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Decoding value creation: A framework for adaptive strategy-technology integration in organisations

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Abstract

Organisations frequently encounter difficulties in determining the optimal timing for prioritising strategies or technologies to enhance value creation. This study presents a context-sensitive conceptual framework that integrates both approaches into a hybrid value creation pathway. Drawing upon the Value Chain Theory, Resource-Based View, Dynamic Capabilities Theory, Strategic Alignment Theory, and Disruptive Innovation Theory, the framework delineates three pathways: strategy-led, technology-led, and hybrid-led. The selection among these pathways is influenced by contextual factors such as market dynamics, organisational maturity, technological disruption, and strategic clarity. Leadership plays a crucial role as an integrator, interpreting environmental signals to guide decisions on the most suitable path for value creation. This adaptive framework surpasses rigid planning, enabling organisations to respond effectively and maintain resilience in rapidly evolving, innovation-driven markets. The hybrid pathway harmonises long-term strategic clarity with short-term technological agility, thereby fostering sustained competitive advantage. This study offers a novel theoretical perspective to inform leaders' situational decision-making in complex organisational environments.

Keywords: Adaptive Decision-Making; Conceptual Framework; Hybrid Approach; Strategy; Technology; Value Creation

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1. Introduction

The value chain framework is fundamental to understanding how organisations create value in today's rapidly evolving business environment. (Pierce and Cleary, 2024; Porter, 2001; Mapanga et al., 2018). This framework highlights the critical roles of both strategic intent and technological capability, which collectively guide organisational direction, resource allocation, operational efficiency, and innovation capacity (Liu and Wang, 2024; Ajayi and Laseinde, 2021). Strategic decisions shape the goals and coordination of value chain activities to achieve competitive advantage (Ebrahim et al., 2024; Hamel and Prahalad, 1989), while technological capability decisions equip organisations with tools to enhance performance and responsiveness within dynamic markets (Dalwai et al., 2024; Simatupang et al., 2017).

A key challenge facing organisations is determining how strategy and technology should interact to create value. Specifically, should strategic decisions dictate technological adoption, or should emerging technologies shape an organisation's strategic direction? This question is highly pertinent in complex and competitive business environments, where ambiguity can lead to a misaligned focus, inefficient resource use, and missed opportunities for innovation (Furr, 2021; Van Zeebroeck et al., 2023). The resolution of this challenge depends on the organisational leadership's ability to seamlessly integrate strategic and technological decisions in view of the prevailing context of market dynamics, organisational maturity, and technological disruption (Mapanga and Gavaza, 2025).

Despite the broad recognition of the interdependence of strategy and technology, the literature seldom clarifies their sequence or primacy in value chain orchestration. Most studies emphasise alignment without addressing which element should lead under varying conditions, leaving organisations without definitive guidance for resource allocation and strategic focus (Marín et al., 2023; World Economic Forum, 2024). This gap underscores the pressing need for a context-sensitive framework to facilitate adaptive decision-making and maintain a competitive edge in the face of rapid changes (Hutchison and Das, 2007; Zheng et al., 2025). The current study addresses this need by developing a conceptual model that enables value chain leaders to prioritise strategy or technology according to evolving organisational contexts in a flexible manner.

The value chain framework remains fundamental to understanding how organisations create value in rapidly evolving business environments (Mapanga et al., 2018; Pierce and Cleary, 2024; Porter, 2001). Within this framework, strategic intent and technological capability are pivotal and interdependent drivers of value creation, guiding the direction, resource allocation, operational efficiency, and innovation capacity of organisations (Liu and Wang, 2024; Ajayi and Laseinde, 2021). In increasingly complex and competitive ecosystems, firms face the challenge of deciding whether to prioritise strategic objectives over technological adoption or to let emerging technologies shape their strategy. This dilemma is critical because unclear guidance can cause misaligned priorities and lost innovation opportunities within value chains (Furr, 2021; Van Zeebroeck et al., 2023).

Leadership plays a central role as an adaptive integrator of strategy and technology, dynamically prioritising these constructs based on contextual factors, such as market dynamics, organisational maturity, and technological disruption (Mapanga and Gavaza, 2025). While the existing literature widely recognises the importance of both elements, a significant gap remains regarding their sequencing and primacy in value chain orchestration. Most studies focus on their alignment, seldom addressing which should lead in varied contexts,

leaving organisations without clear directions for resource allocation and strategic focus (Marín et al., 2023; World Economic Forum, 2024).

This study fills this gap by developing a robust, context-sensitive conceptual framework that positions leadership as the decisive force in balancing strategy and technology for effective value-chain performance. Grounded in established theories such as Dynamic Capabilities and Strategic Alignment, the framework offers actionable insights for organisations to enhance agility, innovation, and sustained competitive advantage in dynamic markets.

2. Literature review

The relationship between strategy, technology, and value creation has become increasingly critical as businesses face rapid market transformations, shifting customer expectations, and digital innovations. Both strategy and technology are key drivers of organisational success (Porter, 1985; Barney, 1991; Henderson and Venkatraman, 1993; Christensen, 1997). However, an enduring and unresolved question remains: Which strategy or technology should take precedence in shaping value chain orchestration? This question is not merely academic, as ambiguity can impact decision-making, resource allocation, and competitiveness in value chains.

2.1. Strategy primacy perspective

Historically, strategic management theories have positioned strategy as the dominant force driving value creation, with technology as a secondary supportive mechanism (Porter, 1985; Dodgson, 2021). Porter's value chain model exemplifies this by showing how strategic decisions determine the configuration and coordination of value-creating activities. In this view, technology supports the implementation of strategic priorities, such as cost leadership or differentiation (Liu and Wang, 2024; Tu, 2025). This approach assumes relatively stable business environments where deliberate planning and alignment are possible (Ebrahim et al., 2024). However, rapid technological advances and market disruptions are increasingly challenging this fixed precedence, calling for reassessment (Furr, 2021; Tariq, 2024).

2.2. Technology-led perspective

Research suggests that technology can lead to strategic shifts, create new opportunities, and disrupt established business models, transforming how firms compete and create value (Vial, 2021; Kilari, 2025; Lobo and Akdere, 2023). Technologies, such as AI, blockchain, and digital platforms, often compel firms to reassess and adapt their strategic orientations. This suggests that technology may lead rather than merely follow a strategy in a dynamic setting (Ferreira et al., 2020; Praveen, 2024). Nevertheless, these perspectives tend to assume high-velocity innovation-driven environments, thus limiting their universal applicability (Porter, 1985; Barney, 1991).

