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From Knowledge to Advantage: Integrating Knowledge-Based and Dynamic Capability Theories

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ABSTRACT

Knowledge has long been recognized as a vital strategic resource, yet creating sustainable competitive advantage remains insufficiently explained. The Knowledge-Based View (KBV) emphasizes knowledge as the foundation of value creation. At the same time, the Dynamic Capability (DC) theory highlights a firm's ability to sense, seize, and reconfigure resources in turbulent environments. This study aims to integrate both perspectives by examining how knowledge management practices influence sustainable competitive advantage, directly and indirectly, through the mediating role of dynamic capabilities. A mixed-method design was applied, combining a survey of 220 managers from Indonesian knowledge-intensive industries with qualitative case studies for contextual validation. Structural Equation Modeling–Partial Least Squares (SEM-PLS) was used to test the hypothesized relationships. The results indicate that knowledge management practices significantly predict dynamic capabilities ($\beta = 0.52$, $p < 0.001$), which in turn positively influence sustainable competitive advantage ($\beta = 0.41$, $p < 0.001$). Knowledge management also has a direct positive effect on competitive advantage ($\beta = 0.28$, $p < 0.001$), while mediation analysis confirms partial mediation ($\beta = 0.21$, $p < 0.01$). The integrated model explains 62% of the variance in competitive advantage. The study concludes that knowledge and dynamic capabilities are complementary drivers of sustained competitiveness, recommending that managers simultaneously invest in knowledge management systems and dynamic routines to thrive in dynamic environments.

Keywords: Knowledge-Based View, Dynamic Capabilities, Knowledge Management, Competitive Advantage, SEM-PLS

INTRODUCTION

In an increasingly volatile and knowledge-driven economy, the quest for sustainable competitive advantage has shifted focus from merely possessing valuable resources to the capacity of firms to adapt and reconfigure these resources. This reality is keenly reflected through two primary theoretical frameworks: the Knowledge-Based View (KBV) and the Dynamic Capability (DC) theory. Despite their distinct focal areas, KBV emphasizes the strategic value of knowledge, and DC theory concentrates on the processes that facilitate adaptation; the two frameworks have traditionally advanced in parallel. Research suggests that integrating these two perspectives is critical in addressing the complexities present in today's dynamic business environments.

The Knowledge-Based View (KBV), derived from the Resource-Based View (RBV), asserts that knowledge is the most critical resource for firms aiming to achieve and maintain competitive advantages. As knowledge is viewed as valuable, rare, non-inimitable, and non-substitutable, firms that excel in creating, transferring, and integrating knowledge can outpace their competitors in innovation and performance improvements (Dan, 2023; Zhou et al., 2018). Dan (2023) emphasizes that tacit or explicit knowledge is the backbone of innovation, propelling

organizations ahead of their rivals. However, the KBV faces critiques for its treatment of knowledge, often downplaying the essential dynamic processes involved in knowledge application and mobilization as organizations respond to changing environments. (Güttel et al., 2017). This limitation necessitates a deeper exploration of how knowledge facilitates adaptability, a core tenet of dynamic capabilities.

Contrastingly, the DC theory centers on a firm's ability to recognize, capitalize upon, and reconfigure its resources in response to fluctuating market conditions (Dejardin et al., 2023; Ruba et al., 2023). As Teece et al. (2014) articulated, dynamic capabilities are the mechanisms through which firms achieve and sustain competitive advantages in environments characterized by continuous change and uncertainty. By fostering capabilities that sense opportunities and threats, seize opportunities, and reconfigure resources, firms are better equipped to navigate turbulent landscapes. Nevertheless, studies critique the DC framework for inadequately addressing the role of knowledge as an input in enabling these dynamic capabilities, leaving the pathways through which knowledge influences adaptability underexplored (Cui et al., 2016; Paavola, 2021).

Synthesizing the KBV and DC theories reveals a conceptual dichotomy: while KBV highlights the inherent value of knowledge, it often neglects adaptation mechanisms. Conversely, while DC addresses adaptation, it tends to underemphasize the role of knowledge. This gap signifies a need for integrated frameworks that account for knowledge management practices and dynamic capabilities to provide a more holistic understanding of competitive advantage, especially in contexts marked by unpredictability and resource constraints, such as emerging economies. (Y. Liu et al., 2023; Muneeb et al., 2023).

Empirical research has initiated attempts to bridge this gap, demonstrating that knowledge management practices bolster innovation performance and that dynamic capabilities mediate the effects of resources on firm outcomes (Tajudeen et al., 2019). For example, Schoemaker et al. identified that effective knowledge management enhances innovation capacity, suggesting that firms that efficiently manage their knowledge assets are more likely to leverage their dynamic capabilities successfully (Schoemaker et al., 2018). In contexts characterized by high environmental dynamism, firms with robust knowledge bases were shown to be better positioned to navigate uncertainty and capitalize on fleeting opportunities, underscoring the interplay between knowledge and dynamic capabilities (Abourokbah et al., 2023).

