

Digital Transformation Success: A Systematic Review of Organizational Readiness and Capability Drivers

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Abstract. Digital transformation success remains inconsistently explained across fragmented research streams that emphasize leadership, technology, culture, or organizational capabilities in isolation. This study provides a systematic review of organizational readiness and capability drivers shaping digital transformation outcomes. Guided by the PRISMA protocol, 52 peer-reviewed studies published between 1 January 2015, and 5 February 2026 were synthesized using qualitative thematic analysis. The findings identify eight interrelated capability domains: strategic leadership, organizational readiness, dynamic capabilities, human capital, digital culture, technological infrastructure, resource orchestration, and ecosystem alignment. Importantly, organizational readiness emerges not as a static pre-implementation condition but as a multidimensional mediating capability linking strategic intent to implementation outcomes. By integrating previously fragmented constructs into a coherent, capability-based perspective, the study advances understanding of digital transformation as an interconnected socio-technical process rather than merely a technology adoption initiative. The study contributes a consolidated conceptual foundation and a co-evolutional systems model for future empirical research and offers guidance for organizations seeking to orchestrate capabilities for sustained digital transformation success.

Keywords: digital transformation; organizational readiness; dynamic capabilities; capability drivers; systematic review

1. Introduction

Digital transformation has become a strategic imperative as digital technologies reshape value creation, delivery, and capture [1], [2]. Rather than isolated technology adoption, digital transformation entails fundamental changes to organizational structures, processes, culture, and business models. Despite substantial investment, many transformation efforts fail to achieve intended outcomes, resulting in stalled implementations and limited performance gains [3]. This persistent gap has shifted attention from technology alone toward the organizational conditions that enable or constrain transformation success.

Prior research has identified numerous determinants: strategic alignment, leadership commitment, organizational culture, digital skills, governance, and technological infrastructure [4], [5], [6]. Organizational readiness has emerged as a critical precursor, reflecting preparedness to adopt and sustain new digital practices [7], [8]. However, these streams remain fragmented across information systems, management, and organizational change research. Existing studies offer limited integrative explanations of how leadership, readiness, capabilities, and technological foundations combine to influence outcomes. This fragmentation creates three specific gaps that our review addresses:

1. The isolation gap: Leadership, technology, culture, and human capital are examined as separate success factors, but studies rarely specify how these factors interact or whether some mediate the effects of others. Managers lack guidance on which conditions are merely correlated with success and which play causal or enabling roles.
2. The static-readiness gap: Organizational readiness is consistently operationalized as a pre-implementation maturity score or assessment checklist. This overlooks evidence that readiness evolves dynamically as transformation unfolds. No existing review has systematically synthesized evidence on readiness as a mediating capability rather than a static antecedent.
3. The mechanism gap: Prior reviews identify what matters (e.g., leadership, culture, technology) but rarely explain how or why these conditions produce transformation success. The mechanisms through which strategic intent translates into implementation outcomes remain underspecified.

To address these gaps, we conducted a systematic literature review following the PRISMA framework. Drawing on 52 peer-reviewed studies published between 1 January 2015 and 5 February 2026 and indexed in Web of Science and Scopus, we applied qualitative thematic synthesis to consolidate organizational conditions associated with digital transformation success.

This study makes four contributions. First, it systematically consolidates fragmented research by integrating critical success factors and organizational readiness constructs across disciplines. Second, it reconceptualizes organizational readiness as a dynamic, multidimensional mediating capability rather than a pre-implementation assessment. Third, it advances an integrated capability-based perspective explaining digital transformation success as the interaction of leadership, human capital, digital culture, technology, and ecosystem alignment. Fourth, it provides a co-evolutional systems model (Figure 2) and research agenda to guide future empirical work.

The paper is structured as follows. Section 2 outlines key concepts. Section 3 describes the methodology. Section 4 presents findings. Section 5 discusses implications and proposes the conceptual model. Section 6 concludes with limitations and future research directions.