2.3. A dynamic contextual debate

The core limitation of the existing literature is its tendency to adopt either/or perspectives, assuming a static or sequential precedence of strategy or technology. However, emerging consensus underscores the need for strategic alignment and mutual reinforcement between strategy and technology (Henderson and Venkatraman, 1993; Mikalef et al., 2019). Research indicates that context matters; in stable industries, strategic goals mainly guide technology investment, whereas in fast-paced industries, technology often drives strategic renewal (Corvello et al., 2025; Nour and Arbussà, 2025). Misalignment causes inefficiencies and threatens competitiveness, particularly in smaller firms (Chen et al., 2025; Cheng et al., 2024).

Furthermore, leadership has emerged as a pivotal but underexplored factor in balancing this dialectic within value chain orchestration, moving beyond internal optimisation to managing complex, ecosystem-wide technological and strategic networks (Begeç and Akyuz, 2023; Bharadwaj and Yeo, 2020). Despite the broad recognition of their interplay, clear guidance on prioritising strategy or technology under varying circumstances remains absent (Marín et al., 2023; World Economic Forum, 2024).

3. Underpinning theoretical frameworks

This study is anchored in five complementary theoretical perspectives, offering a robust framework for analysing the interplay between strategy, technology, and value creation. These perspectives encompass Value Chain Theory (Porter, 1985), Resource-Based View (RBV) (Barney, 1991; Wernerfelt, 1984), Dynamic Capabilities Theory (Teece et al., 1997), Strategic Alignment Theory (Henderson and Venkatraman, 1993), and Disruptive Innovation Theory (Christensen, 1997). Each theory provides unique insights into organisational decision-making, adaptation to change, and structuring activities to generate value. Furthermore, they serve as critical lenses for understanding the evolving leadership roles of strategy and technology in contemporary value chains. These frameworks were examined in greater depth to provide a comprehensive conceptual foundation.

3.1. Porter’s value chain theory

Porter's (1985) value chain theory offers a foundational framework for understanding how organisations create value through interconnected activities, ranging from inbound logistics to marketing and after-sales services. Within this framework, strategy serves as the guiding principle, determining which activities to prioritise, how they should be executed, and how they interrelate to produce a competitive advantage (Molete et al., 2025; Sun et al., 2024; Zahra and Covin, 1993). This theory posits that strategic planning precedes and shapes operational decisions, including technology deployment, within the value chain. This perspective supports the notion that strategy directs and governs the utilisation of technology. By contrast, Bejleri et al. (2023) argue that Porter's model does not adequately address scenarios in which technology alters the structure or function of the value chain. This limitation highlights the need for innovative approaches that recognise technology as a potential catalyst for transformation within the value chain.

3.2. Resource-based view (RBV)

The Resource-Based View (RBV) (Barney, 1991) posits that firms achieve a sustainable competitive advantage by exploiting their distinctive internal resources and capabilities. Hence, one can argue that the organisation's strategy is the reference point for identifying, developing, and deploying these resources, with technology being one such resource. As Olaitan and Mapanga (2024) noted, technology only becomes valuable to an organisation when it is rare, difficult to imitate, and aligned with its strategic objectives. In other words, this perspective supports the strategic management view that only strategy guides the utilisation of resources, including technology.(Hamel and Prahalad, 1989; Nour and Arbussà, 2025; Porter, 2001). Any contrary view raises a critical question about the mechanisms by which technology, as a strategic resource, can shape the organisation's strategy, rather than being decided upon as a tool for implementing strategy.

3.3. Dynamic capabilities theory (DCT)

Teece et al. (1997) coined the term "dynamic capabilities" perspective to explain how firms adapt within rapidly evolving environments. This view emphasises a firm's capacity to identify and reconfigure resources to capitalise on new opportunities. Numerous studies (Tariq, 2024; Teece, 2023; Van De Wetering et al., 2018; Van Zeebroeck et al., 2023; Vial, 2021) have asserted that technology facilitates these firm capabilities by offering data, automation, and connectivity, enabling organisations to respond promptly. Therefore, according to Tariq (2024), technology plays a leading role in driving strategic changes in fast-paced and innovative industries. Firms begin by adopting new technologies and adjusting their strategies to exploit emerging opportunities. Thus, the DCT challenges the traditional assumption that prioritises strategic decisions over technological changes, proposing instead flexible, context-dependent dynamics between strategy and technology within value chains. (Ferreira et al., 2020; Kilari, 2025; Nour and Arbussà, 2025; Sun et al., 2024).

3.4. Strategic alignment theory (SAT)

Strategic Alignment Theory (Henderson and Venkatraman, 1993) emphasises the congruence between business strategy and technological change, positing that organisational performance is enhanced when the strategy-technology decisions are aligned, with misalignment leading to inefficiencies and missed opportunities. Unlike theories that prioritise either strategy or technology, this theory advocates for mutual reinforcement without prescribing a leading domain, thus offering a flexible perspective in which leadership may shift based on factors such as organisational maturity, industry conditions, or external pressures(Benrqya et al., 2024; Vereecke et al., 2018a; Zang et al., 2025). This perspective explains why some firms succeed by adopting a strategy-led approach, while others pursue technology-led decisions to guide strategic evolution(Chen et al., 2025; Henderson and Venkatraman, 1993; Marín et al., 2023). According to Smith and Thomas (2024), Strategic Alignment Theory provides a framework for examining the dynamic primary roles of strategy or technology in determining the performance of value chains in different contexts.

3.5. Disruptive innovation theory (DIT)

Christensen (1997) demonstrated how emergent technologies can fundamentally disrupt established firms and transform industries and value chains. Thus, firms are forced to reassess their strategic priorities to avert

the effects of technological innovation. Indeed, technologies such as artificial intelligence, blockchain, and cloud computing have disrupted conventional business models, often catching incumbents unprepared (Lobo and Akdere, 2023; Nalini, 2024; Rogers, 2003). Clearly, the DIT provides robust evidence that technology can compel organisations to alter their strategic directions, especially when technological innovations introduce novel changes to customer value propositions or expectations. In such instances, firm strategy must adapt to the technology rather than dictate it (Dhlamini, 2025; Morris and Kuratko, 2025; Saman et al., 2025; Van Zeebroeck et al., 2023); thus, traditional models assume the primacy of strategy-led approaches in driving value creation in value chains, highlighting the need for a conceptual framework that acknowledges technology-led value creation in organisations.