Understanding the symbiotic relationship between the KBV and DC theories can enrich the discourse on competitive advantage within dynamic environments. Future empirical studies should aim to validate these integrations, particularly in sectors that face unique challenges amidst resource constraints and high environmental volatility.

This study seeks to fill this gap by integrating the Knowledge-Based View and Dynamic Capability theory into a unified framework. Specifically, it examines how knowledge management practices (creation, sharing, and integration) influence sustainable competitive advantage through the mediating role of dynamic capabilities (sensing, seizing, and reconfiguring). The central research question is: How do knowledge management practices contribute to sustainable competitive advantage, and to what extent do dynamic capabilities mediate this relationship?

The study is situated in Indonesian knowledge-intensive industries, including finance, technology, and services, where the pace of change is accelerating and the strategic management of knowledge is critical. Indonesia provides a unique context: firms face rapid digitalization, global competition, and regulatory challenges, all of which demand strong knowledge foundations and dynamic adaptability. By focusing on this context, the study contributes to international debates and offers insights relevant to emerging market firms striving for competitiveness.

This research makes three key contributions: 1) Develops and empirically validates an integrative framework bridging KBV and DC theories. By doing so, it addresses each perspective's critiques in isolation and demonstrates their complementarity. 2) Based on data from 220 managers analyzed using SEM-PLS, it provides quantitative evidence that dynamic capabilities partially mediate the relationship between knowledge and competitive advantage. This enriches the empirical literature, which has often tested KBV or DC in isolation. 3) Offers managers evidence-based insights: knowledge is insufficient unless activated through dynamic capabilities. Investment in knowledge creation, sharing, and integration must be coupled with developing sensing, seizing, and reconfiguring routines to sustain competitiveness in volatile markets.

The remainder of the paper is organized as follows. Section 2 reviews the theoretical foundations of KBV and DC, highlighting prior research and identifying the gap this study addresses. Section 3 presents the conceptual framework and hypotheses. Section 4 explains the research methodology, including data collection, measurement, and analysis techniques. Section 5 reports the empirical results, while Section 6 discusses their theoretical and practical implications. Section 7 concludes with key findings, limitations, and directions for future research.

LITERATURE REVIEW

Knowledge-Based View (KBV)

The Knowledge-Based View (KBV) is a crucial extension of the Resource-Based View (RBV). It identifies knowledge, specifically tacit and socially complex knowledge, as the most strategically significant resource for organizations. This assertion aligns with the VRIN criteria articulated by Barney, which posits that valuable, rare, difficult to imitate, and non-substitutable resources are essential for achieving and sustaining competitive advantage (Freeman et al., 2021; Seriki, 2023). Nonaka and von Krogh (2019) emphasize that firms adept at creating, sharing, and integrating knowledge tend to outperform their rivals in innovation and overall performance. Recent empirical research provides robust support for this view, illustrating the centrality of knowledge management practices, which can significantly enhance innovation performance (Badir et al., 2019; Ruba et al., 2023).

Specifically, the KBV outlines multiple knowledge processes that are fundamental to organizational success. Knowledge creation involves the dynamic interaction between tacit and explicit knowledge, fostering innovation through continuous dialogue and learning (Mellahi et al., 2018). Knowledge sharing facilitates the distribution of insights and skills across organizational boundaries, supporting collective learning and responsiveness to changes in the business environment (Cassiman & Valentini, 2015). Meanwhile, knowledge integration synthesizes diverse knowledge assets to devise innovative solutions, thus reinforcing an organization's competitive edge (Paavola, 2021). Kianto et al. (2017) corroborate this by demonstrating that effective knowledge management practices are positively correlated with enhanced innovation performance across various sectors. Similarly, Donate and de Pablo (2015) found a positive relationship between knowledge management and overall firm performance, underscoring the strategic importance of managing knowledge flows within organizations.

Despite its strengths, the KBV faces critiques for often treating knowledge as a static asset. Critics argue that this perspective underestimates the dynamic processes through which organizations leverage and mobilize knowledge in fluctuating environments (C. Liu & Feng, 2024). Teece (2014) highlights these shortcomings, suggesting that a more nuanced understanding of how firms exploit their knowledge in response to environmental dynamism is essential for a comprehensive grasp of competitive advantage dynamics. To effectively address these challenges, it is vital to integrate the KBV with frameworks that emphasize dynamic capabilities, an approach that elucidates how organizations adapt and reconfigure their knowledge resources in response to market changes. By merging the insights from the KBV with dynamic capability theory, which focuses on an organization's ability to sense opportunities, seize them, and reconfigure resources, we can develop a more holistic view of competitive advantage that accounts for both the strategic importance of knowledge and the necessity for adaptive processes in turbulent environments(Muneeb et al., 2023). This integration is especially critical in today's rapidly evolving marketplace, where adapting and innovating effectively is paramount for maintaining competitiveness.

