 2024). Sector-specific maturity models likewise show that organizational maturity must be assessed through multiple dimensions rather than isolated indicators. For example, maturity assessment in the textile sector has highlighted the importance of integrated evaluation frameworks for identifying development priorities (Kahveci et al., 2026), while research in grain engineering and post-harvest operations has demonstrated that maturity models can help organizations identify gaps between current digital practices and desired transformation capabilities (Oelker et al., 2025). These findings suggest that maturity should be treated as an organizational development architecture rather than a purely technological status.

A capability perspective provides an important theoretical foundation for understanding strategic maturity in digital-oriented organizations. Dynamic capability theory emphasizes the ability of organizations to sense environmental changes, seize emerging opportunities, and reconfigure internal and external resources in response to evolving competitive conditions. In digital environments, these capabilities become particularly important because technological change, data intensity, platform competition, and customer expectations evolve rapidly. Research on digital transformation and dynamic capabilities has shown that organizations must integrate strategic planning with sensing, learning, adaptation, and resource reconfiguration if digital initiatives are to generate sustainable performance outcomes (Alrub & Cañizares, 2025). A broader synthesis of the literature similarly indicates that dynamic capabilities and digital technologies reinforce one another through mechanisms such as knowledge integration, innovation, strategic flexibility, and organizational transformation (Hajar et al., 2026). Evidence from digital platform enterprises further shows that dynamic capabilities are essential to constructing and governing complex supply chain ecosystems because firms must continuously coordinate partners, redesign resource configurations, and respond to market turbulence (Chi, 2024). In this respect, strategic maturity can be interpreted as the institutionalization and systematic development of such capabilities across multiple organizational domains.

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The technological foundation of strategic maturity remains crucial, but technology alone is insufficient. Organizations require robust digital infrastructure, interoperable systems, cloud-based resources, analytical platforms, and scalable architectures that allow technological capabilities to support strategic objectives. Research on cloud computing demonstrates that cloud technologies can become strategically significant when they support agility, responsiveness, resilience, and integration across supply chain strategies (Marín et al., 2026). In manufacturing settings, the application of smart information systems similarly depends on the combined influence of technological, managerial, organizational, and contextual drivers, indicating that digital systems create value when integrated with organizational routines and strategic processes (Chuang et al., 2025). Research on technological capabilities in industrial small and medium-sized enterprises further indicates that readiness for Industry 4.0 requires more than the acquisition of tools; it requires the coordinated development of technological competence, organizational adaptation, and strategic orientation (Toscano-Romero et al., 2026). Earlier evidence from Central and Eastern European food supply chains also demonstrated that digital transformation is shaped by uneven levels of technological preparedness, organizational capability, and contextual conditions (Szegedi et al., 2022). Collectively, these studies show that technological readiness constitutes an enabling layer of strategic maturity rather than a substitute for it.

Organizational knowledge and learning represent another central dimension of strategic maturity. Digital transformation frequently introduces new forms of knowledge, new decision requirements, and new patterns of collaboration that organizations must absorb and institutionalize. The intersection between knowledge management and digital transformation has been identified as particularly important in small and medium-sized enterprises, where limited resources increase the need for effective knowledge acquisition, sharing, retention, and reuse (Thango et al., 2025). The strategic integration of artificial intelligence into logistics likewise requires the hybridization of knowledge-processing capabilities and dynamic capabilities because organizations must transform data and technological intelligence into actionable operational and strategic knowledge (Toth et al., 2025). Likewise, digital capability development has been associated with the organization's ability to acquire, integrate, and exploit knowledge across levels and functions (Widianto et al., 2026). From this perspective, organizations with higher strategic maturity are expected to possess stronger organizational learning mechanisms, greater absorptive capacity, and more systematic processes for translating technological knowledge into competitive action.

Data-driven decision-making is similarly becoming an indispensable component of strategic maturity. The increasing availability of internal and external data enables organizations to monitor markets, identify patterns, anticipate change, and improve the quality of strategic decisions. However, the competitive value of data depends on analytical capability, managerial interpretation, governance quality, and the integration of evidence into decision processes. Research on algorithmic human resource management demonstrates that algorithmic systems can strengthen strategic decision-making when integrated with managerial processes and organizational objectives (Alabdali et al., 2024). Social media analytics research has likewise identified analytical capabilities, organizational readiness, and technology-related resources as central determinants of organizations' ability to transform digital information into intellectual capital (Shahzad et al., 2026). Competitive intelligence derived from web scraping and machine learning further illustrates how organizations can systematically convert external digital information into market knowledge and competitive advantage (Allaham, 2026). These findings reinforce the argument that strategic maturity includes not only technological access to data but also the organizational capability to interpret, govern, and use information in strategic decision-making.

Artificial intelligence has further intensified the relationship between digital maturity and strategic capability development. AI adoption has become an increasingly important element of digital transformation, entrepreneurship, innovation, and organizational competitiveness, yet its strategic benefits vary substantially according to organizational maturity and complementary capabilities. A thematic review of AI adoption and digital transformation identifies organizational readiness, innovation ecosystems, managerial capability, and strategic integration as important emerging themes shaping successful implementation (Ashkani et al., 2026). The integration of AI adoption frameworks with digital maturity models has similarly been proposed as a means of helping organizations move beyond fragmented technology adoption toward systematic capability development (Dey, 2025). At the organizational level, AI maturity appears to depend on socio-technical alignment, perceived benefits, and leadership engagement, with evidence from small and medium-sized enterprises showing that management involvement is particularly important under conditions of competitive pressure (Jaciow et al., 2026). These findings indicate

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that organizations cannot derive sustainable competitive value from AI merely by deploying advanced systems; rather, they need mature leadership, governance, learning, and strategic alignment processes that enable technology to reinforce organizational capabilities.

Leadership and strategic orientation therefore occupy a central position within strategic maturity. Digital transformation commonly requires senior managers to articulate a coherent strategic vision, prioritize investments, coordinate cross-functional initiatives, and create an organizational climate supportive of experimentation and change. The role of innovation-oriented leadership has been demonstrated in research showing that technology orientation can promote process innovation through digital capability, while leadership orientation strengthens the conversion of technological resources into innovation outcomes (Xi & Zhi-yuan, 2025). Similarly, leadership engagement has been linked to the development of AI maturity and sustainable digital transformation (Jaciow et al., 2026). Strategic maturity therefore requires more than executive support in a symbolic sense; it requires leaders who can understand technological possibilities, align them with business priorities, enable organizational learning, manage transformation risks, and mobilize resources toward strategic objectives. In global competitive environments, the importance of such strategic alignment becomes even more evident because firms must integrate sustainability, responsiveness, innovation, and international competitive priorities into coherent organizational systems (Khan et al., 2026).