2. Conceptual Background

2.1. Digital Transformation as Socio-Technical Change

Digital transformation is increasingly conceptualized as fundamental organizational transformation rather than mere technology adoption. Contemporary scholarship frames it as affecting structures, processes, culture, and value-creation mechanisms [7], [9]. This integration requires organizations to rethink traditional management practices and develop new capabilities, skills, and leadership approaches suited to digitally enabled environments [2]. Digital transformation is therefore understood as a socio-technical phenomenon involving the interaction of technological systems, organizational capabilities, and human actors.

2.2. Organisational Readiness, Capabilities and Success Factors: Definitions and Boundaries

To address conceptual ambiguity in literature, Table 1 defines three core constructs with clear boundaries:

Table 1. Inclusion and exclusion criteria

Construct	Definition (as used in this study)	Boundary / What it is NOT
Critical success factors	Discrete organisational conditions, practices, or attributes that empirically correlate with positive digital transformation outcomes	A checklist or prescriptive formula; factors may be interdependent and context-dependent
Organisational readiness	A multidimensional, evolving organisational state reflecting alignment among strategic, technological, cultural, human, and governance dimensions, as well as collective change commitment and efficacy, that enables the initiation and sustainment of digital transformation	A static pre-implementation assessment; a maturity score alone; synonymous with technological preparedness
Capability drivers	The organisational capacities (including dynamic capabilities, IT capabilities, absorptive capacity) that enable firms to deploy resources, reconfigure processes, and adapt to digital change	The same as success factors (capabilities are deeper, more durable organisational properties); merely having resources without the ability to deploy them

2.2.1. Relationship among constructs

Critical success factors are observable conditions associated with success. Organisational readiness is a higher-order construct that subsumes multiple success factors and reflects the organisation's preparedness to act. Capability drivers are enduring organisational capacities that readiness enables. Thus: success factors → indicators of readiness → readiness enables capabilities → capabilities drive outcomes.

3. Methodology

We adopted a systematic literature review guided by the PRISMA framework to ensure transparency, replicability, and rigor.

3.1. Search Strategy

The search was conducted between 1 January 2026 and 5 February 2026 (updated in May 2026). The Boolean search string was:

"digital transformation" OR "digital transformation initiative" OR "digitalization project" AND "critical success factor" OR "key success factor" OR "CSF" AND "organizational readiness" OR "organizational readiness" OR "change readiness" OR "technology readiness". Two databases were selected: Web of Science (all collections) and Scopus (title, abstract, keywords). These are widely recognized as the most comprehensive indexing platforms for peer-reviewed research in information systems, management, and digital transformation.

3.2. Identification of Studies and Screening

The search process in Figure 1 yielded 107 studies from WoS (after excluding 12 dissertations) and 11 from Scopus, totaling 106 records. After removing 7 duplicates, 99 studies proceeded to screening. Stage 1 (title and abstract screening): Excluded 21 studies, leaving 78 for full-text assessment. Stage 2 (full-text screening): Excluded 26 studies for the following reasons: non-English (2), not focused on digital transformation (7), did not address organizational readiness or success factors (17). Final included studies: 52.