Dynamic Capabilities (DC)

Dynamic Capabilities (DC) theory emerged as a significant advancement in the understanding of competitive advantage by addressing the limitations of the Resource-Based View (RBV), particularly its static approach to resources (Holz, 2024). Teece, Pisano, and Shuen (2017) defined dynamic capabilities as a firm's ability to integrate, build, and reconfigure internal and external competencies in response to rapidly changing environments. This concept has evolved, with Teece (2017) delineating three core processes that underpin dynamic capabilities: 1) sensing opportunities and threats; 2) seizing those opportunities by mobilizing resources; and 3) reconfiguring organizational structures and assets to maintain competitiveness. The emphasis of DC theory highlights that competitive advantage does not solely arise from the possession of resources but from a firm's capacity for continuous adaptation and renewal of those resources.

Moreover, empirical research supports the assertion that dynamic capabilities positively correlate with key outcomes such as innovation, organizational agility, and long-term performance. For instance, Zahra et al. (2016) found that firms with robust dynamic capabilities tend to outperform their competitors in innovation and responsiveness to market changes. Furthermore, studies by Zhou et al. (2018) reinforce this connection, suggesting that firms that leverage their dynamic capabilities effectively are better positioned in volatile markets.

Despite these advantages, DC theory has faced significant criticism for its conceptual ambiguity and measurement challenges (M. Crick, 2020). Barreto (2020) highlighted that while dynamic capabilities elucidate the processes through which firms adapt, they fail to clarify the foundational resources that enable such adaptive mechanisms, neglecting the role of existing knowledge. This oversight presents a crucial gap in the literature, which suggests that examining how knowledge underpins dynamic capabilities could address this issue.

Integrating knowledge management within the DC framework may provide valuable insights into how firms can effectively sense, seize, and reconfigure resources. As organizations operate in environments characterized by constant flux, understanding, adapting, and leveraging knowledge becomes increasingly paramount. By addressing these gaps, future research can contribute to a deeper understanding of the interplay between dynamic capabilities

and knowledge management, ultimately facilitating enhanced organizational performance in rapidly evolving markets.

Integrating KBV and DC

Integrating the Knowledge-Based View (KBV) and Dynamic Capabilities (DC) theory presents a rich avenue for understanding how organizations can navigate complex and rapidly changing environments. Although these frameworks have developed independently, there is increasing recognition of their complementary nature. Knowledge is the substrate on which dynamic capabilities operate, while dynamic capabilities provide mechanisms through which knowledge is effectively mobilized and utilized in practice (Dickel & Moura, 2016). Several scholars have emphasized the synergy between KBV and DC. For instance, Pavlou and El Sawy (2021) argue that knowledge management practices are crucial for enhancing dynamic capabilities, thereby improving overall firm performance. Similarly, Andreeva and Kianto (2021) found that effective knowledge management practices bolster dynamic capabilities, ultimately enhancing innovation outcomes. Their study underlines how knowledge supports innovation and improves organizations' agility and adaptability in competitive markets. This is further corroborated by Protogerou, Caloghirou, and Lioukas (2022), who demonstrated that dynamic capabilities mediate the relationship between knowledge assets and innovation performance, highlighting the critical link between understanding and leveraging knowledge and maintaining competitive advantage.

Wilden and Gudergan (2015) further elaborated on this integration by emphasizing that the effectiveness of dynamic capabilities is contingent upon robust knowledge integration and learning processes, suggesting that organizations with strong knowledge management capabilities are better equipped to implement dynamic capabilities effectively. By viewing knowledge as a dynamic resource that can be transformed into capabilities, firms can sense and seize opportunities in their environments more adeptly. However, despite these insights, the integration of KBV and DC remains relatively underexplored, especially in emerging market contexts characterized by resource constraints and higher uncertainties. Research conducted in regions such as Indonesia and other Southeast Asian economies has highlighted the importance of knowledge management in fostering adaptability (Gnekpe et al., 2022). Nevertheless, there exists a scarcity of comprehensive empirical models that fully articulate how these frameworks interact in practice. To elevate the discourse and research surrounding the integration of KBV and DC, future studies should focus on developing empirical frameworks that assess the interplay of these constructs. Investigating knowledge management's role in enabling dynamic capabilities can facilitate a deeper understanding of how firms adapt to changing environments. This is particularly relevant in sectors where organizations face high uncertainty and must innovate rapidly to survive. Bridging KBV and DC can yield profound insights into how organizations leverage knowledge to enhance their dynamic capabilities, ultimately leading to improved performance and competitiveness. Continued exploration in this field is necessary to unlock the full potential of these theoretical frameworks in guiding firms through the complexities of modern markets.

Research Gap and Conceptual Framework

The review suggests that while KBV underscores the importance of knowledge, it does not sufficiently explain how knowledge is activated to produce competitive advantage. Conversely, DC theory explains how firms adapt and transform resources, but often neglects the foundational role of expertise. Integrating these perspectives provides a more holistic understanding. Thus, this study develops a framework in which knowledge management practices influence sustainable competitive advantage by mediating dynamic capabilities. This integration addresses theoretical fragmentation and offers empirical insights into how firms in emerging economies like Indonesia leverage knowledge for enduring competitiveness. The conceptual framework can be seen in Figure 1.