Together, these theories inform the complexity and fluidity of the precedence dynamics between strategy and technology in organisations. While some theories, such as Porter's Value Chain and the Resource-Based View (RBV), emphasise strategy-driven approaches to value creation, others, such as the Dynamic Capabilities Theory and Disruptive Innovation Theory, highlight the critical role of technological advancements in shaping strategic directions. Strategic Alignment Theory attempts to bridge the dichotomy between these perspectives, demonstrating how strategy and technology can mutually reinforce each other in response to evolving organisational and environmental contexts. However, it remains prescriptive, similar to others. The framework guiding leadership decisions to deal with the fluid interplay between strategy and technology in value creation remains fragmented. It calls for developing a unified conceptual framework to guide leaders when and how value chain incumbents should prioritise strategy-led or technology-led approaches to value creation within their value chains. Such a framework will ensure that strategy- and technology-led approaches are effectively leveraged to create practical value and sustain competitive advantages in contemporary value chains. This study aimed to achieve this goal, and the subsequent section outlines how it was accomplished.

4. Methodology

This study employs a conceptual research design to develop a theoretical framework that explains the fluid interaction between strategy, technology, and leadership in organisational value creation. Unlike empirical research, this approach focuses on synthesising literature, integrating theory, and developing the conceptual framework based on existing scholarly works and other authoritative sources.(Jaakkola, 2020; Kumar et al., 2022). The methodology for this study comprises six unified stages designed to ensure rigorous conceptual development: literature identification and mapping, theory selection and construct mapping, contextual analysis, conceptual framework development, and theoretical refinement.

4.1. Literature identification

Complete literature mapping was conducted to gather foundational and contemporary academic sources related to strategy, technology, and leadership in value chains. We performed searches in Scopus, Web of Science, and Google Scholar, using carefully selected keywords such as "strategy," "technology," "leadership," "value chain," "dynamic capabilities," "strategic alignment," and "disruptive innovation." We limited the selection of articles to peer-reviewed journals, conference proceedings, and influential industry reports

published in English from 2015 to 2024, to allow for a robust knowledge foundation that would adequately inform the conceptual framework.

4.2. Theory selection and construct mapping

Based on citation impact, relevance, and conceptual fit, we selected five principal theoretical perspectives: The Value Chain Theory, Resource-Based View, Dynamic Capabilities Theory, Strategic Alignment Theory, and Disruptive Innovation Theory. To identify areas of convergence or divergence and establish the groundwork for developing the framework, we systematically analysed theories to map pertinent constructs and propositions pointing to strategy, technology, and leadership application in value chains.

4.3. Contextual analysis

To ensure that the conceptual framework accommodates the complexity and contingency inherent in real-world organisational contexts, we analysed the literature for contextual factors such as strategic clarity, market shifts, organisational maturity, and technological innovations that would likely influence whether strategy-led or technology-led decisions would be made to improve value creation in value chains.

4.4. Conceptual framework synthesis

Drawing upon insights from previous stages, we iteratively developed an initial conceptual framework to explain the circumstances in which organisations in the value chain would adopt a strategy-led or technology-led approach to optimise value creation in the value chain by integrating theories, concepts, and findings of the existing theoretical literature.

4.5. Theoretical refinement

The initial framework underwent further iterative refinement through a comprehensive synthesis of established case studies and findings from the literature. Discrepancies and ambiguities were addressed through rigorous literature review and, where necessary, informed academic judgment. All methodological decisions regarding inclusion, categorisation, and framework structure were meticulously documented to ensure transparency and replicability. Consequently, the resulting conceptual framework is firmly grounded in and supported by existing theoretical perspectives and literature, ensuring its robustness and relevance.

5. Strategy and technology prioritisation framework for value creation

This study presents a conceptual framework that elucidates the dynamic interaction between strategic direction and technological capability to enhance value-chain performance. This framework is based on the notion that effective value creation requires integrating strategy, technology, and adaptive leadership to navigate contextual complexity.

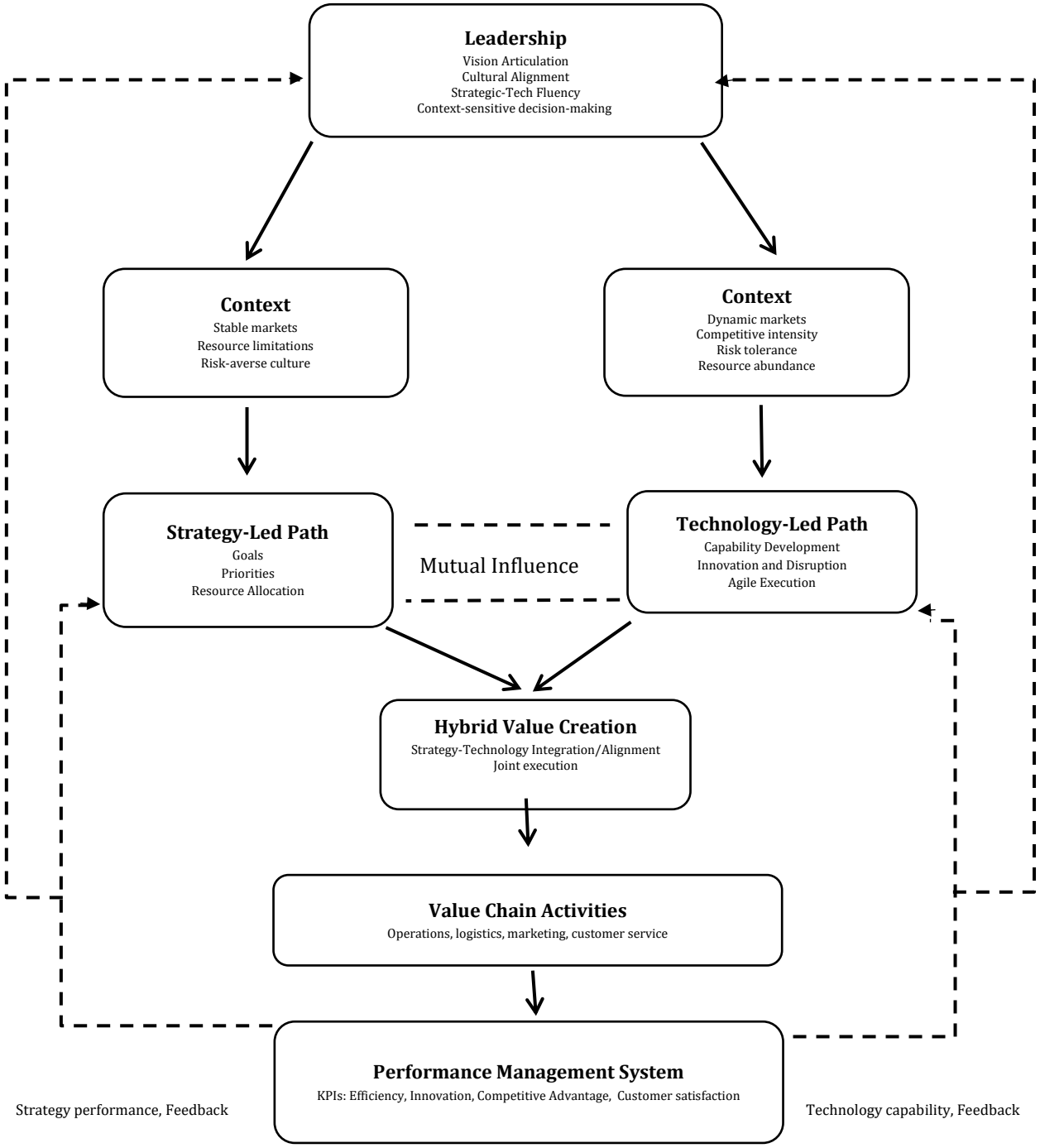


Figure 1. Conceptual Framework for Strategy-Technology Integration in Organisational Value Chains