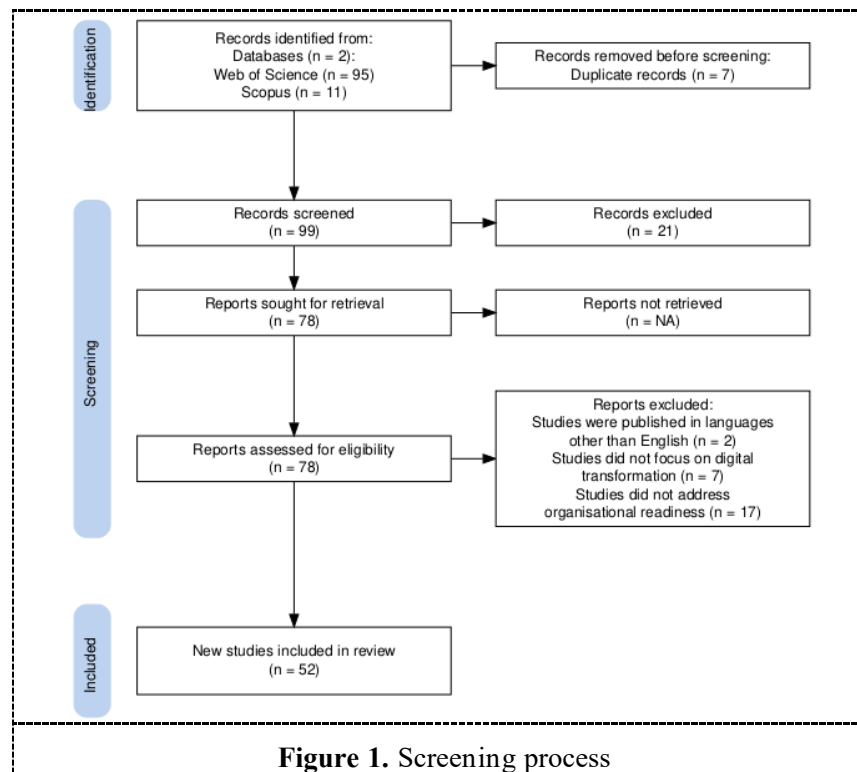


Table 2 details the exclusion and inclusion process adopted for the paper.

Table 2. Inclusion and exclusion criteria

Criterion Category	Inclusion	Exclusion
Topic focus	Digital transformation projects, initiatives, or programmes in organisational contexts	General IT adoption without transformation framing; purely technical studies
Construct coverage	Examines critical success factors, organisational readiness, maturity, or preparedness	Outcomes without discussing success factors or readiness
Publication type	Peer-reviewed journal articles; conference proceedings	Books, book chapters, dissertations, editorials, opinion pieces, white papers
Language	English	Non-English
Publication year	Between 1 January 2015 and 5 February 2026	Pre-2015
Methodology	Empirical (quantitative, qualitative, mixed) or conceptual/theoretical with clear argumentation	Purely descriptive without analytical generalisability

3.2.1. Justification for the period between 1 January 2015 and 5 February 2026 timeframe

2015 marks an inflection point in digital transformation scholarship following Westerman et al.'s [10] influential work and the widespread diffusion of cloud computing, big data analytics, and AI technologies. This timeframe was selected to ensure that the review captures current and relevant

developments in digital transformation, given the rapid evolution of digital technologies and organizational practices. Over the past decade, digital transformation has shifted from a technology-focused concept to a strategic organizational imperative, influencing by advancements in cloud computing, big data analytics, artificial intelligence, mobile technologies.

3.2.2. Justification for sample size (n=52)

The identification of 52 eligible studies reflects rigorous inclusion criteria rather than a narrow search. Our initial search retrieved 106 records; exclusions were primarily because studies addressed DT outcomes without explicit examination of success factors or readiness (n=17) or focused on technology adoption without organizational transformation framing (n=7). The DT literature remains fragmented, and many rigorous studies examine specific success factors in isolation without engaging with readiness constructs, the very fragmentation our review addresses. Thus, the sample size reflects the state of the literature. We acknowledge that future updates, as literature matures, may yield larger samples.

3.3. Quality assessment of the included studies

We assessed the quality of included studies using an adapted CASP checklist. Each study was scored on eight dimensions (0–2 per dimension; maximum 16). The average score was 13.4 (range 10–16). No study score was below 10; all were retained. The quality assessment results are presented in Table 3. We used an adapted CASP (Critical Appraisal Skills Programme) checklist with eight dimensions, each scored 0 (not met), 1 (partially met), or 2 (fully met). Maximum possible score = 16. The mean score was 13.4 (SD = 1.6), with a range of 10–16. No study was excluded on quality grounds.

Quality dimensions assessed:

- I. Clarity of research aim – Explicitly stated research question/objective
- II. Methodological rigour – Appropriate method for the question; clear design
- III. Construct definition – Clear definition of DT, readiness, or success factors
- IV. Data/analysis quality – Appropriate data collection/analysis (empirical) or logical coherence (conceptual)
- V. Findings substantiation – Claims supported by evidence or argument
- VI. Generalizability/transferability – Explicit discussion of scope conditions or limitations
- VII. Theoretical contribution – Advances theory beyond description
- VIII. Reflexivity/limitations – Acknowledges limitations