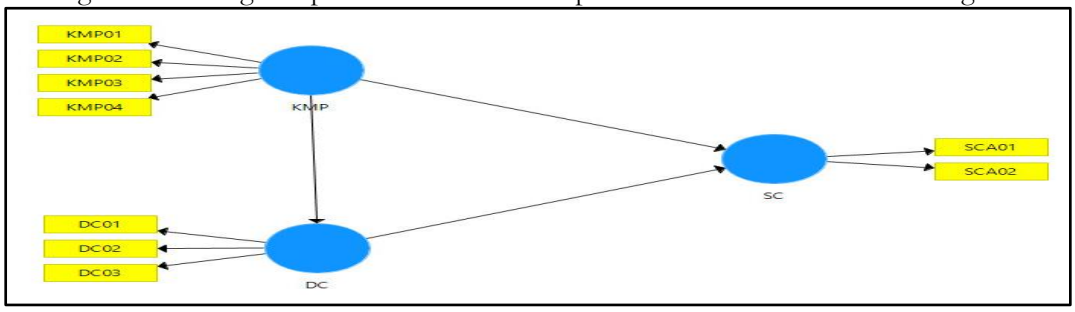

Figure 1. Conceptual Framework Integrating Knowledge-Based View and Dynamic Capability Theory (Source: research results)

Note. The model illustrates the mediating role of Dynamic Capabilities (sensing, seizing, reconfiguring) in the relationship between Knowledge Management Practices (knowledge creation, sharing, integration) and Sustainable Competitive Advantage (firm performance, innovation). H_1 predicts that knowledge management practices have a positive influence on dynamic

capabilities. H_2 predicts that dynamic capabilities have a positive influence on sustainable competitive advantage. H_3 represents the direct effect of knowledge management practices on sustainable competitive advantage.

METHODS

Research Design

This study adopts a mixed-method design, combining quantitative and qualitative approaches. The primary method is quantitative survey research, supported by qualitative case studies to enhance contextual interpretation. The quantitative design allows for testing hypothesized relationships among knowledge management practices, dynamic capabilities, and sustainable competitive advantage using Structural Equation Modeling–Partial Least Squares (SEM-PLS). The qualitative component provides richer insights into how firms translate knowledge into dynamic routines in practice.

Hypotheses development:

H_1: Knowledge management practices positively influence dynamic capabilities.

H_2: Dynamic capabilities positively influence sustainable competitive advantage.

H_3: Knowledge management practices positively influence sustainable competitive advantage. Moreover,

H_4: Dynamic capabilities mediate the relationship between knowledge management practices and sustainable competitive advantage.

Population and Sample

The population comprises companies operating in knowledge-intensive industries in Jakarta, Indonesia, including finance, information technology, and services. These sectors were selected because they face high environmental turbulence and require knowledge and adaptability to achieve competitiveness. The study was conducted from January to May 2025. The sampling frame targeted senior and middle managers responsible for strategic decision-making and knowledge processes within their organizations. Using purposive sampling, 220 valid responses were obtained, meeting the minimum threshold for SEM-PLS analysis (Hair & Alamer, 2022), as the sample exceeded 10 times the maximum number of structural paths leading to a construct.

Data Analysis

Data analysis followed a two-step procedure. First, the measurement model was assessed to establish construct reliability and validity. Reliability was examined using Cronbach's alpha and composite reliability (CR), with a minimum threshold of 0.70. Convergent validity was evaluated by ensuring that the Average Variance Extracted (AVE) exceeded 0.50, while discriminant validity was assessed using the Heterotrait-Monotrait ratio (HTMT), with acceptable values at or below 0.85. Second, the structural model was tested to evaluate hypothesized relationships.

This involved estimating path coefficients (β), t-values, and significance levels (p-values) using a bootstrapping procedure with 5,000 resamples. The model's explanatory power was assessed through the coefficient of determination (R^2), while predictive relevance (Q^2) and model fit indices (with SRMR < 0.08) were also examined. Furthermore, mediation analysis was performed to test the indirect effect of knowledge management practices on sustainable competitive advantage through dynamic capabilities, following the procedures recommended by Preacher and Hayes (2008).

To enrich the findings, qualitative data were gathered from three case firms selected based on their performance reputation in innovation. Semi-structured interviews were conducted with managers and employees to capture narratives of how knowledge management processes enable sensing, seizing, and reconfiguring routines. Thematic analysis was employed to identify patterns that complement and triangulate the quantitative results.

RESULTS AND DISCUSSION

Descriptive Statistics

Descriptive statistics were calculated to provide an overview of the sample characteristics and the main study variables. The final sample consisted of 220 respondents, representing managers from diverse knowledge-intensive industries: finance (32%), information technology (28%), professional services (25%), and other industries (15%). Regarding demographics, 62% of respondents were male and 38% female, with an average age of 41.2 years and an average managerial experience of 12.4 years.