This framework (Figure 1) illustrates how leadership informed by contextual intelligence guides an organisation's strategic orientation towards a strategy-led, technology-led, or hybrid approach to orchestrate value creation across the value chain. At the core is the leadership node, which interprets environmental signals and internal capabilities to determine the most appropriate value-creation pathway.

5.1. Leadership

Leadership is crucial in shaping an organisation's strategic and technological approaches to value creation. Leaders proficient in strategy and technology can articulate and communicate a vision that fosters cultural alignment throughout the entire value chain. This alignment is rooted in strong contextual intelligence, which refers to a leader's ability to interpret and respond to environmental signals, including market dynamics (Porter, 1980), organizational maturity (Vereecke et al., 2018b; Holmström and Magnusson, 2025), technological disruptions (Christensen, 1997; Li, 2024), and strategic clarity (Kaplan and Norton, 1996). Leadership is pivotal in ensuring that value-creation activities remain aligned with the continuously evolving internal capabilities and external demands (Hambrick and Mason, 1984; Lou et al., 2025; Sundowo et al., 2024).

5.2. Contextual variables

The conceptual framework delineates four principal contextual variables that shape an organisation's strategy for value creation, each aligning with a distinct strategic trajectory. Under stable market conditions characterised by predictable demand and low volatility, organisations can effectively engage in deliberate planning and execution (Porter, 1985; Kaplan and Norton, 1996). Resource limitations necessitate a judicious balance between strategic disciplines and selective technological integration to sustain value creation (Tushman and O' Reilly, 1996; Teece, 2023). Conversely, evolving customer expectations and dynamic markets are characterised by rapid demand shifts, heightened competitive intensity, demand-driven innovation, and the continuous reconfiguration of value chain activities (Christensen, 1997; Bharadwaj and Yeo, 2020; Teece et al., 1997; Venkatraman, 1989). Depending on environmental conditions, organisations adopt specific strategies that dictate the prioritisation of strategy and technology.

5.3. Strategy-led approach

Within the conceptual framework, this component signifies the structured methodology for value creation employed by firms within a value chain. Leaders prioritise strategic clarity, operational alignment, and long-term planning in response to technological disruptions. Typically, they are inclined to adopt this methodology when they perceive the firm as operating in markets characterised by stability and relative predictability (Carreno, 2025; Crace et al., 2023; Kotter, 1990; Marreiros et al., 2023; Schein, 1992). This approach is also pertinent when a firm encounters internal resource constraints and a risk-averse organisational culture (Porter, 1985; Barney, 1991). In this context, technology serves as a supportive tool for achieving operational efficiency and incremental innovation, without disrupting a firm's strategic direction. Contextual intelligence is crucial for informed resource allocation and competitive positioning decisions, ensuring that value chain activities, such as operations, logistics, and customer service, are closely aligned with strategic objectives.

5.4. Technology-led approach

The technology-led pathway represents an innovation-centric approach to value creation in which technological capabilities drive strategic transformations within a firm. This approach is typically employed when a firm faces evolving market conditions, innovation pressures, and resource abundance (Christensen, 1997; Kilari, 2025; Mirzaei and Darbani, 2023). The emphasis is on agility and experimentation, leveraging

emerging technologies to disrupt existing models and creating new value sources. Instead of adhering to a predetermined strategy, technology redefines a firm's strategic direction, facilitating radical shifts in business models and competitive positioning (Carreno, 2025; Crace et al., 2023; Kotter, 1990; Marreiros et al., 2023; Schein, 1992). Value chain activities are reorganised in alignment with technological innovations and capabilities to achieve scalability and market impact in the value creation process. Performance monitoring is a crucial component guiding the iterative refinement of a firm's technological investments and strategic direction. However, this approach entails higher levels of risk and requires robust governance and adaptive leadership (Choori, 2023; Kilari, 2025; Mirzaei and Darbani, 2023; Teece et al., 1997; Venkatraman, 1989).

5.5. Hybrid value creation

The hybrid component represents an integrative approach to value creation, emphasising the simultaneous optimisation of strategic clarity and technological agility. This approach is efficient in contexts characterised by moderate resource availability, evolving customer expectations, and demand for organisational adaptability (Tushman and O'Reilly, 1996; Teece, 2023). Leaders adopting this approach must exhibit heightened contextual intelligence to balance strategy and technology in response to the changing environmental conditions. Technology and strategy are viewed as interdependent constructs, with technological tools enhancing strategic execution (Bharadwaj and Yeo, 2020; Christensen, 1997; Dodgson, 2021) and strategies guiding technology adoption (Dodgson, 2021; Kaplan and Norton, 1996; Porter, 1985; Furr, 2021). Value chain activities are designed for both efficiency and innovation, enabling firms to remain responsive without losing coherence (Choori, 2023; Kilari, 2025; Mirzaei and Darbani, 2023; Teece et al., 1997; Venkatraman, 1989). Performance feedback mechanisms for this component are multidimensional, allowing the system to capture strategic performance and technological effectiveness, thereby providing continuous recalibration. By adopting this approach, firms gain resilience and competitiveness in complex environments, positioning themselves to adapt, scale, and sustain their values over time.

5.6. Performance management and adaptive feedback mecha

Performance measurement and management systems are integral to the conceptual framework, enabling a systematic evaluation of the alignment between strategy and technology across value-chain activities. By employing key performance indicators (KPIs) such as operational efficiency, innovation outcomes, customer satisfaction, and competitiveness, the system provides leadership with valuable insights into integration outcomes (Betts et al., 2022; Kaplan and Norton, 1996; Neely et al., 1995). Embedded feedback loops transform the framework from a static structure to a dynamic value-creation mechanism. Operating across three integrated dimensions, feedback from value chain activities informs strategic recalibration (Argyris and Schoen, 1978; Tripathi and Kalia, 2024; Zang et al., 2025), whereas insights into technological capabilities guide the necessary technological investments to maintain alignment with organisational requirements (Al Mehairbi, 2024; Jackson and Rahman, 2017; Solanki et al., 2024). Concurrently, combined feedback mechanisms either confirm or challenge leadership decisions, reinforcing or redirecting a firm's strategic direction. This framework develops essential capabilities for sustaining value creation in complex and evolving environments by fostering a culture of continuous learning, real-time adaptation, and strategic agility (Sidik et al., 2024; Potgieter et al., 2005; Teece et al., 1997; Venkatraman, 1989; Emily et al., 2025).