Table 3. Inclusion and exclusion criteria

ID	Citation	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Total	Quality
1	[11]	2	2	2	2	2	1	2	1	14	High
2	[12]	2	2	2	2	2	2	2	1	15	High
3	[13]	2	1	2	2	2	1	2	1	13	Moderate
4	[14]	2	2	2	2	2	2	2	2	16	High
5	[15]	2	2	2	2	2	1	2	1	14	High
6	[16]	2	2	2	1	2	1	2	1	13	Moderate
7	[17]	2	1	2	2	2	1	2	1	13	Moderate
8	[18]	1	2	2	2	1	1	2	1	12	Moderate
9	[19]	2	2	2	2	2	2	2	1	15	High
10	[20]	2	1	2	1	2	1	2	1	12	Moderate
11	[21]	2	1	2	2	1	1	1	1	11	Moderate
12	[22]	2	2	2	2	2	2	2	2	16	High
13	[23]	2	2	2	2	2	1	2	1	14	High
14	[24]	1	1	2	2	1	1	2	1	11	Moderate
15	[1]	2	1	2	2	2	1	2	1	13	Moderate

ID	Citation	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Total	Quality
16	[25]	2	2	2	1	2	1	2	1	13	Moderate
17	[26]	1	2	2	2	1	1	2	1	12	Moderate
18	[27]	2	1	2	2	1	1	1	1	11	Moderate
19	[28]	2	2	2	2	2	2	2	2	16	High
20	[29]	2	2	2	2	2	1	2	1	14	High
21	[30]	2	2	2	2	2	2	2	1	15	High
22	[31]	2	1	2	2	2	1	2	1	13	Moderate
23	[32]	2	2	2	2	2	1	2	1	14	High
24	[33]	2	2	2	1	1	1	1	1	11	Moderate
25	[34]	2	2	2	2	2	2	2	2	16	High
26	[35]	1	2	2	2	2	2	2	1	14	High
27	[36]	2	2	2	2	2	1	2	1	14	High
28	[37]	2	2	2	2	2	2	2	2	16	High
29	[38]	2	2	2	1	2	1	2	1	13	Moderate
30	[39]	2	2	2	2	2	2	2	2	16	High
31	[40]	2	2	2	2	2	1	2	1	14	High
32	[41]	2	2	2	2	2	2	2	2	16	High
33	[42]	2	2	2	2	2	1	2	1	14	High
34	[43]	2	1	2	2	2	1	2	1	13	Moderate
35	[44]	2	2	2	2	2	2	2	2	16	High
36	[45]	2	2	2	2	2	1	2	1	14	High
37	[46]	2	1	2	1	2	1	2	1	12	Moderate
38	[47]	2	2	2	2	2	2	2	2	16	High
39	[48]	2	2	2	2	2	2	2	1	15	High
40	[4]	1	1	2	2	2	1	2	1	12	Moderate
41	[49]	2	2	2	2	2	1	2	1	14	High
42	[50]	2	2	2	2	2	1	2	1	14	High
43	[51]	2	2	2	2	2	2	2	1	15	High
44	[52]	2	2	2	2	2	2	2	2	16	High
45	[53]	2	2	2	2	2	1	2	1	14	High
46	[54]	2	2	2	2	2	1	2	1	14	High
47	[55]	2	2	2	2	2	2	2	2	16	High
48	[56]	2	2	2	2	2	1	2	1	14	High
49	[57]	2	2	2	2	2	1	2	1	14	High
50	[3]	1	1	2	2	1	1	2	1	11	Moderate
51	[58]	2	2	2	2	2	2	2	2	16	High
52	[59]	2	2	2	2	2	1	2	1	14	High

Table 4 presents the quality profile of the included studies across the assessed appraisal dimensions.

Table 4. Inclusion and exclusion criteria

Dimension	Mean score (0–2)	% scoring 2 (fully met)
Q1: Clarity of research aim	1.87	87%
Q2: Methodological rigour	1.73	73%
Q3: Construct definition	2.00	100%

Dimension	Mean score (0–2)	% scoring 2 (fully met)
Q4: Data/analysis quality	1.85	85%
Q5: Findings substantiation	1.87	87%
Q6: Generalisability/transferability	1.33	33%
Q7: Theoretical contribution	1.94	94%
Q8: Reflexivity/limitations	1.25	25%

Table 4 shows that studies were strongest on construct definition (Q3) and theoretical contribution (Q7). The weakest areas were generalisability/transferability (Q6) and reflexivity/limitations (Q8), reflecting a common pattern in the digital transformation literature: authors often fail to discuss scope conditions or explicitly acknowledge limitations.