Organizational agility is another critical mechanism through which strategic maturity may influence competitive capability. Digital environments are characterized by rapid technological shifts, discontinuous market change, platform-based competition, regulatory developments, and evolving customer expectations. Under these conditions, rigid strategic planning systems can quickly lose relevance. Organizations therefore require the ability to modify strategies, reconfigure resources, adjust processes, and respond rapidly to new information. Research on Saudi small and medium-sized enterprises suggests that knowledge and information technology infrastructure contribute to business performance through the sequential roles of digital maturity and organizational agility, emphasizing that maturity becomes valuable when it enhances adaptive organizational action (Alarifi, 2026). Work on institutional resilience similarly demonstrates that digital transformation must be connected to systemic adaptability, feedback mechanisms, and resilience if institutions are to withstand environmental disruptions (Alharbi, 2026). These findings suggest that agility and resilience should not be viewed as peripheral outcomes of digitalization but as central manifestations of strategic maturity.

Innovation capability also constitutes a major bridge between strategic maturity and competitive advantage. Digital-oriented organizations frequently operate in contexts in which technological opportunities emerge faster than established organizational routines can respond. To remain competitive, firms must develop processes for experimentation, idea generation, technology adoption, collaborative innovation, and commercialization. Evidence from the Porto Digital cluster demonstrates that innovation management capacity is multidimensional and depends on organizational processes, strategic coordination, resources, and ecosystem relationships (Pinto et al., 2025). In manufacturing and industrial contexts, digital capability and technological orientation have similarly been linked to process innovation and organizational adaptation (Toscano-Romero et al., 2026; Xi & Zhi-yuan, 2025). The transition toward Industry 5.0 further expands this perspective by emphasizing the integration of advanced technologies with human-centered, sustainable, and system-based organizational practices (Singh et al., 2026). Thus, a mature digital-oriented organization should be capable not only of implementing current technologies but also of continuously transforming technological opportunities into innovative products, services, processes, and business models.

Competitive capability development represents the strategic outcome toward which these maturity dimensions converge. Competitive capabilities may include differentiation, operational efficiency, market responsiveness, innovation, customer value creation, resilience, and the ability to sustain favorable positions under changing conditions. Empirical evidence in electronic manufacturing indicates that digital maturity can strengthen competitive advantage through dynamic capabilities, illustrating how organizational readiness and adaptive capability interact in the generation of competitive outcomes (Zhang, 2024). Research on global apparel firms similarly suggests that sustained competitiveness depends on the coordinated development of strategic, operational, sustainability-related, and market-facing capabilities rather than isolated functional strengths (Khan

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et al., 2026). Research on global businesses further emphasizes that AI-related strategic value derives from the integration of technological intelligence with strategic decision-making and competitive positioning (Zambonino-Torres et al., 2026). Accordingly, competitive advantage in digital environments increasingly reflects the quality of an organization's integrated capability system rather than ownership of any single technology or resource.

Despite the growing literature on digital maturity, digital transformation, dynamic capabilities, AI readiness, technological capability, and organizational agility, important conceptual fragmentation remains. Many existing studies examine one or two organizational dimensions in isolation, focus on particular technologies, or develop maturity instruments tailored to specific sectors. Although such work provides important insights, it does not fully explain how strategic leadership, strategic–digital alignment, data-driven decision-making, agility, innovation, organizational learning, technological readiness, and strategic governance combine as dimensions of a broader strategic maturity architecture. Research on organizational maturity has already suggested that maturity influences the lifecycle and sustainability orientation of digital management systems (Jordan & Zabukovšek, 2023), while earlier work on digital transformation competence in small and medium-sized enterprises emphasized the need to develop organizational competencies rather than simply implement technologies (González-Varona et al., 2021). However, there remains a need for integrative models that identify the constituent dimensions of strategic maturity and empirically assess their contribution to competitive capability development in contemporary digitally oriented organizations.

This gap is particularly relevant in emerging and rapidly transforming organizational contexts, where digital investments may expand faster than the managerial and strategic systems needed to govern them. Organizations can possess sophisticated technological infrastructures while remaining strategically immature if their leadership, governance, analytics, learning, innovation, and alignment mechanisms are underdeveloped. Conversely, organizations with fewer technological resources may achieve stronger competitive outcomes when they integrate available technologies with adaptive routines, knowledge capabilities, and coherent strategic priorities. The literature on digital transformation therefore increasingly points toward the importance of complementarity among technological, human, strategic, and organizational factors rather than technological determinism (Dey, 2025; Hajar et al., 2026). This integrative perspective is also consistent with evidence showing that institutional resilience, smart manufacturing, digital platform ecosystems, and AI maturity emerge from combinations of technological infrastructure, leadership, organizational processes, knowledge, and strategic adaptation rather than isolated interventions (Alharbi, 2026; Chi, 2024; Chuang et al., 2025; Jaciow et al., 2026).

Accordingly, developing a comprehensive understanding of strategic maturity requires identifying the organizational dimensions that collectively enable digital-oriented firms to transform digital resources into sustainable competitive capabilities. Such an approach can advance the maturity literature by shifting attention from descriptive stages of technology adoption toward a capability-based interpretation of organizational development. It can also provide managers with a diagnostic framework for identifying capability gaps, prioritizing investments, strengthening alignment between strategy and digital transformation, and designing coordinated interventions across leadership, governance, analytics, innovation, learning, technology, and agility. Moreover, the diversity of maturity assessment approaches and sector-specific frameworks indicates that an empirically grounded model should account for the interdependence of multiple strategic and digital dimensions rather than applying a universal technology-centered maturity sequence (Iribarren et al., 2024; Kahveci et al., 2026; Oelker et al., 2025). By integrating these dimensions into a single conceptual architecture, strategic maturity can be understood as an organization-wide capacity for continually aligning digital opportunities with strategic priorities and converting that alignment into superior competitive capabilities.

The aim of the present study was to identify the dimensions and components of strategic maturity in digital-oriented organizations and to develop and empirically validate an integrated model for enhancing their competitive capabilities.

2. Methods and Materials

This study employed an exploratory sequential mixed-methods design to identify the dimensions and components of strategic maturity in digital-oriented organizations and to develop and empirically validate a model for enhancing competitive capabilities. The research was conducted in Tehran, Iran, and consisted of two consecutive qualitative and quantitative phases.