6. Discussion

This conceptual study presents a flexible, context-sensitive framework to elucidate how organisations can effectively balance strategy and technology to optimise their value chains. The adaptive prioritisation of strategy-technology elements in value creation necessitates organisational leadership with high strategy-technology fluency and contextual intelligence levels. In this context, leadership functions as an integrative force between the strategy and technology components of value creation, considering organisational contextual factors, such as market dynamics, organisational maturity, technological disruption, and strategic clarity [Mapanga and Gavaza, 2025; Porter, 1985; Christensen, 1997; Kaplan and Norton, 1996]. This insight addresses a significant gap in the existing literature, which has predominantly focused on strategy-technology alignment without considering the guiding influence of context in value creation (Marín et al., 2023; World Economic Forum, 2024).

This conceptual framework acknowledges the influence of various contextual variables such as stable markets, resource constraints, evolving customer expectations, and a dynamic competitive environment on organisational value creation. This demonstrates that neither strategy nor technology can universally guarantee value creation under all conditions (Bharadwaj and Yeo, 2020; Teece et al., 1997; Tushman and O' Reilly, 1996). Instead, the framework adopts a contingency perspective, recognising that the optimal approach depends on situational factors. This perspective aligns with and extends established theories such as Porter's Value Chain, Dynamic Capabilities, and Strategic Alignment by integrating them into a cohesive, leadership-centric model (Porter, 1985; Barney, 1991; Henderson and Venkatraman, 1993; Teece et al., 1997; Christensen, 1997). It accommodates complexity, environmental shifts, and organisational evolution over time, providing a flexible mechanism for adaptive decision making and sustained competitive advantage.

Furthermore, this conceptual framework introduces multidimensional feedback mechanisms that transform the framework from a static structure to a dynamic system of learning and adaptation. By continuously monitoring key performance indicators such as operational efficiency, innovation output, customer satisfaction, and competitiveness, organisations can iteratively refine their strategic and technological investments (Kaplan and Norton, 1996; Argyris and Schoen, 1978; Betts et al., 2022; Neely et al., 1995; Solanki et al., 2024). This feature significantly contributes to the theoretical discourse on dynamic capabilities and organisational agility, offering clear pathways for ensuring continuous improvement in organisational value creation (Teece, 2023; Sidik et al., 2024).

From a practical perspective, this conceptual framework offers leaders a comprehensive decision-making tool that transcends the limitations of rigid and uniform value-creation models. It advocates adaptive decision-making, wherein the organisation's strategy and technology are deployed synergistically and adjusted according to contextual realities. This synergy enhances organisational resilience, innovation, and competitiveness, particularly in contemporary volatile technology-driven markets, a defining feature of the Fourth Industrial Revolution (Furr, 2021; Kilari, 2025; Olaitan and Mapanga, 2024).

This study acknowledges several limitations inherent to conceptual research. The framework requires empirical validation across diverse industries and geographic contexts to evaluate its generalisability and practical applicability (Marín et al., 2023; Zheng et al., 2025). Furthermore, the influence of organisational culture and sector-specific dynamics on the integrative role of leadership remains unexplored (Bejleri et al., 2023; Bejleri et al., 2024). Future research should employ mixed-method empirical designs to test the

hypotheses derived from the framework and investigate cultural and sectoral adaptations (Jaakkola, 2020; Kumar et al., 2022).

7. Conclusion

This study investigates the prioritisation of strategy versus technology in driving value creation within organisational value chains by developing a context-sensitive conceptual framework. This framework synthesises strategy- and technology-driven approaches into a hybrid pathway, drawing upon key theoretical perspectives such as Porter's Value Chain Theory, Resource-Based View, Dynamic Capabilities Theory, Strategic Alignment Theory, and Disruptive Innovation Theory. It positions leadership as the central adaptive integrator, dynamically prioritising strategy or technology based on contextual factors such as market dynamics, organisational maturity, technological disruption, and strategic clarity. The study acknowledges that stable markets with resource constraints favour a strategy-led approach, whereas dynamic innovation-driven environments require technology-led responses. This study also supports a hybrid approach that balances long-term strategic clarity with short-term technological agility, in moderate contexts. Embedded multidimensional feedback mechanisms enhance continuous learning and recalibration, fostering sustained competitive advantage and organisational resilience in volatile environments. This leadership-centric conceptual framework advances the literature by moving beyond static or unidirectional assumptions, offering actionable guidance for flexible situational decision making. Although theoretically robust and extensively grounded in contemporary literature, the conceptual framework awaits empirical validation across diverse industries and cultural settings to assess its generalisability and inform sector-specific adaptations, thus charting a promising future research agenda focused on refining how organisations orchestrate strategy and technology integration for effective value creation.

References

Ajayi, M.O. and Laseinde, O.T. (2021), "Application of Porter's value chain model for construing potential prospects and lacunas in Industry 4.0 adoption by 21st-century manufacturers", in: Trzcielinski, S., Mrugalska, B., Karwowski, W., Rossi, E. and Di Nicolantonio, M. (Eds), *Advances in Manufacturing, Production Management and Process Control*, Springer International Publishing, pp. 353-363. https://doi.org/10.1007/978-3-030-80462-6_44

Argyris, C. and Schoen, D.A. (1978), *Organisational Learning: A Theory of Action Perspective*, Reading, MA.Available at: https://books.google.co.za/books?id=Bb41tAEACAAJ (Accessed 13 Nov. 2025).