3.4. Data extraction and synthesis

The 52 studies were analysed using qualitative thematic synthesis. Codes were inductively generated and organised into higher-order themes.

4. Findings

The thematic synthesis identified eight interrelated themes. Table 5 presents the identified themes and their corresponding codes derived from the analysis of the studies included.

Table 5. A slightly more complex table with a narrow caption

Theme	Representative Codes
Strategic leadership	Top management commitment; digital leadership; executive sponsorship; strategic alignment; board digital fluency; vision communication
Organisational readiness	Digital maturity; readiness frameworks; pre-implementation audit; change efficacy; willingness to change; readiness-performance linkage
Dynamic capabilities	Sensing and seizing; IT capability; data analytics; strategic agility; knowledge management; resource mobilisation
Human capital	Digital literacy; skill gaps; upskilling; cross-functional teams; employee adaptability; change fatigue
Digital culture	Learning orientation; experimentation; risk tolerance; digital mindset; decentralised decision-making
Technological infrastructure	Cloud adoption; cybersecurity; ERP readiness; system interoperability; digital platforms
Ecosystem alignment	Government policy; regulatory frameworks; competitive pressure; stakeholder collaboration; supply chain integration
Transformation outcomes	Operational efficiency; innovation performance; competitive advantage; resilience; market expansion

4.1. Strategic leadership

Strategic leadership consistently emerged as a central organizational driver. Leadership commitment, executive sponsorship, digital vision, and board-level digital fluency were repeatedly identified as critical enablers [12], [14], [27], [39], [55]. Leadership contributions included articulating vision, aligning transformation with strategy, and mobilizing resources. Managerial digital readiness and cognitive readiness were emerging competencies. Leadership was associated with improved outcomes by

facilitating strategic alignment, innovation culture, and capacity development [12], [14], [15], [30], [38], [39], [40], [44], [47], [52], [55], [60], [61], [62], [63].

4.2. Organisational readiness as a mediating capability

Organizational readiness emerged as a multidimensional construct encompassing technological, strategic, cultural, operational, legal, and human dimensions [22], [29], [30], [34], [50], [53], [61], [64], [65], [66]. Readiness assessments and maturity models were commonly employed to evaluate preparedness. Change commitment, change efficacy, and willingness to change were critical components [15], [20]. A central pattern: organizational readiness functions as a mediating mechanism linking leadership with intent to transformation outcomes. Readiness is not solely a pre-implementation condition, but an organizational capability associated with how transformation initiatives are enacted and sustained.

4.3. Dynamic capabilities

Digital transformation was strongly associated with dynamic capabilities, IT capabilities, knowledge management, and innovation capabilities [19], [40], [44]. Sensing, seizing, and transforming capabilities enabled organizations to respond to technological change. Absorptive capacity and organizational learning were critical mechanisms for integrating new technologies and adapting business processes.

4.4. Human capital and workforce transformation

Human capital emerged as a central pillar. Digital skills, upskilling, employee adaptability, and training programmes were key enablers [13], [14], [39]. Skill gaps, resistance to change, and change fatigue were major barriers. Workforce capability development was positioned as a critical condition supporting sustained implementation.

4.5. Digital culture and change orientation

Innovation-oriented cultures, psychological safety, openness to change, and learning orientation supported transformation [12], [28], [42]. Organizations with strong digital cultures exhibited higher experimentation and successful technology adoption. Risk-averse environments slowed progress.

4.6. Technological infrastructure and resource orchestration

Financial readiness, IT infrastructure, cybersecurity, and cloud adoption were foundational enablers [15], [39], [63]. Inadequate infrastructure was consistently connected to implementation challenges.

4.7. Ecosystem and institutional alignment

External drivers, government policy, regulatory frameworks, competitive pressure, and stakeholder expectations shaped transformation processes [21], [29], [41]. Ecosystem collaboration and partner digital maturity were key factors.

4.8. Transformation outcomes

Digital transformation was associated with improvements in operational efficiency, innovation capability, organizational resilience, and competitive advantage [44], [47], [61].