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The qualitative phase was designed to explore the underlying dimensions, components, and indicators of strategic maturity and to clarify the mechanisms through which strategic maturity may contribute to the development of organizational competitive capabilities in digitally oriented environments. The participants in this phase consisted of 18 experts selected through purposive and criterion-based sampling. Eligible participants were senior managers, strategic planning specialists, digital transformation managers, information technology executives, management consultants, and university faculty members with expertise in strategic management, digital transformation, organizational capability development, or digital business. Inclusion criteria consisted of holding at least a master's degree in a relevant field, having a minimum of five years of professional or academic experience related to strategic management or digital transformation, and possessing direct knowledge of digitally oriented organizations. Recruitment continued until theoretical saturation was achieved and additional interviews no longer generated substantively new concepts or categories. Following development of the preliminary conceptual model, the quantitative phase was conducted to test the measurement and structural relationships among the identified constructs. The statistical population consisted of managers, deputy managers, strategic planning personnel, digital transformation specialists, information technology managers, and senior organizational experts working in digital-oriented organizations located in Tehran. A total of 384 participants were included in the quantitative phase using stratified purposive sampling to ensure adequate representation of individuals occupying strategic, technological, and managerial positions. Participants were required to have at least three years of organizational experience and sufficient familiarity with their organization's strategic planning, digital transformation processes, competitive positioning, or capability-development activities. Participation in both phases was voluntary, the purpose and procedures of the research were explained before data collection, confidentiality and anonymity were ensured, and informed consent was obtained from all participants.

Data collection was performed using semi-structured expert interviews in the qualitative phase and a researcher-developed questionnaire in the quantitative phase. The semi-structured interview protocol was developed based on the research objectives and the conceptual domains of strategic maturity, digital transformation, dynamic organizational capabilities, strategic alignment, organizational learning, technological readiness, strategic decision-making, innovation, and competitive capability development. The interviews began with broad questions concerning the meaning and characteristics of strategic maturity in digital-oriented organizations and subsequently addressed indicators of mature strategic planning and implementation, strategic use of digital technologies, integration between organizational strategy and digital initiatives, leadership capabilities, organizational agility, data-driven decision-making, innovation capacity, knowledge and learning mechanisms, environmental responsiveness, resource orchestration, and the competitive outcomes associated with strategic maturity. Probing questions were used whenever clarification, elaboration, or concrete organizational examples were required. Each interview lasted approximately 45 to 70 minutes and was conducted individually. With participants' consent, the interviews were recorded and subsequently transcribed verbatim for analysis. The results of the qualitative analysis were used to construct the initial item pool for the quantitative instrument. Questionnaire items were formulated directly from the categories, subcategories, and indicators identified through the qualitative phase and were measured using a five-point Likert scale ranging from 1, representing “strongly disagree,” to 5, representing “strongly agree.” To establish content validity, the initial questionnaire was evaluated by a panel of experts in strategic management, organizational studies, digital transformation, and research methodology, who assessed the relevance, clarity, representativeness, and conceptual consistency of the items. Items considered ambiguous, repetitive, or insufficiently representative of the identified constructs were revised or eliminated. Face validity was subsequently examined through a pilot administration to a small group of managers and organizational experts similar to the target population to verify the comprehensibility and appropriateness of the wording. Construct validity was assessed in the main quantitative phase using confirmatory factor analysis, while convergent and discriminant validity were evaluated through standardized factor loadings, average variance extracted, composite reliability, and inter-construct relationships. Internal consistency reliability was assessed using Cronbach's alpha and composite reliability coefficients, with coefficients of 0.70 or greater considered evidence of acceptable reliability.

Qualitative and quantitative data were analyzed sequentially in accordance with the exploratory mixed-methods design. In the qualitative phase, interview transcripts were reviewed repeatedly and analyzed through systematic thematic coding involving initial coding, category development, comparison and integration of related concepts, and abstraction of the main dimensions and components of strategic maturity. Meaningful units within each transcript were first identified and assigned conceptual codes. Similar codes were then compared, merged, and organized into subcategories, after which conceptually

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related subcategories were integrated into broader categories representing the principal dimensions of strategic maturity and competitive capability development. Constant comparison was applied throughout the analysis to identify similarities and differences among participants' accounts and to refine the boundaries between categories. Coding continued until conceptual saturation was achieved and no new substantive categories emerged. To strengthen qualitative rigor, the coding structure and category definitions were repeatedly reviewed, selected interpretations were checked against the original interview data, and the emerging conceptual framework was examined for internal coherence and consistency. In the quantitative phase, descriptive statistics were initially calculated to summarize participant characteristics and the distribution of the research variables. Data quality was assessed through examination of missing values, outliers, distributional characteristics, and multicollinearity. The measurement model was then evaluated using confirmatory factor analysis to determine whether the observed indicators adequately represented the latent constructs identified in the qualitative phase. Standardized factor loadings, Cronbach's alpha, composite reliability, and average variance extracted were examined to assess indicator reliability, internal consistency, and convergent validity, while discriminant validity was evaluated by comparing the relationships among latent constructs and their shared variance. After confirmation of the measurement model, structural equation modeling was employed to test the hypothesized relationships among the dimensions of strategic maturity and the development of competitive capabilities. Model adequacy was assessed using multiple fit indices, including the chi-square to degrees-of-freedom ratio, root mean square error of approximation, comparative fit index, Tucker–Lewis index, goodness-of-fit index, and standardized root mean square residual. The magnitude, direction, and statistical significance of standardized path coefficients were examined to determine the relative contribution of the identified strategic maturity dimensions to competitive capability development. Statistical significance was evaluated at the 0.05 level, and the final model was interpreted by integrating the quantitative findings with the conceptual categories derived from the qualitative phase, thereby providing an empirically supported framework for understanding and developing strategic maturity in digital-oriented organizations.