Barney, J. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, Vol. 17 No. 1, pp. 99-120. https://doi.org/10.1007/978-3-030-80462-6_44

Begeç, S. and Akyuz, G.A. (2023), "Requirements of collaborative and transformational leadership in digital ecosystems: Techno-orchestrating leaders in a VUCA world", *Revista de Administração de Empresas*, Vol. 63 No. 5. https://doi.org/10.1590/s0034-759020230505

Bejleri, E., Boriçi Kraja, Y. and Memaj, G. (2023), "Porter Framework vs A More Extended Framework", *International Journal of Religion*, Vol. 4 No. 1, pp. 115-124. https://doi.org/10.61707/8aa0e811

Bejleri, E., Kraja, Y.B. and Memaj, G. (2024), "Porter framework vs a more extended framework", *International Journal of Religion*, Vol. 5 No. 9, pp. 115-124. https://doi.org/10.61707/8aa0e811

Benrqya, Y., Chetioui, Y. and Jerboui, C. (2024), "Investigating the relationship between supply chain maturity and performance: An emerging market study", *International Journal of Productivity and Performance Management*, Vol. 73 No. 6, pp. 1772–1796. https://doi.org/10.1108/IJPPM-09-2022-0477

Betts, K., Gutiérrez-Franco, E. and Ponce-Cueto, E. (2022), "Key metrics to measure the performance and impact of reusable packaging in circular supply chains", *Frontiers in Sustainability*, Vol. 3. https://doi.org/10.3389/frsus.2022.910215

Bharadwaj, A. and Yeo, J. (2020), "Digital ecosystem and collaboration", in: Schlegelmilch, B.B. and Winer, R.S. (Ed.s), *The Routledge Companion to Strategic Marketing*, Routledge, pp. 151-162. https://doi.org/10.4324/9781351038669-13

Carreno, A. (2025), "An analytical review of John Kotter's change leadership framework: A modern approach to sustainable organisational transformation", Working Paper – Version 3, Institute for Change Leadership and Business Transformation. https://doi.org/10.2139/ssrn.5044428

Chen, X., Shi, Q., Zhou, Z. and Cheng, X. (2025), "Impact of digital transformation misalignment on supplier financial risk", *International Journal of Operations and Production Management*, Vol. 45 No. 1, pp. 152–184. https://doi.org/10.1108/IJOPM-09-2023-0773

Cheng, Y., Zeng, B. and Lin, W. (2024), "Heterogeneous effects of inclusive digital economy and resource distribution mismatch on corporate ESG performance in China", *Resources Policy*, Vol. 92. https://doi.org/10.1016/j.resourpol.2024.104973

Choori, A. (2023), "Challenges and opportunities of emerging technologies in strategic management", *Journal of Technology in Entrepreneurship and Strategic Management*, Vol. 2 No. 4, pp. 1-7. https://doi.org/10.61838/kman.jtesm.2.4.1

Christensen, C.M. (1997), *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*, Harvard Business School Press.

Corvello, V., Singh, R., Singh, A. and Katragadda, R. (2025), "Fostering technological advancements through innovation ecosystems: A path to modern industrialisation", in: Singh, R., Corvello, V., Coniglio, I.M. and Khan, S. (Eds), *Innovation Ecosystems and Sustainable Technologies*, Emerald Publishing Limited, pp. 189–210. https://doi.org/10.1108/978-1-83662-368-720251009

Crace, R.K., Hardy, C.J. and Crace, R.L. (2023), "Authentic excellence for organisations: Creating flourishing cultures", in: *Authentic Excellence for Organisations: Creating Flourishing and Cultures*, Taylor and Francis, pp. 164. https://doi.org/10.4324/9781003265726

Dalwai, A., Khanna, V., Das, S. and Singh, R. (2024), "A collectivisation approach to agricultural supply and value chains", in: Kumari, S., Venkatesh, V.G., Tripathy, K.K., Padhan, H. and Nair, M.P.S. (Eds), *Advances in Logistics, Operations, and Management Science*, IGI Global, pp. 73–110. https://doi.org/10.4018/979-8-3693-4330-2.ch003

Dhlamini, J. (2025), "Setting the strategic direction: The role of the mission, vision, values statements, and strategic leadership", *Journal of Strategy and Management*, Vol. 18 No. 3, pp. 591-615. https://doi.org/10.1108/JSMA-08-2024-0193

Dodgson, M. (2021), "The strategic management of technology and innovation", in: Dodgson, M. (Ed.), *Oxford Research Encyclopedia of Business and Management*, Oxford University Press. https://doi.org/10.1093/acrefore/9780190224851.013.145

Ebrahim, S., Hackbarth, G., Ostapski, A. and Coggins, T. (2024), "Strategic intent: A conceptual approach", *American Journal of Management*, Vol. 24 No. 1. https://doi.org/10.33423/ajm.v24i1.6980

Emily, S., Xu, Z., Xiangang, W., Rahul, M., Jiajia, C. and Zhiyuan, W. (2025), "The AI-driven smart supply chain: Pathways and challenges to enhancing enterprise operational efficiency", *Journal of Theory and Practice in Economics and Management*, Vol. 2 No. 2, pp. 63-74.

Ferreira, M.J., Moreira, F., Pereira, C.S. and Durão, N. (2020), "The digital transformation at organisations – The case of retail sector", in: Rocha, Á., Adeli, H., Reis, L.P., Costanzo, S., Orovic, I. and Moreira, F. (Ed.s), *Trends and Innovations in Information Systems and Technologies*, Springer International Publishing, Vol. 1159, pp. 560–567. https://doi.org/10.1007/978-3-030-45688-7_56

Furr, N.R. (2021), "Technology entrepreneurship, technology strategy, and uncertainty", in: Duhaime, I.M., Hitt, M.A. and Lyles, M.A. (Ed.s), *Strategic Management*, Oxford University Press, pp. 205–220. https://doi.org/10.1093/oso/9780190090883.003.0012

Hambrick, D.C. and Mason, P.A. (1984), "Upper echelons: The organisation as a reflection of its top managers", *The Academy of Management Review*, Vol. 9 No. 2, p. 193. https://doi.org/10.2307/258434

Hamel, G. and Prahalad, C.K. (1989), "Strategic intent", *Harvard Business Review*, Vol. 67 No. 3, pp. 63–76.

Henderson, J.C. and Venkatraman, H. (1993), "Strategic alignment: Leveraging information technology for transforming organisations", *IBM Systems Journal*, Vol. 32 No. 1, pp. 472-484. https://doi.org/10.1147/sj.382.0472

Holmström, J. and Magnusson, J. (2025), "Navigating the organisational AI journey: The AI transformation framework", *Business Horizons*. https://doi.org/10.1016/j.bushor.2025.01.002

Hutchison, J. and Das, S.R. (2007), "Examining a firm's decisions with a contingency framework for manufacturing flexibility", *International Journal of Operations and Production Management*, Vol. 27 No. 2, pp. 159–180. https://doi.org/10.1108/01443570710720603

Jaakkola, E. (2020), "Designing conceptual articles: Four approaches", *AMS Review*, Vol. 10 No. 1–2, pp. 18-26. https://doi.org/10.1007/s13162-020-00161-0

Jackson, G.W. and Rahman, S.S.M. (2017), "Security governance, management, and strategic alignment via capabilities", in: *2017 International Conference on Computational Science and Computational Intelligence (CSCI)*, IEEE, pp. 44–49. https://doi.org/10.1109/CSCI.2017.8

Kaplan, R.S. and Norton, D.P. (1996), *The Balanced Scorecard: Translating Strategy into Action*, Harvard Business School Press.