Table 1 presents the means and standard deviations of the key constructs. The results indicate that mean scores for knowledge management practices, dynamic capabilities, and sustainable competitive advantage were above the

scale midpoint. This suggests that firms in the sample generally demonstrate favorable knowledge practices, capability development, and performance outcomes.

Table 1. Descriptive Statistics of the Study

No	Variable	Mean	SD
1	Knowledge Management Practices	3.74	0.68
2	Dynamic Capabilities	3.81	0.71
3	Sustainable Competitive Advantage	3.77	0.65

Source: Research Results (2025)

The descriptive statistics highlight several essential insights. First, the relatively balanced distribution across industries ensures representation of multiple knowledge-intensive contexts, strengthening the findings' generalizability. Second, the demographic profile indicates that the respondents are experienced managers (average 12.4 years in managerial roles), suggesting they possess sufficient expertise to assess knowledge management and capability-related practices within their organizations. Third, the mean scores across all constructs exceed the scale midpoint (3.00 on a 5-point scale), reflecting that firms in the sample report moderately to highly favorable levels of knowledge management, dynamic capabilities, and sustainable competitive advantage. This baseline supports the assumption that Indonesian knowledge-intensive firms actively engage in practices relevant to the Knowledge-Based View (KBV) and Dynamic Capability (DC) frameworks.

Measurement Model Assessment

Before testing the structural relationships, the measurement model was assessed to ensure the constructs met the criteria of reliability and validity. Reliability was assessed using Cronbach's alpha and Composite Reliability (CR), both of which exceeded the recommended threshold of 0.70. Convergent validity was assessed by Average Variance Extracted (AVE), which was above 0.50 for all constructs. Discriminant validity was examined using the Heterotrait-Monotrait (HTMT) ratio, with all values below 0.85, indicating that the constructs were empirically distinct, as in Table 2.

Table 2. Measurement Model Assessment Results

Construct	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)	HTMT (range)
Knowledge Management Practices	0.88	0.91	0.62	0.71–0.79
Dynamic Capabilities	0.86	0.90	0.58	0.68–0.80
Sustainable Competitive Advantage	0.84	0.89	0.57	0.65–0.77

The results indicate that the measurement model satisfies all recommended thresholds for reliability and validity. Specifically, Cronbach's alpha values ranged from 0.84 to 0.88, and Composite Reliability (CR) values ranged from 0.89 to 0.91, confirming strong internal consistency. Average Variance Extracted (AVE) values, ranging from 0.57 to 0.62, exceeded the minimum requirement of 0.50, confirming adequate convergent validity. Furthermore, HTMT ratios across constructs fell between 0.65 and 0.80, well below the conservative cut-off of 0.85, establishing discriminant validity. Together, these results prove that the constructs were measured reliably and can be used confidently for structural model testing.

Structural Model Results

After establishing the reliability and validity of the measurement model, the structural model was tested to evaluate the hypothesized relationships. The model's explanatory power was assessed through the coefficient of determination (R^2), while predictive relevance (Q^2) and overall fit (SRMR) were also examined. Path coefficients were estimated using a bootstrapping procedure with 5,000 resamples, as shown in Table 3.

Table 3. Structural Model Results

Hypothesis	Path	β (Coefficient)	t-value	p-value
H_1	Knowledge Management → Dynamic Capabilities	**0.52**	9.87	<0.001
H_2	Dynamic Capabilities → Competitive Advantage	**0.41**	7.15	<0.001
H_3	Knowledge Management → Competitive Advantage	**0.28**	4.92	<0.001
H_4	Indirect Effect (Mediation via DC)	**0.21**	4.11	<0.01

Model Fit & Predictive Power: 1) R^2 (Dynamic Capabilities) = **0.46**; 2) R^2 (Sustainable Competitive Advantage) = **0.62;** 3) SRMR = **0.061** (acceptable, <0.08). Moreover, 4) Q^2 values > 0, indicating predictive relevance. The results provide strong support for all four hypotheses. Knowledge management practices impact dynamic capabilities significantly (H_1, $\beta = 0.52$, $p < 0.001$), demonstrating that knowledge creation, sharing, and integration enhance a firm's ability to sense, seize, and reconfigure. Dynamic capabilities, in turn, positively influenced sustainable competitive advantage (H_2, $\beta = 0.41$, $p < 0.001$), confirming their role as mechanisms of adaptation and renewal. Knowledge management also directly affected competitive advantage (H_3, $\beta = 0.28$, $p < 0.001$), consistent with the Knowledge-Based View. Mediation analysis revealed that dynamic capabilities partially mediated the relationship between knowledge management and competitive advantage (H_4, indirect $\beta = 0.21$, $p < 0.01$).

The model's explanatory power is substantial, with the predictors accounting for 46% of the variance in dynamic capabilities and 62% of the variance in competitive advantage. The good fit indices (SRMR = 0.061, $Q^2 > 0$) strengthen the model's robustness. These results confirm that integrating KBV and DC comprehensively explains how knowledge resources are transformed into sustainable competitive advantage. Visual of the structural model (with path coefficients and R^2 values shown in Figure 2.