3. Findings and Results

The quantitative phase included 384 managers, senior experts, strategic planning specialists, information technology professionals, and digital transformation personnel working in digital-oriented organizations in Tehran. Of the participants, 228 individuals (59.38%) were male and 156 (40.62%) were female. In terms of age, 49 participants (12.76%) were younger than 30 years, 118 (30.73%) were between 30 and 39 years, 143 (37.24%) were between 40 and 49 years, and 74 (19.27%) were 50 years of age or older. Regarding educational attainment, 42 participants (10.94%) held a bachelor's degree, 239 (62.24%) held a master's degree, and 103 (26.82%) held a doctoral degree. Organizational tenure showed that 61 participants (15.89%) had between 3 and 5 years of experience, 121 (31.51%) had between 6 and 10 years, 128 (33.33%) had between 11 and 15 years, and 74 (19.27%) had more than 15 years of professional experience. With respect to organizational position, 69 participants (17.97%) were senior or executive managers, 86 (22.40%) were middle managers or deputy managers, 73 (19.01%) worked in strategic planning and business development positions, 81 (21.09%) were digital transformation or information technology specialists, and 75 (19.53%) were senior organizational experts. The demographic distribution indicated that the respondents represented a relatively experienced and highly educated professional group with substantial exposure to strategic decision-making, digital technologies, organizational transformation, and competitive capability development. This composition was considered appropriate for evaluating a multidimensional strategic maturity model because the majority of respondents possessed both organizational experience and direct familiarity with strategic and digital processes.

Table 1. Dimensions and Components of Strategic Maturity in Digital-Oriented Organizations Identified through Qualitative Analysis

Main Dimension	Components	Number of Initial Codes	Number of Final Indicators
Strategic Digital Leadership	Digital strategic vision; senior management commitment; strategic foresight; digital leadership competence; strategic prioritization	34	9
Strategic–Digital Alignment	Alignment of digital initiatives with corporate strategy; integration of business and IT priorities; strategic coherence; cross-functional coordination	31	8
Data-Driven Strategic Decision-Making	Data accessibility; analytical capability; evidence-based decisions; real-time monitoring; predictive intelligence	29	8
Organizational Agility and Adaptability	Strategic flexibility; rapid resource reconfiguration; responsiveness to environmental change; adaptive processes; organizational resilience	33	9

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Digital Innovation Capability	Digital experimentation; innovation culture; technology adoption; digital product and service development; open innovation	30	8
Organizational Learning and Knowledge Capability	Knowledge sharing; strategic learning; organizational memory; continuous learning; absorptive capacity	27	7
Digital Infrastructure and Technological Readiness	Technology integration; platform readiness; interoperability; cybersecurity preparedness; scalable digital architecture	28	8
Strategic Governance and Performance Management	Digital governance; strategic accountability; performance measurement; portfolio management; strategic control	26	7
Competitive Capability Development	Differentiation capability; customer responsiveness; innovation-based competitiveness; market responsiveness; operational efficiency	32	9
Total	45 conceptual components	270	73

Qualitative analysis of the 18 expert interviews initially generated 270 meaningful codes associated with strategic maturity, digital transformation, strategic capability, organizational responsiveness, and competitive performance. Through repeated comparison, consolidation of semantically overlapping codes, and progressive abstraction, these codes were organized into 45 conceptual components and ultimately classified into nine major dimensions. Eight dimensions represented the substantive domains of strategic maturity, whereas competitive capability development emerged as the principal outcome construct of the model. Strategic digital leadership included concepts related to the development of a coherent digital vision, senior management commitment, strategic foresight, leadership competence, and prioritization of digital initiatives. Strategic–digital alignment reflected the extent to which digital investments, technological projects, business processes, and organizational priorities were coordinated with the organization's broader strategic objectives. Data-driven strategic decision-making emphasized the institutionalized use of reliable organizational data, analytics, real-time performance information, and predictive intelligence in strategic choices. Organizational agility and adaptability represented the organization's capacity to respond quickly to technological and environmental changes, redesign processes, and reconfigure resources. Digital innovation capability captured experimentation, adoption of emerging technologies, innovation-oriented culture, and the development of digitally enabled products and services. Organizational learning and knowledge capability concerned the acquisition, dissemination, integration, and strategic utilization of knowledge. Digital infrastructure and technological readiness represented the technological foundations necessary for strategic digital transformation, whereas strategic governance and performance management concerned accountability, strategic control, performance monitoring, and governance of digital portfolios. Competitive capability development was characterized by improved differentiation, responsiveness to customers and markets, innovation-based competitiveness, and enhanced operational effectiveness. The resulting qualitative framework therefore suggested that strategic maturity in digital-oriented organizations was not a single organizational characteristic but a multidimensional capability system integrating strategic leadership, technological readiness, organizational learning, innovation, agility, governance, and data-driven management.

Table 2. Descriptive Statistics, Reliability, and Convergent Validity of the Research Constructs

Construct	Mean	SD	Standardized Loading Range	Cronbach's Alpha	Composite Reliability	AVE
Strategic Digital Leadership	3.79	0.66	0.71–0.88	0.89	0.92	0.59
Strategic–Digital Alignment	3.67	0.71	0.70–0.87	0.88	0.91	0.57
Data-Driven Strategic Decision-Making	3.58	0.74	0.72–0.90	0.91	0.93	0.63
Organizational Agility and Adaptability	3.71	0.68	0.73–0.89	0.90	0.92	0.60
Digital Innovation Capability	3.62	0.72	0.71–0.91	0.91	0.93	0.62
Organizational Learning and Knowledge Capability	3.74	0.65	0.70–0.86	0.87	0.90	0.56
Digital Infrastructure and Technological Readiness	3.84	0.63	0.74–0.90	0.90	0.93	0.64
Strategic Governance and Performance Management	3.55	0.76	0.69–0.87	0.88	0.91	0.58
Competitive Capability Development	3.76	0.69	0.73–0.92	0.92	0.94	0.65

The descriptive and measurement-model results demonstrated satisfactory levels of internal consistency, indicator reliability, and convergent validity across all constructs. Mean scores ranged from 3.55 for strategic governance and performance management to 3.84 for digital infrastructure and technological readiness, indicating that respondents generally evaluated the maturity-related capabilities of their organizations above the theoretical midpoint of the five-point scale, although the degree of development varied across dimensions. Strategic governance and performance management obtained the lowest mean score, suggesting that formalized mechanisms for strategic control, digital accountability, portfolio oversight, and

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performance evaluation were comparatively less developed than technological infrastructure and leadership-related capabilities. Digital infrastructure and technological readiness had the highest mean, followed by strategic digital leadership and competitive capability development, indicating relatively stronger perceived development of technological foundations and management commitment. Standardized factor loadings were predominantly above 0.70; the minimum loading was 0.69 and the maximum was 0.92, providing evidence that the retained items adequately represented their intended latent constructs. Cronbach's alpha coefficients ranged from 0.87 to 0.92, while composite reliability coefficients varied between 0.90 and 0.94, exceeding the conventional threshold of 0.70 and confirming satisfactory internal consistency reliability. The average variance extracted values ranged from 0.56 to 0.65 and were therefore above the recommended value of 0.50 for all constructs. These results indicated that each latent variable explained more than half of the variance of its corresponding observed indicators and supported the convergent validity of the measurement model. Competitive capability development demonstrated the highest overall measurement quality, with Cronbach's alpha of 0.92, composite reliability of 0.94, and an AVE of 0.65. Taken together, the findings confirmed that the measurement instrument developed from the qualitative phase possessed adequate psychometric properties and was appropriate for subsequent structural model testing.