Kilari, S.D. (2025), "The impact of artificial intelligence on automated manufacturing and supply chain systems: Advancements, challenges, and future prospects", available at: https://ssrn.com/abstract=5204723 (Accessed 13 Nov. 2025).

Kotter, J.P. (1990), *A Force for Change: How Leadership Differs from Management*, The Free Press.

Kumar, S., Dawson, K., Pollard, R. and Jeter, G. (2022), "Analyzing theories, conceptual frameworks, and research methods in EdD dissertations", *TechTrends*, Vol. 66, pp. 721–728. https://doi.org/10.1007/s11528-022-00739-4

Li, K. (2024), "Enterprise innovation and sustainable development strategy in the era of digital economy", *International Journal of Global Economics and Management*, Vol. 4 No. 2, pp. 389–396. https://doi.org/10.62051/ijgem.v4n2.43

Liu, R. and Wang, Y. (2024), "Enhancing enterprise value creation through intelligent digital transformation of the value chain: A deep learning and edge computing approach", *Journal of the Knowledge Economy*, Vol. 16 No. 1, pp. 2601–2619. https://doi.org/10.1007/s13132-024-02087-5

Lobo, F. and Akdere, M. (2023), "Strategic technology innovation management and leadership theory – Knowledge structure and research front implications", in: *Proceedings of the International Conference on Industrial Engineering and Operations Management*, March 9. https://doi.org/10.46254/AN13.20230283

Lou, B., Shepherd, N.G., Strobl, A. and Bauer, F. (2025), "Playing politics: An upper echelons' perspective on political behaviour during acquisition decision making", *British Journal of Management*, Vol. 36 No. 1, pp. 110–129. https://doi.org/10.1111/1467-8551.12831

Mapanga, A. and Gavaza, B.K. (2025), "Towards a unified conceptual framework for understanding the entrepreneurship construct", *International Journal of Business Ecosystem and Strategy*, Vol. 7 No. 3, pp. 102–113. https://doi.org/10.36096/ijbes.v7i3.828

Mapanga, A., Ogutu Miruka, C. and Mavetera, N. (2018), "Barriers to effective value chain management in developing countries: New insights from the cotton industrial value chain", *Problems and Perspectives in Management*, Vol. 16 No. 1, pp. 22–35. https://doi.org/10.21511/ppm.16(1).2018.03

Marín, R., Santos-Arteaga, F.J., Tavana, M. and Di Caprio, D. (2023), "Value chain digitalisation and technological development as catalysts for innovation in small and medium-sized enterprises", *Journal of Innovation and Knowledge*, Vol. 8 No. 4, 100454. https://doi.org/10.1016/j.jik.2023.100454

Marreiros, S.I., Romana, F.A. and Lopes, A.A. (2023), "The impact of organisational culture in the public management leadership style", *American Journal of Industrial and Business Management*, Vol. 13 No. 5, pp. 312–327. https://doi.org/10.4236/ajibm.2023.135020

Mikalef, P., Boura, M., Lekakos, G. and Krogstie, J. (2019), "Big data analytics capabilities and innovation: The mediating role of dynamic capabilities and moderating effect of the environment", *British Journal of Management*, Vol. 30 No. 2, pp. 272–298. https://doi.org/10.1111/1467-8551.12343

Mirzaei, A. and Darbani, S. (2023), "Emerging technologies in strategic management", *Journal of Technology in Entrepreneurship and Strategic Management*, Vol. 2 No. 2, pp. 1–5. https://doi.org/10.61838/kman.jtesm.2.2.1

Molete, O.B., Mokhele, S.E., Ntombela, S.D. and Thango, B.A. (2025), "The impact of IT strategic planning process on SME performance: A systematic review", *Businesses*, Vol. 5 No. 1, p. 2. https://doi.org/10.3390/businesses5010002

Morris, M.H. and Kuratko, D.F. (2025), "Dynamics of strategy implementation across different types of new ventures", *Organisational Dynamics*. https://doi.org/10.1016/j.orgdyn.2025.101128

Nalini, R. (2024), "The transformative power of artificial intelligence in decision-making, automation, and customer engagement", in: Figueiredo, P.C.N. (Ed.), *Advances in Logistics, Operations, and Management Science*, IGI Global, pp. 189–208. https://doi.org/10.4018/979-8-3693-0712-0.ch009

Neely, A., Gregory, M. and Platts, K. (1995), "Performance measurement system design: A literature review and research agenda", *International Journal of Operations and Production Management*, Vol. 15 No. 4, pp. 80–116. https://doi.org/10.1108/01443579510083622

Olaitan, O.O. and Mapanga, A. (2024), "Unleashing the power of the 4IR in organisational value chains: A conceptual analysis", *South African Journal of Information Management*, Vol. 26 No. 1. https://doi.org/10.4102/sajim.v26i1.1805

Pierce, G.L. and Cleary, P.F. (2024), "The persistent educational digital divide and its impact on societal inequality", *PLOS ONE*, Vol. 19 No. 4. https://doi.org/10.1371/journal.pone.0286795

Pistrui, B. and Diófási-Kovács, O. (2020), "Industry 4.0 through the lenses of technology, strategy, and organisation: A compilation of case study evidence", *Vezetéstudomány / Budapest Management Review*, Vol. 51 No. 11, pp. 14–25. https://doi.org/10.14267/VEZTUD.2020.11.02

Porter, M.E. (1980), *Competitive Strategy: Techniques for Analysing Industries and Competitors*, Free Press, New York, NY.

Porter, M.E. (1985), *Competitive Advantage: Creating and Sustaining Superior Performance*, Free Press.

Porter, M.E. (2001), "The value chain and competitive advantage", in: Barnes, D. (Ed.), *Understanding Business Processes*, Routledge, London, pp. 50–66.

Potgieter, A., April, K. and Bishop, J. (2005), "Complex adaptive enterprises", in: Khosrow-Pour, M. (Ed.), *Encyclopedia of Information Science and Technology*, IGI Global, pp. 475–480. https://doi.org/10.4018/978-1-59140-553-5.ch084

Praveen, K.V. (2024), "Transformative impact of AI and cloud technologies: A comparative analysis across healthcare, retail, and mobile financial services", *International Journal for Multidisciplinary Research*, Vol. 6 No. 6, p. 29894. https://doi.org/10.36948/ijfmr.2024.v06i06.29894

Rogers, E.M. (2003), *Diffusion of Innovations* (5th ed.), Free Press.
Schein, E.H. (1992), *Organisational Culture and Leadership* (2nd ed.), Jossey-Bass.