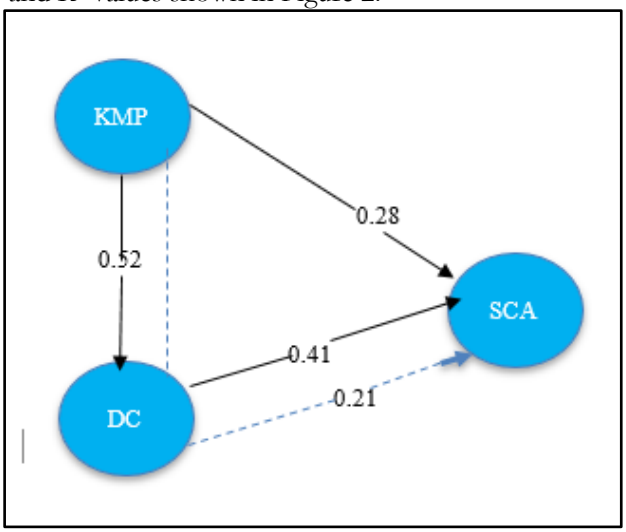

Figure 2. Structural Model Results with Path Coefficients

The figure illustrates the tested relationships among the study variables. Knowledge Management Practices significantly influence Dynamic Capabilities ($\beta = 0.52$, $p < 0.001$), which in turn positively affect Sustainable Competitive Advantage ($\beta = 0.41$, $p < 0.001$). Knowledge Management Practices also directly affect Sustainable Competitive Advantage ($\beta = 0.28$, $p < 0.001$). The model explains 46% of the variance in Dynamic Capabilities ($R^2 = 0.46$) and 62% of the variance in Sustainable Competitive Advantage ($R^2 = 0.62$). Dashed arrows represent direct effects, while solid arrows indicate mediated relationships.

Mediation Analysis

To further examine the mediating role of dynamic capabilities, a bootstrapping procedure with 5,000 resamples was conducted to test the indirect effects of knowledge management practices on sustainable competitive advantage. The results confirm that dynamic capabilities partially mediate this relationship, as the direct and indirect effects were significant, as in Table 4.

Table 4. Mediation Analysis Results

Relationship	Direct effect (β)	Indirect effect (β)	t-value	p-value
Knowledge Management → Sustainable Competitive Advantage	0.28***	0.21**	4.11	<0.01

Model Fit & Explanatory Power: 1) R^2 (Dynamic Capabilities) = 0.46; 2) R^2 (Sustainable Competitive Advantage) = 0.62; and 3) SRMR = 0.061 (< 0.08, acceptable). The mediation results indicate that dynamic capabilities partially mediate the relationship between knowledge management practices and sustainable competitive advantage. The direct effect of knowledge management on competitive advantage remained significant ($\beta = 0.28$, $p < 0.001$), while the indirect impact through dynamic capabilities was also substantial ($\beta = 0.21$, $p < 0.01$). This suggests that while knowledge resources directly enhance firm performance, their impact is substantially amplified when channeled through dynamic capabilities. Approximately 43% of the total effect of knowledge management on competitive advantage is explained by the mediating role of dynamic capabilities, confirming the integrative nature of the Knowledge-Based View and the Dynamic Capabilities perspective.

Qualitative Validation

Qualitative case studies were conducted with three knowledge-intensive firms to complement the quantitative findings and provide a deeper understanding of the context. Semi-structured interviews were conducted with senior managers and key employees to capture organizational narratives regarding knowledge management practices and their role in shaping dynamic capabilities. Thematic analysis was employed to identify recurring patterns, particularly focusing on knowledge creation, sharing, and integration, and their influence on sensing, seizing, and reconfiguring capacities, as in Table 5.

Table 5. Summary of Qualitative Validation Themes

Qualitative Evidence	Dynamic Capability Dimension	Observed Outcome
Investment in knowledge creation platforms (digital repositories, knowledge-sharing portals).	**Sensing**	Improved ability to identify emerging opportunities and threats in the market.
Active use of collaborative tools and knowledge-sharing practices across departments.	**Seizing**	Faster decision-making and more effective mobilization of resources.
Fragmented or siloed knowledge practices within firms.	**Reconfiguring**	Difficulty in adapting processes and slower organizational responses to change.
Cross-functional teams and communities of practice promote the integration of diverse knowledge.	**Reconfiguring**	Enhanced flexibility and sustainable competitive advantage through innovation and adaptation.

This thematic summary highlights how knowledge management practices enhance dynamic capabilities and contribute to a competitive advantage. Firms that institutionalize knowledge creation and sharing platforms were better able to sense opportunities and seize them effectively. However, firms with fragmented knowledge flows experienced barriers in reconfiguring resources, which hindered adaptability. Notably, knowledge integration routines, such as cross-functional collaboration and communities of practice, emerged as a critical enabler of

reconfiguring, ensuring continuous renewal and sustained competitiveness. These findings reinforce the quantitative evidence that dynamic capabilities mediate the relationship between knowledge and performance, confirming the integrative value of the KBV–DC framework.