Table 3. Goodness-of-Fit Indices for the Confirmatory Measurement Model and Structural Model

Fit Index	Recommended Criterion	Measurement Model	Structural Model
χ^2	—	1684.73	1779.48
df	—	812	836
χ^2/df	< 3.00	2.07	2.13
RMSEA	< 0.08	0.053	0.054
SRMR	< 0.08	0.047	0.051
CFI	> 0.90	0.945	0.938
TLI	> 0.90	0.938	0.931
GFI	> 0.90	0.912	0.904
AGFI	> 0.85	0.891	0.883
IFI	> 0.90	0.946	0.939
NFI	> 0.90	0.921	0.915

The confirmatory factor analysis and structural equation modeling results indicated that both the measurement model and the structural model provided an acceptable representation of the empirical data. For the measurement model, the chi-square to degrees-of-freedom ratio was 2.07, whereas the corresponding value for the structural model was 2.13; both values were clearly below the recommended maximum of 3.00 and indicated an acceptable level of discrepancy between the observed and model-implied covariance matrices. The RMSEA values were 0.053 and 0.054 for the measurement and structural models, respectively, demonstrating a close approximation to the population covariance structure. Similarly, the SRMR values of 0.047 and 0.051 were substantially lower than the 0.08 threshold, indicating relatively small standardized residuals. Incremental fit indices were also satisfactory. The CFI was 0.945 for the measurement model and 0.938 for the structural model, while the TLI values were 0.938 and 0.931, respectively. The IFI values of 0.946 and 0.939 and NFI values of 0.921 and 0.915 further supported acceptable comparative fit. Absolute fit was also supported by GFI values exceeding 0.90 and AGFI values of 0.891 and 0.883, both of which exceeded the minimum acceptable level of 0.85. Although a modest reduction in some fit indices occurred following the introduction of structural paths, the overall pattern remained within acceptable limits and indicated that the hypothesized relationships among the strategic maturity dimensions and competitive capability development were compatible with the observed data. Accordingly, the model was considered sufficiently well fitted to permit interpretation of the standardized structural coefficients.

Table 4. Structural Effects of Strategic Maturity Dimensions on Competitive Capability Development

Structural Path	B	SE	β	t	p	Result
Strategic Digital Leadership → Competitive Capability Development	0.21	0.05	0.23	4.47	<0.001	Supported
Strategic–Digital Alignment → Competitive Capability Development	0.18	0.05	0.19	3.89	<0.001	Supported
Data-Driven Strategic Decision-Making → Competitive Capability Development	0.24	0.05	0.26	5.12	<0.001	Supported
Organizational Agility and Adaptability → Competitive Capability Development	0.28	0.05	0.31	5.94	<0.001	Supported
Digital Innovation Capability → Competitive Capability Development	0.26	0.05	0.29	5.61	<0.001	Supported
Organizational Learning and Knowledge Capability → Competitive Capability Development	0.15	0.04	0.16	3.41	0.001	Supported
Digital Infrastructure and Technological Readiness → Competitive Capability Development	0.17	0.05	0.18	3.64	<0.001	Supported
Strategic Governance and Performance Management → Competitive Capability Development	0.13	0.04	0.14	3.02	0.003	Supported

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The structural model showed that all eight dimensions of strategic maturity exerted positive and statistically significant effects on competitive capability development. Organizational agility and adaptability produced the strongest standardized effect on competitive capability development ($\beta = 0.31$, $t = 5.94$, $p < 0.001$), indicating that organizations capable of rapidly adjusting strategies, reallocating resources, modifying processes, and responding to technological and market changes were more likely to develop sustainable competitive capabilities. Digital innovation capability demonstrated the second strongest effect ($\beta = 0.29$, $t = 5.61$, $p < 0.001$), suggesting that continuous experimentation, adoption of emerging technologies, innovation-oriented culture, and development of digitally enabled offerings played a central role in strengthening competitive advantage. Data-driven strategic decision-making also exerted a substantial effect ($\beta = 0.26$, $t = 5.12$, $p < 0.001$), demonstrating that systematic use of analytics, organizational data, predictive information, and real-time performance indicators enhanced organizations' ability to compete effectively. Strategic digital leadership had a significant standardized effect of $\beta = 0.23$ ($t = 4.47$, $p < 0.001$), whereas strategic–digital alignment had an effect of $\beta = 0.19$ ($t = 3.89$, $p < 0.001$). Digital infrastructure and technological readiness also significantly predicted competitive capability development ($\beta = 0.18$, $t = 3.64$, $p < 0.001$), demonstrating that technological infrastructure functioned as an enabling foundation rather than as an isolated source of competitiveness. Organizational learning and knowledge capability showed a significant effect of $\beta = 0.16$ ($t = 3.41$, $p = 0.001$), while strategic governance and performance management demonstrated the smallest, although still significant, direct effect ($\beta = 0.14$, $t = 3.02$, $p = 0.003$). The eight strategic maturity dimensions collectively explained 68.40% of the variance in competitive capability development ($R^2 = 0.684$), indicating considerable explanatory power. The relative magnitude of the coefficients further showed that competitive capability development depended more strongly on adaptive, innovative, and information-based organizational capacities than on technological resources alone.