Saman, N.R.M., Mahmud, N. and Nor, N.M. (2025), "Strategic technology adoption for sustainability performance in SMEs: A comprehensive review", *International Journal of Research and Innovation in Social Science*, Vol. 9 No. II, pp. 1060–1079. https://doi.org/10.47772/IJRISS.2025.9020085

Shi, X. and Zailani, S. (2025), "Capabilities and resources for value creation and sustainable competitive advantage: A study of the Chinese video game industry", *Sustainability*, Vol. 17 No. 2, p. 605. https://doi.org/10.3390/su17020605

Sidik, M.A., El Fathali, H.I., Ayarkwa, J., Acheampong, A., Osei-Tutu, S. and Afful, A.E. (2024), "Criteria for evaluating environmental sustainability performance of building projects: A review", *Transactions on Engineering and Computing Sciences*, Vol. 12 No. 2, pp. 83–109. https://doi.org/10.14738/tecs.122.16768

Simatupang, T.M., Piboonrungroj, P. and Williams, S.J. (2017), "The emergence of value chain thinking", *International Journal of Value Chain Management*, Vol. 8 No. 1, p. 40. https://doi.org/10.1504/IJVCM.2017.082685

Smith, S.D. and Thomas, T.F. (2024), "The effects of strategic alignment and strategic clarity on multidimensional task performance", *Accounting, Organisations and Society*, Vol. 112, 101524. https://doi.org/10.1016/j.aos.2023.101524

Solanki, A., Jain, K. and Jadiga, S. (2024), "Building a data-driven culture: Empowering organisations with business intelligence", *International Journal of Computer Trends and Technology*, Vol. 72 No. 2, pp. 46–55. https://doi.org/10.14445/22312803/IJCTT-V72I2P109

Sun, Y., Tan, C., Lim, K.H., Liang, T. and Yeh, Y. (2024), "Strategic contexts, strategic orientations, and organisational technology adoption: A configurational approach", *Information Systems Journal*, Vol. 34 No. 4, pp. 1355–1401. https://doi.org/10.1111/isj.12497

Sundowo, A.W., Hermawan, A., Wijayanto, D., Ikhsan, M., Rachmad, F., Kuswoyo, Y. and S., S.A. (2024), "Transformative adaptive leadership in the digital age: A systematic review of emerging paradigms and socio-economic implications for organisational resilience", *Journal of Social and Economics Research*, Vol. 6 No. 2, pp. 128–136. https://doi.org/10.54783/jser.v6i2.636

Tariq, M.U. (2024), "Strategic integration of technological advances in modern business practices", in: Sedky, A. (Ed.), *Advances in Business Information Systems and Analytics*, IGI Global, pp. 95–120. https://doi.org/10.4018/979-8-3693-6447-5.ch004

Teece, D.J. (2023), "The evolution of the dynamic capabilities framework", in: Adams, R., Grichnik, D., Pundziene, A. and Volkmann, C. (Ed.s), *Artificiality and Sustainability in Entrepreneurship*, Springer International Publishing, pp. 113–129. https://doi.org/10.1007/978-3-031-11371-0_6

Teece, D.J., Pisano, G. and Shuen, A. (1997), "Dynamic capabilities and strategic management", *Strategic Management Journal*, Vol. 18 No. 7, pp. 509–533. https://doi.org/10.1002/(SICI)1097-0266(199708)18:7%3C509::AID-SMJ882%3E3.0.CO;2-Z

Tripathi, A. and Kalia, P. (2024), "Examining the effects of a supportive work environment and organisational learning culture on organisational performance in ICT companies", *Innovation*, Vol. 26 No. 2, pp. 257–277. https://doi.org/10.1080/14479338.2022.2116640

Tushman, M.L. and O'Reilly, C.A. III. (1996), "Ambidextrous Organizations: Managing Evolutionary and Revolutionary Change", *California Management Review*, Vol. 38 No. 4, pp. 8–30. https://doi.org/10.2307/41165852

Van De Wetering, R., Mikalef, P. and Pateli, A. (2018), "Strategic alignment between IT flexibility and dynamic capabilities: An empirical investigation", *International Journal of IT/Business Alignment and Governance*, Vol. 9 No. 1, pp. 1–20. https://doi.org/10.4018/IJITBAG.2018010101

Van Zeebroeck, N., Kretschmer, T. and Bughin, J. (2023), "Digital 'is' strategy: The role of digital technology adoption in strategy renewal", *IEEE Transactions on Engineering Management*, Vol. 70 No. 9, pp. 3183–3197. https://doi.org/10.1109/TEM.2021.3079347

Venkatraman, N. (1989), "The concept of fit in strategy research: Toward verbal and statistical correspondence", *The Academy of Management Review*, Vol. 14 No. 3, pp. 423. https://doi.org/10.2307/258177

Vereecke, A., Vanderheyden, K., Baecke, P. and Van Steendam, T. (2018a), "Mind the gap: Assessing maturity of demand planning, a cornerstone of SandOP", *International Journal of Operations and Production Management*, Vol. 38 No. 8, pp. 1618–1639. https://doi.org/10.1108/IJOPM-11-2016-0698

Vereecke, A., Vanderheyden, K., Baecke, P. and Van Steendam, T. (2018b), "Mind the gap: Assessing maturity of demand planning, a cornerstone of SandOP", *International Journal of Operations and Production Management*, Vol. 38 No. 8, pp. 1618–1639. https://doi.org/10.1108/IJOPM-11-2016-0698

Vial, G. (2021), "Managing digital transformation: Understanding the strategic process", in: Hinterhuber, A., Vescovi, T. and Checchinato, F. (Ed.s), *Routledge*. https://doi.org/10.4324/9781003008637-4

Wernerfelt, B. (1984), "A Resource-Based View of the Firm", *Strategic Management Journal*, Vol. 5 No. 2, pp. 171–180. https://doi.org/10.1002/smj.4250050207

Zahra, S.A. and Covin, J.G. (1993), "Business strategy, technology policy, and firm performance", *Strategic Management Journal*, Vol. 14 No. 6, pp. 451–478. https://doi.org/10.1002/smj.4250140605

Zang, S., Zhou, J., Wu, H. and Sun, M. (2025), "How can enterprises enhance their digital innovation capability in the context of technological leapfrogging?", *Technology Analysis and Strategic Management*, pp. 1–15. https://doi.org/10.1080/09537325.2025.2465846

Zheng, L.J., Islam, N., Zhang, J.Z., Behl, A., Wang, X. and Papadopoulos, T. (2025), "Aligning risk and value creation: A process model of supply chain risk management in geopolitical disruptions", *International Journal of Operations and Production Management*, Vol. 45 No. 5, pp. 1178–1210. https://doi.org/10.1108/IJOPM-03-2024-0271