DISCUSSION

The objective of this study was to examine how knowledge management practices contribute to a sustainable competitive advantage, both directly and indirectly, through the mediating role of dynamic capabilities. The findings strongly support the integrative framework, advancing our understanding of how the Knowledge-Based View (KBV) and Dynamic Capability (DC) theories complement one another.

Knowledge Management and Dynamic Capabilities

The results confirm that knowledge management practices have a significant influence on dynamic capabilities (H_1 supported, $\beta = 0.52$, $p < 0.001$). Knowledge management (KM) practices significantly influence organizations' dynamic capabilities (DCs). Empirical findings suggest that these practices enhance DCs, emphasizing that knowledge creation, sharing, and integration are fundamental to developing organizational agility and adaptability. Effective KM transforms knowledge into a dynamic resource that enables firms to sense better, seize, and reconfigure resources in response to changing environments (Bieńkowska & Tworek, 2020; Fainshmidt et al., 2016; Wilhelm et al., 2015). For example, Andreeva and Kianto (2021) and Kianto et al. (2017) highlight that systematic knowledge processes enable organizations to respond to emerging opportunities and facilitate innovative practices, thereby reinforcing knowledge as an adaptability driver.

The relationship between KM and DCs underscores organizations' need to possess robust knowledge processes to adapt to environmental changes. Literature indicates that firms with strong KM capabilities respond more adeptly to market changes and technological innovations, resulting in competitive advantages (Akpan et al., 2022). Teece (2017) articulated that the dynamic capability framework elaborates that knowledge management is not merely about knowledge accumulation but involves leveraging knowledge to enhance organizational agility. This is supported by empirical evidence that shows organizations employing effective KM strategies exhibit increased resilience and agility, helping them navigate crises and uncertainties more successfully (Abou Kamar et al., 2023; Ferrón-Vílchez & Leyva-de la Hiz, 2023).

Dynamic capabilities are an overarching framework that delineates how organizations utilize knowledge assets for immediate gains, long-term resilience, and competitive positioning. The strategic integration of KM into organizational processes can facilitate a continuous cycle of learning and adaptation (García-Valenzuela et al., 2023). By fostering a culture of knowledge sharing and collaborative learning, organizations can cultivate an environment where dynamic capabilities thrive, ultimately leading to sustainable performance (Soto et al., 2024)

Dynamic Capabilities and Competitive Advantage

The study findings suggest a significant relationship between dynamic capabilities (DCs) and sustainable competitive advantage (H_2: $\beta = 0.41$, $p < 0.001$), which aligns with the theoretical framework established by Wilhelm et al., (2015), who argue that dynamic capabilities enable firms to adapt their operating routines to changing environmental requirements, enhancing their competitive advantage. The ability of firms to innovate and maintain performance amidst environmental fluctuations is crucial, and this adaptability serves as a foundation for sustained competitive advantage.

Empirical support is further provided by Fainshmidt et al. (2016), whose meta-analysis indicates that organizations with superior dynamic capabilities experience enhanced innovation and performance outcomes. These findings affirm that dynamic capabilities are valuable not in isolation but as mechanisms that improve organizations' resource utilization and knowledge management. This interrelationship suggests that firms leveraging their dynamic capabilities can sustain their performance and drive innovation, contributing to overall competitive advantage.

As various scholars have posited, dynamic capabilities enable organizations to sense market changes, seize opportunities, and reconfigure resources strategically. For instance, Dejardin et al. (2022) elaborate on the relationship between dynamic capabilities and organizational performance, reinforcing their role in navigating challenges and competing effectively in dynamic environments. Moreover, Ju (2023) highlights the importance of knowledge management within these capabilities, emphasizing that effective use of internal and external knowledge resources is critical for fostering innovation and enhancing organizational resilience.

Combining knowledge management and dynamic capabilities underscores that fostering a continuous learning and adaptation culture is vital for firms aiming to thrive in competitive markets. This interplay not only establishes a roadmap to competitive advantage but also highlights the necessity for organizations to remain flexible and

responsive to sustain long-term success (Wilhelm et al., 2015; Fainshmidt et al., 2016; Dejardin et al., 2022; Ju, 2023).

Knowledge Management and Competitive Advantage

The findings of this study reveal a significant direct effect of knowledge management (KM) on sustainable competitive advantage (SCA) (H_3: $\beta = 0.28$, $p < 0.001$), highlighting that knowledge resources can independently drive performance improvements. This aligns with the Knowledge-Based View (KBV) proposition that recognizes knowledge as a unique, valuable, and inimitable asset essential for competitive advantage(Lee & Yoo, 2019). Grant (2016) and Nonaka & von Krogh (2019) articulate that the effective management of knowledge resources is pivotal for organizations aiming to achieve superior performance and sustainable advantage. Consistent with this perspective, Donate and de Pablo (2015) found a positive relationship between KM practices and firm performance, affirming that knowledge is a powerful catalyst for improving organizational competitive dynamics

However, it is noteworthy that the modest size of the direct effect of KM on SCA, compared to the indirect pathways through dynamic capabilities, suggests that the mere presence of knowledge resources is insufficient to realize their full potential. Instead, these resources require activation through dynamic capabilities to be fully effective in driving competitive advantage (Yan et al., 2024). Dynamic capabilities are essential as they enable firms to adapt, innovate, and reconfigure their resources according to the market demands (Schoemaker et al., 2018), thus amplifying the role of KM in a firm's strategic pursuits (Lautenschlager & Tzempelikos, 2021).