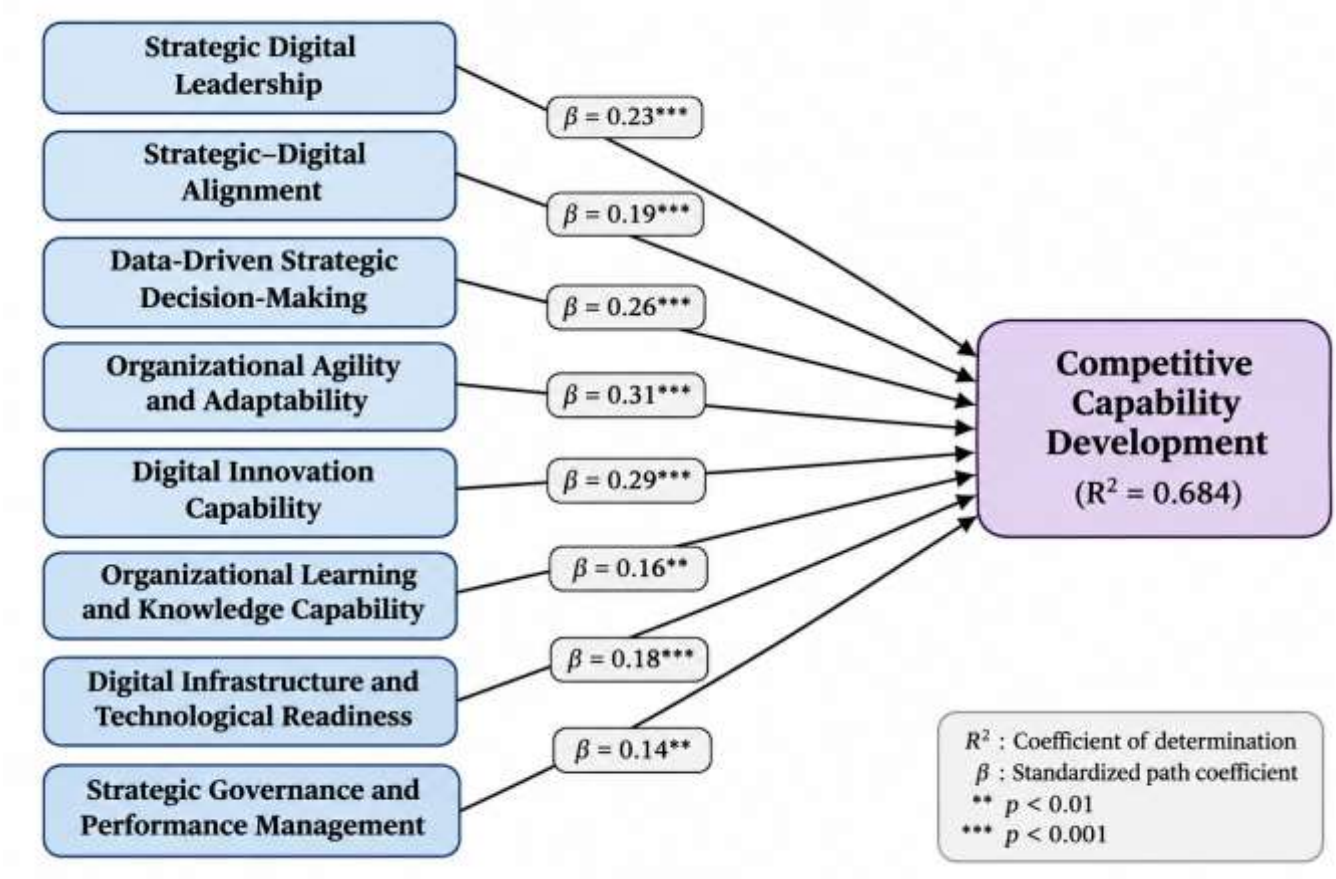


Figure 1. Structural Model of Strategic Maturity and Competitive Capability Development in Digital-Oriented Organizations

The structural model depicted the eight strategic maturity dimensions as mutually complementary organizational capabilities converging on competitive capability development as the principal endogenous outcome. All standardized paths were positive

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and statistically significant, confirming that higher levels of maturity across leadership, strategic alignment, data-based decision-making, agility, innovation, organizational learning, technological readiness, and governance were associated with stronger competitive capabilities. Among these relationships, organizational agility and adaptability displayed the highest path coefficient, followed by digital innovation capability and data-driven strategic decision-making, illustrating the central role of rapid organizational responsiveness, innovation, and analytical intelligence in digitally intensive competitive environments. Strategic digital leadership also occupied a prominent position in the model because leadership commitment and strategic vision provided the managerial direction through which technological and organizational capabilities could be coordinated. Strategic–digital alignment, technological readiness, organizational learning, and strategic governance showed smaller but significant direct effects, suggesting that these dimensions functioned as necessary supporting mechanisms within the broader maturity architecture. The model therefore supported a systemic interpretation of strategic maturity in which competitive capabilities emerge from the coordinated development of multiple interdependent organizational domains rather than from isolated digital investments. The explained variance of 68.40% further demonstrated that the integrated model possessed substantial explanatory capacity and provided empirical support for the proposed framework for developing competitive capabilities in digital-oriented organizations.

4. Discussion and Conclusion

The present study sought to identify the dimensions and components of strategic maturity in digital-oriented organizations and to develop an integrated model explaining the development of competitive capabilities. The findings supported a multidimensional conceptualization of strategic maturity consisting of strategic digital leadership, strategic–digital alignment, data-driven strategic decision-making, organizational agility and adaptability, digital innovation capability, organizational learning and knowledge capability, digital infrastructure and technological readiness, and strategic governance and performance management. All eight dimensions had positive and statistically significant effects on competitive capability development, and together they explained 68.40% of its variance. This substantial explanatory power indicates that competitive capability in digital-oriented organizations is not generated by technological resources alone but emerges from the coordinated interaction of strategic, technological, informational, behavioral, and organizational capabilities. This interpretation is consistent with contemporary approaches that conceptualize digital capability as a multidimensional and multilevel construct rather than a narrowly technical competence (Widianto et al., 2026). It is also compatible with research emphasizing that successful digital transformation requires a combination of technological resources, organizational adaptation, managerial capabilities, and dynamic capabilities (Hajar et al., 2026; Toscano-Romero et al., 2026). The findings therefore reinforce a capability-based view of strategic maturity in which competitive outcomes depend on the organization's ability to integrate and continuously renew complementary strategic resources.

Among the identified dimensions, organizational agility and adaptability exerted the strongest effect on competitive capability development, with a standardized path coefficient of $\beta = 0.31$. This result indicates that the ability to rapidly recognize environmental change, adjust strategic priorities, reconfigure resources, redesign processes, and respond to emerging technological and market conditions is the most influential strategic maturity capability in the proposed model. In digitally intensive environments, competitive advantages are increasingly temporary, and organizations must continuously adapt rather than depend on static strategic positions. The prominence of agility in the present findings is consistent with evidence showing that digital maturity can contribute to organizational performance through increased organizational agility. Alarifi demonstrated that knowledge and information technology infrastructure influence business performance through the sequential mechanisms of digital maturity and organizational agility, emphasizing the importance of converting technological readiness into adaptive organizational behavior (Alarifi, 2026). Similarly, research on dynamic capabilities and digital technologies identifies sensing, seizing, and resource reconfiguration as central mechanisms through which organizations translate technological change into improved performance (Hajar et al., 2026). The finding is also consistent with research on digital platform enterprises, where dynamic capability enables organizations to continuously reconstruct supply chain ecosystems and coordinate rapidly changing relationships among actors (Chi, 2024). Thus, strategic maturity appears to be expressed most directly through an organization's capacity to transform environmental uncertainty into timely strategic action.