5. Discussion

5.1. Theoretical positioning: A capability-based socio-technical perspective

The paper anchors an integrated perspective in two complementary theoretical traditions. Dynamic capabilities theory [67], [68] explains how organizations develop sensing, seizing, and transforming capabilities to navigate technological uncertainty. Socio-technical systems theory [69] emphasizes that digital transformation outcomes emerge from the alignment of social (e.g., culture, human capital) and technical (e.g., infrastructure, data systems) subsystems. Together, these traditions explain why isolated investments in technology or leadership produce limited returns: transformation requires the co-evolution

of multiple organizational subsystems. Our framework extends both traditions by foregrounding organizational readiness as the mediating mechanism through which dynamic capabilities are activated and socio-technical alignment is achieved.

5.2. What is new compared to prior reviews?

Table 6 contrasts our review with five influential prior reviews.

Table 6. A slightly more complex table with a narrow caption

Prior Review	Focus	Limitation	Our Contribution
Vial [70] – <i>JSIS</i>	Conceptual framework of DT	Does not synthesise empirical evidence on readiness	Empirical synthesis of 52 studies
Hanelt et al. [71] – <i>JMS</i>	Digital transformation pathways	Focuses on strategic choices, not capabilities as mediators	Reconceptualises readiness as <i>mediating capability</i>
Verhoef et al. [72] – <i>JBR</i>	Three-phase DT model	Stage-based, static view of readiness	Dynamic, co-evolutional perspective
Nadkarni & Prügl [73] – <i>IJMR</i>	Digital transformation maturity	Readiness is treated as a pre-implementation condition	Readiness as <i>evolving, multidimensional capability</i>
Kraus et al [74]– <i>TFSC</i>	DT success factors	Fragmented list without integration	Unified capability ecosystem model

5.2.1. Novelty statement

Unlike prior reviews that catalogue success factors as independent determinants, our synthesis makes three novel contributions: (a) we reconceptualize organizational readiness not as a static pre-implementation condition but as a dynamic mediating capability; (b) we identify eight interdependent capability domains that form an integrated ecosystem rather than a checklist; and (c) we propose a co-evolutional systems model explaining how strategic leadership, readiness and capabilities interact over time.

5.3. How does our framework differ from existing models?

Table 7 contrasts our model with three dominant frameworks.

Table 7. A slightly more complex table with a narrow caption

Existing Model	Core Logic	Limitation	Our Model's Difference
TOE framework [75]	Technological, organisational, environmental contexts influence adoption	Static; treats readiness as input; does not explain process	Readiness as a mediating mechanism linking leadership to outcomes
Dynamic capabilities [68]	Sensing, seizing, transforming capabilities	Under-specifies the role of readiness as distinct from dynamic capabilities	Positions readiness as an enabling condition for capability deployment
Maturity models [10]	Stage-based progression	Linear, deterministic; ignores feedback loops	Co-evolutional systems model with bidirectional arrows and no fixed stage sequence