Integrating KM with dynamic capabilities enhances the efficacy of knowledge resources and transforms them into actionable strategies that lead to superior performance outcomes. The synergy created enables firms to leverage their knowledge for exploitative and explorative innovations, vital in maintaining competitiveness in turbulent environments (Pradhan, 2019). This synthesis underscores the importance of adopting a holistic approach where both KM and dynamic capabilities are emphasized to achieve sustained competitive advantage amidst the complexities of the modern business landscape (Huamani Torres et al., 2024). While KM presents a direct avenue to enhance competitive advantage, its potential is realized when coupled with dynamic capabilities. This integrated perspective allows firms to activate their knowledge resources effectively, thus improving overall performance and maintaining a competitive edge.

The Mediating Role of Dynamic Capabilities

The mediation analysis indicates that dynamic capabilities partially mediate the relationship between knowledge management (KM) and sustainable competitive advantage (SCA) (H_4: $\beta = 0.21$, $p < 0.01$), demonstrating that approximately 43% of the total effect of KM on competitive advantage is channeled through dynamic capabilities. This finding supports the theoretical claim that the Knowledge-Based View (KBV) and dynamic capabilities (DC) are complementary, as outlined by Pavlou & El Sawy (2011) and Zahra et al. (2016), who argue that while knowledge provides the content necessary for strategic advantage, dynamic capabilities furnish the processes needed to operationalize that knowledge into performance outcomes.

By highlighting the mediating role of dynamic capabilities, this study effectively addresses critiques regarding the static nature of KBV and the foundations of dynamic capabilities. It underscores that merely having access to knowledge is insufficient; organizations must also cultivate the capacity to adapt, integrate, and apply this knowledge effectively in varying contexts. This aligns with the assertions of (Abu Adi et al., 2021), who emphasizes the importance of incorporating dynamic capabilities within organizational frameworks to build resilience and foster continual development in shifting environments(Tamirat & Amentie, 2023). Moreover, the findings are consistent with those of Frank et al. (2017), who assert that firms equipped with robust dynamic capabilities can better navigate complex market conditions and enhance performance, thereby reinforcing the significance of process-oriented adjustments in leveraging knowledge for competitive gain. Similarly, other scholars have noted that dynamic capabilities enable firms to optimize resources, ensuring that knowledge can be transformed into tangible competitive advantages rather than remaining dormant assets.

This integration of KM and dynamic capabilities fosters an environment conducive to operational flexibility and innovation, reinforcing firms' need to develop and enhance these capabilities as part of their strategic initiatives. By understanding and leveraging the relationship between KM and dynamic capabilities, organizations can better position themselves for sustained competitive advantage by cultivating the knowledge resources available and the dynamic processes that optimize their application.

CONCLUSION

This study examined how knowledge management practices contribute to sustainable competitive advantage through the mediating role of dynamic capabilities. Drawing on data from 220 managers in Indonesian knowledge-

intensive industries, supported by qualitative case studies, the research provides empirical evidence for an integrated framework combining the Knowledge-Based View (KBV) and Dynamic Capability (DC) theory.

The findings demonstrate four key insights. First, knowledge management practices—encompassing creation, sharing, and integration significantly enhance dynamic capabilities. Second, dynamic capabilities, sensing, seizing, and reconfiguring, strongly predict sustainable competitive advantage. Third, knowledge management also directly affects competitive advantage, which is consistent with KBV. Fourth, dynamic capabilities partially mediate the relationship between knowledge and advantage, confirming that knowledge provides the foundation while capabilities act as the mechanism that transforms knowledge into performance outcomes.

This study theoretically bridges the KBV and DC perspectives, offering a more holistic explanation of how firms convert knowledge into advantage. Empirically, it validates a mediation model in an emerging market context, demonstrating that expertise and capabilities are complementary. Practically, it highlights that managers must invest in knowledge management systems and cultivate dynamic routines to sustain competitiveness in turbulent environments.

Limitations include the cross-sectional design and sectoral focus, which future studies can address through longitudinal and cross-industry comparisons. Nevertheless, the findings advance strategic management theory and provide actionable insights for firms striving to build resilience and adaptability. Knowledge alone cannot guarantee long-term competitiveness; combining knowledge and dynamic capabilities enables firms to thrive in uncertain and rapidly changing environments. Future research should also explore moderating variables such as environmental dynamism, digitalization, or organizational culture to refine the conditions under which KBV and DC integration is most effective.

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