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Digital innovation capability showed the second strongest effect on competitive capability development, with β = 0.29. This result suggests that organizations that institutionalize experimentation, encourage the adoption of emerging technologies, support innovation-oriented cultures, and continually develop new digital products, services, and processes are better positioned to maintain competitiveness. The finding corresponds closely with research emphasizing that innovation capability is not an isolated creative function but a systemic organizational capacity involving strategy, resources, knowledge, managerial support, and ecosystem interactions. Pinto et al. demonstrated that innovation management capacity consists of multiple organizational capabilities that collectively facilitate the transformation of knowledge and resources into innovation outcomes (Pinto et al., 2025). Likewise, Xi and Li showed that technology orientation can enhance process innovation through digital capability and that innovation-oriented leadership strengthens this relationship (Xi & Zhi-yuan, 2025). Research on technological capabilities in industrial SMEs similarly indicates that digital transformation and sustainable adaptation to Industry 4.0 require organizations to combine technological competence with organizational and strategic innovation capabilities (Toscano-Romero et al., 2026). The current findings extend this reasoning by demonstrating that digital innovation capability is a central constituent of strategic maturity and one of its strongest pathways to competitive capability development.

Data-driven strategic decision-making also demonstrated a comparatively strong influence on competitive capability development, with β = 0.26. This finding indicates that organizations capable of accessing reliable information, applying analytical methods, monitoring strategic indicators in real time, and integrating evidence into decision processes possess stronger competitive capabilities. In digital environments, the volume and velocity of available information may become a source of strategic complexity unless organizations possess the analytical capabilities required to transform data into actionable intelligence. The present result is supported by research showing that algorithmic systems can enhance strategic decision-making when technological capabilities are integrated with managerial processes and organizational objectives (Alabdali et al., 2024). Similarly, Shahzad et al. emphasized that the effective adoption of social media analytics depends on organizational readiness and analytical capability and can enhance the development of organizational intellectual capital (Shahzad et al., 2026). Allaham further demonstrated the strategic potential of web scraping, bibliometric methods, and machine learning for generating competitive intelligence from large-scale digital information (Allaham, 2026). Taken together, these studies support the interpretation that strategic maturity requires an organization to progress beyond data accumulation toward institutionalized analytical intelligence capable of improving strategic responsiveness and competitive positioning.

Strategic digital leadership significantly influenced competitive capability development with β = 0.23, confirming that managerial vision, leadership commitment, digital competence, strategic foresight, and the prioritization of transformation initiatives are essential components of strategic maturity. Digital transformation often requires decisions that cut across conventional organizational boundaries and involve considerable uncertainty, resource commitment, and cultural change. Accordingly, senior leadership plays a critical role in coordinating transformation initiatives and ensuring that digital investments remain connected to long-term strategic priorities. This finding aligns with Jaciow et al., who showed that leadership engagement is associated with AI maturity and sustainable digital transformation under competitive pressure (Jaciow et al., 2026). It is also supported by research demonstrating that innovation-oriented leadership strengthens the relationship between technological orientation and innovation outcomes (Xi & Zhi-yuan, 2025). Zambonino-Torres et al. similarly emphasized that the strategic value generated by artificial intelligence depends on the integration of technological intelligence with strategic management and competitive positioning (Zambonino-Torres et al., 2026). Therefore, the significant role of strategic digital leadership in the current model suggests that technological transformation becomes competitively meaningful when leaders establish direction, allocate resources, promote organizational commitment, and create mechanisms for coordinated implementation.

Strategic–digital alignment had a positive and significant effect on competitive capability development, with β = 0.19. This finding demonstrates that digital transformation becomes strategically valuable when digital initiatives, technological investments, business objectives, and organizational priorities are mutually consistent. Organizations may invest substantially in digital technologies without obtaining corresponding competitive returns when technological initiatives remain disconnected from corporate strategy. The present result is consistent with Alrub and Cañizares, who emphasized the integration of dynamic capabilities and strategic planning as a prerequisite for successful digital transformation (Alrub & Cañizares, 2025). Dey

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likewise argued that linking AI adoption frameworks with digital maturity models can provide organizations with more coherent strategic pathways for technology implementation and capability development (Dey, 2025). In addition, González-Varona et al. highlighted the importance of developing organizational competence for digital transformation rather than treating transformation as a collection of separate technology projects (González-Varona et al., 2021). The present study extends these observations by positioning strategic–digital alignment as an explicit maturity dimension that directly contributes to competitive capability development.

Digital infrastructure and technological readiness significantly predicted competitive capability development with $\beta = 0.18$. Although this effect was smaller than those of agility, innovation, and data-driven decision-making, it remains important because digital infrastructure provides the technological foundation upon which higher-order strategic capabilities are built. Reliable platforms, integrated systems, cloud resources, interoperability, scalable architectures, and appropriate cybersecurity mechanisms allow organizations to execute digital strategies and respond efficiently to changing conditions. Marín et al. identified cloud computing as a strategically important resource capable of supporting agility, resilience, integration, and responsive supply chain strategies (Marín et al., 2026). Chuang et al. likewise showed that the successful application of smart manufacturing information systems depends on interactions among technological, organizational, and managerial conditions (Chuang et al., 2025). Digital transformation research in food supply chains has similarly shown that differences in technological readiness can shape the capacity of organizations to implement and benefit from digital solutions (Szegedi et al., 2022). The current findings therefore suggest that technological infrastructure should be regarded as a necessary enabling capability, although competitive advantage depends on how effectively that infrastructure is combined with strategic and organizational capabilities.