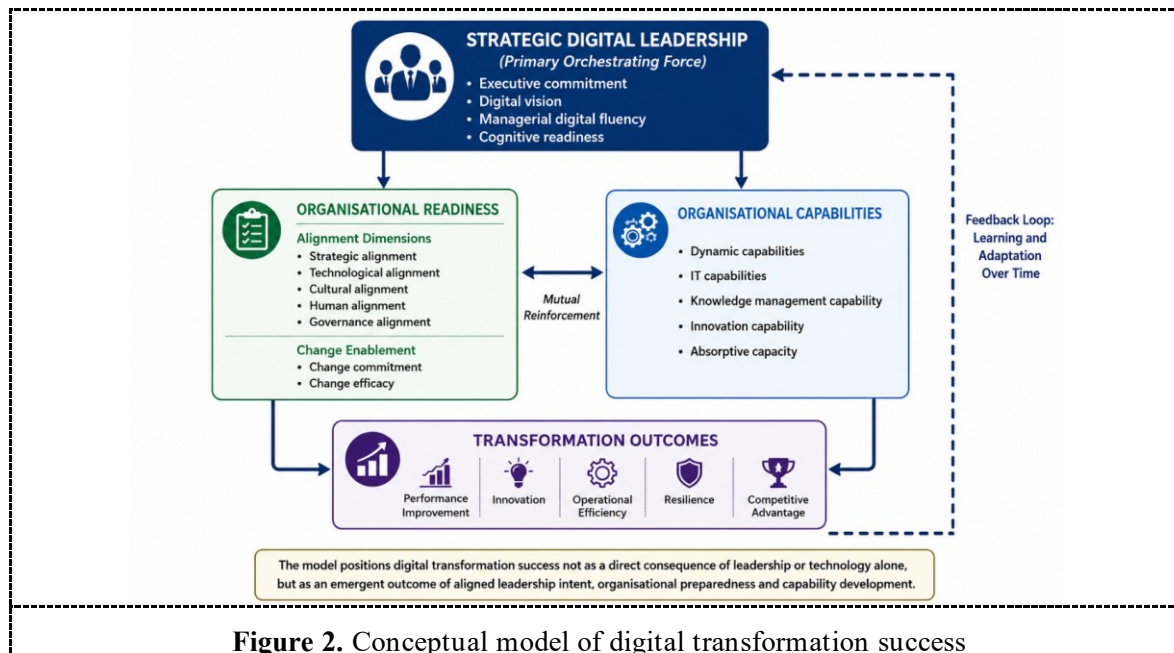
5.3.1. Key differentiator

Whereas existing models treat organisational readiness as either an antecedent (TOE), an implicit component of capabilities (dynamic capabilities view), or a maturity stage (stage models), our framework

positions readiness as a distinct, multidimensional, mediating capability that evolves alongside leadership action and dynamic capabilities. This reframing explains why organisations with similar technological investments achieve divergent outcomes: readiness mediates the translation of strategic intent into implementation effectiveness.

5.4. Conceptual model: Co-evolutional systems model

Building on the synthesis, we propose a co-evolutional systems model (Figure 2). The model conceptualizes digital transformation success as an outcome of an integrated organizational system driven by strategic leadership and enabled through organizational readiness and capabilities.



5.5. Managerial implications

From a practical perspective, organizations should priorities: (a) strategic leadership development, particularly board-level digital fluency and cognitive readiness; (b) continuous workforce upskilling and change management to mitigate resistance and change fatigue; (c) formal readiness assessment practices before and during transformation; (d) cultivation of adaptive, innovation-oriented cultures with psychological safety; and (e) sustained investment in digital infrastructure, cybersecurity and data governance. Policymakers can support transformation by fostering institutional environments that encourage collaboration, regulatory clarity, and the development of digital capabilities, particularly for small and medium-sized enterprises.

6. Conclusion

6.1. Managerial implications

This study advances understanding of digital transformation by demonstrating that success is best explained not by technology adoption alone but by the coordinated interaction of organizational, technological, and human capabilities. The synthesis indicates that strategic leadership and organizational readiness function as central organizing mechanisms. A key contribution lies in reconceptualizing organizational readiness as a dynamic mediating capability linking strategic intent to implementation outcomes. By integrating fragmented streams within a capability-based, socio-technical perspective, the

study provides a consolidated conceptual explanation and a co-evolutional systems model of how organizational alignment enables sustained transformation.

6.2. Managerial implications

This study has limitations. First, as a systematic review relying on secondary literature, findings reflect variations in how digital transformation success and readiness are conceptualized across studies, and do not provide primary empirical validation. Second, the cross-sectional nature of the reviewed literature may limit context-specific generalizability across industries and institutional environments. Third, the rapid evolution of digital technologies suggests that some insights may require continuous updating as organizational practices evolve.

6.3. Managerial implications

Future research should empirically examine the dynamic relationships identified in this synthesis, particularly: (a) the mediating role of organizational readiness using longitudinal, quantitative methods; (b) the interaction between leadership, culture and capability development across diverse institutional contexts; (c) comparative studies across industries (e.g., manufacturing vs. services) and firm sizes (SMEs vs. large enterprises); (d) the feedback loops proposed in our co-evolutional model, which suggest that transformation outcomes reshape leadership cognition and readiness over time. Such studies will further clarify how capability orchestration evolve throughout digital transformation journeys.

7. References

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