Organizational learning and knowledge capability showed a significant effect on competitive capability development, with $\beta = 0.16$. Although its direct effect was more modest than those of agility and innovation, knowledge capability is likely to serve as an underlying mechanism supporting several other maturity dimensions. Organizations need to acquire new technological knowledge, interpret external developments, share expertise across functions, retain organizational learning, and transform experience into improved strategic routines. Thango et al. identified knowledge management as a central element of digital transformation in SMEs and emphasized that successful transformation depends on the capacity to acquire, share, and integrate knowledge while overcoming organizational barriers (Thango et al., 2025). Toth et al. similarly proposed that AI integration in logistics requires the hybridization of knowledge-process capabilities and dynamic capabilities (Toth et al., 2025). Widianto et al. also emphasized the multilevel nature of digital capability, suggesting that technological competencies become strategically valuable when embedded within organizational and human capabilities (Widianto et al., 2026). Thus, the present result supports the view that strategic maturity requires the institutionalization of continuous learning and knowledge integration rather than episodic training or isolated expertise.

Strategic governance and performance management had the smallest but still statistically significant direct effect on competitive capability development, with $\beta = 0.14$. This finding should not be interpreted as evidence that governance is unimportant. Instead, governance may operate as an enabling and stabilizing mechanism through which other strategic capabilities are coordinated, monitored, and sustained. Digital-oriented organizations require mechanisms for accountability, strategic control, investment prioritization, portfolio management, performance measurement, and risk oversight to ensure that transformation initiatives remain aligned with organizational objectives. Jordan and Zabukovšek showed that organizational maturity and sustainability orientation influence the lifecycle and management of digital management systems, demonstrating the importance of institutionalized managerial structures in sustaining digital initiatives (Jordan & Zabukovšek, 2023). Alharbi's hybrid analysis of institutional resilience also suggests that successful digital transformation requires feedback mechanisms, systemic coordination, and governance structures capable of supporting resilience over time (Alharbi, 2026). The relatively smaller direct coefficient identified in the present study may therefore reflect the possibility that governance influences competitiveness partly through indirect pathways, such as improving strategic alignment, supporting investment discipline, or enhancing the effectiveness of other organizational capabilities.

The overall model further demonstrated that the eight strategic maturity dimensions collectively explained 68.40% of the variance in competitive capability development. This substantial proportion indicates that strategic maturity represents a

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powerful explanatory framework for understanding competitiveness in digitally oriented organizations. The finding is compatible with Zhang's research showing that digital maturity and dynamic capability jointly contribute to competitive advantage in electronic manufacturing (Zhang, 2024). It is also consistent with Khan et al., who identified multiple interconnected strategic and sustainability-related factors that determine competitive success in global markets (Khan et al., 2026). The results further correspond with research on AI adoption and transformation, which increasingly emphasizes that technological value emerges from complementary organizational capabilities rather than from technology acquisition in isolation (Ashkani et al., 2026). The transition toward Industry 5.0 similarly reinforces the importance of systems-based approaches integrating technology, people, sustainability, and organizational practices (Singh et al., 2026). Consequently, the present model supports the argument that digital competitiveness arises from capability orchestration: organizations must develop technological readiness while simultaneously strengthening leadership, analytics, innovation, knowledge, agility, strategic alignment, and governance.

The findings also contribute to the literature on maturity assessment by moving beyond models focused primarily on technology adoption or staged implementation. Existing reviews indicate that Industry 4.0 and digital maturity assessment instruments vary substantially in their dimensions and often prioritize technological criteria (Iribarren et al., 2024). Sector-specific approaches, including those developed for textiles and post-harvest engineering, demonstrate the usefulness of maturity models for diagnosing organizational readiness and identifying development priorities (Kahveci et al., 2026; Oelker et al., 2025). However, the present study suggests that strategic maturity should be understood as a broader organizational capability architecture in which digital resources are embedded within strategic decision systems and adaptive organizational processes. This interpretation also complements earlier work emphasizing that organizations must intentionally build competence for digital transformation (González-Varona et al., 2021). By integrating eight mutually reinforcing dimensions into a single framework, the study provides a more comprehensive explanation of how digital-oriented organizations can progress from fragmented digital activity toward strategically mature and competitively capable organizational systems.

A limitation of the present study is that the quantitative phase was restricted to managers, senior experts, strategic planning personnel, digital transformation professionals, and information technology specialists working in digital-oriented organizations in Tehran. Although this population was appropriate for evaluating strategic maturity, the contextual characteristics of organizations operating in Tehran may limit the generalizability of the findings to organizations in other regions, countries, or institutional environments. In addition, the cross-sectional design captures perceptions and organizational conditions at a single point in time and therefore cannot fully represent the evolutionary nature of strategic maturity. The use of self-reported questionnaire data may also introduce common method bias and perceptual subjectivity, particularly when respondents simultaneously evaluate organizational capabilities and competitive outcomes. Furthermore, while the proposed model explains a substantial proportion of competitive capability development, additional variables such as environmental turbulence, organizational size, industry characteristics, regulatory conditions, organizational culture, and resource availability may also influence the relationships identified in the model.

Future research should examine the proposed model in different geographical, industrial, and organizational contexts to determine the stability and boundary conditions of its dimensions and structural relationships. Longitudinal designs would be particularly valuable for investigating how organizations move between different levels of strategic maturity and whether improvements in specific dimensions precede measurable changes in competitive capability. Comparative research could also examine differences between digitally native firms and traditional organizations undergoing digital transformation, as well as differences between small and medium-sized enterprises and large corporations. Future studies may test mediating relationships among the identified dimensions, particularly whether technological readiness influences competitiveness through innovation, agility, or data-driven decision-making and whether governance and leadership operate primarily through indirect pathways. Researchers could additionally develop maturity-level classifications based on the identified dimensions and construct diagnostic scoring systems capable of distinguishing emerging, developing, established, and advanced levels of strategic maturity.

From a practical perspective, managers should treat strategic maturity development as an integrated organizational transformation program rather than as a collection of independent digital projects. Organizations should first diagnose their

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current capabilities across the eight identified dimensions and identify areas in which technological investment is not matched by corresponding strategic or organizational capability. Particular attention should be given to organizational agility, digital innovation, and data-driven decision-making because these dimensions demonstrated the strongest direct contributions to competitive capability development. Senior leaders should establish a coherent digital strategic vision, ensure alignment between technology initiatives and business priorities, and create governance mechanisms for monitoring transformation investments and outcomes. Organizations should also invest in scalable digital infrastructure while simultaneously strengthening knowledge-sharing systems, analytical competencies, innovation processes, cross-functional collaboration, and mechanisms for rapid resource reconfiguration. Strategic maturity should be monitored continuously through measurable indicators so that capability gaps can be identified early and resources can be directed toward areas offering the greatest contribution to sustained competitiveness.

Ethical Considerations

All procedures performed in this study were under the ethical standards.

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Conflict of Interest

The authors report no conflict of interest.

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