

Advances in Human Resource Management Research

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Increasing Competitive Advantage with Creativity and Innovation: The Moderating Effect of Digital Leadership

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Received: 2025-03-24 Accepted: 2025-04-26

Available online: 2025-09-30

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KEYWORDS	ABSTRACT
<p>Keywords: Place here five to seven critical keywords used in your article, each word separated by a semicolon (;) and typed in a row to the right</p> <p>Conflict of Interest Statement: The author(s) declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.</p> <p>Copyright © 2025 All Author(s). All rights reserved.</p>	<p>Purpose: This study explores how psychological empowerment influences competitive advantage through creativity and innovative work behavior while also analyzing the moderating role of digital leadership. The study emphasizes the importance of building sustainable competitive strategies in Micro, Small, and Medium Enterprises (MSMEs) through innovation-driven human capital.</p> <p>Research Design and Methodology: A quantitative approach was employed, using a structured questionnaire distributed to 254 MSMEs in South Sulawesi, Indonesia. Data analysis was conducted through Structural Equation Modeling using the Partial Least Squares (SEM-PLS) method to test direct and indirect effects among the studied variables.</p> <p>Findings and Discussion: The results reveal that psychological empowerment significantly affects creativity and innovative work behavior, not a competitive advantage. Creativity influences innovative work behavior but does not directly lead to competitive advantage. Innovative work behavior significantly contributes to competitive advantage. Moreover, creativity mediates the relationship between psychological empowerment and innovative behavior, but not with a competitive advantage. Innovative work behavior mediates both psychological empowerment and creativity in achieving competitive advantage. Digital leadership strengthens the transformation of creativity into innovative behavior. It reinforces the impact of innovative behavior on competitive advantage but does not enhance the direct effects of psychological empowerment and creativity on competitiveness.</p> <p>Implications: This study offers theoretical and managerial insights by highlighting the strategic role of innovation and digital leadership in building sustainable competitive advantage. MSME leaders are encouraged to enhance employee empowerment, nurture creativity, and embrace digital leadership to drive innovation.</p>

Introduction

Globalization and technological advancement have shaped an increasingly complex and dynamic business landscape (Horkoff *et al.*, 2019; Uddin *et al.*, 2020). These changes have significantly impacted the small and medium-sized enterprises (SMEs) sector, particularly in terms of

competitiveness and business sustainability. As the backbone of national economies, SMEs must respond to these shifts with adaptive, sustainable business development strategies (Ferreira *et al.*, 2020; Elidemir *et al.*, 2020). Within this context, the ability to generate creative ideas, foster innovation, and leverage technology becomes critical in distinguishing oneself from competitors and capturing market opportunities. The most successful SMEs prioritize creativity, adopt innovation-oriented practices, and effectively integrate technology into their business processes—creating new markets and added value that set them apart (Munir & Beh, 2020; Wasono & Furinto, 2018). This view aligns with Lee *et al.*, (2019) and Singh & Sarkar (2019), who emphasize that creativity and innovative behavior are dynamic capabilities essential for sustaining growth and achieving a competitive edge.

Empirical evidence, however, indicates that Indonesian SMEs' competitiveness remains below that of neighboring ASEAN countries. According to the Global Innovation Index, Indonesia ranks 75th in the "Creative Goods and Services" category, significantly behind Malaysia (10th) and Singapore (13th). In the "Innovation Linkages" category, Indonesia is 64th, compared to Malaysia at 38th and Singapore at 13th. Overall, Indonesia holds 87th globally, while Malaysia and Singapore rank 36th and 8th, respectively. These rankings suggest that Indonesian SMEs' innovation and creativity capacity is insufficient to compete effectively in the global economy. This phenomenon highlights a fundamental weakness in Indonesian SMEs' mindset and business strategies, which have yet to fully embrace creativity and innovation as strategic drivers of competitive advantage. Therefore, a new approach is required to emphasize digital leadership, organizational transformation, and the strengthening of innovative behavior. Technology-driven transformation presents a significant opportunity to develop ambidextrous organizations capable of simultaneously exploiting core competencies and exploring innovations (Jackson & Dunn-Jensen, 2021), in which leadership plays a pivotal role in guiding change and ensuring business adaptability in today's era of disruption (Mihardjo & Rukmana, 2018).

Creativity and innovation have long been critical in establishing and sustaining a competitive advantage in today's rapidly evolving business environment. A growing body of research emphasizes the importance of dynamic capabilities—particularly creativity and innovative behavior—in maintaining long-term business viability and adaptability (Lee *et al.*, 2019). As firms navigate increasingly complex and competitive markets, these capabilities provide the agility and differentiation needed to respond effectively to environmental shifts. Elidemir *et al.* (2020) and Ferreira *et al.*, (2020) affirm that creativity and innovation are foundational to developing modern business strategies, especially in globalization and digitalization. Safari *et al.*, (2020) further support this perspective by highlighting that innovative behavior is not merely a support mechanism but a core organizational activity that drives the development of sustainable competitive advantage. Psychological empowerment has been identified as an essential antecedent for promoting creativity and innovative behavior among employees (Afsar & Badir, 2016; Gautam & Ghimire, 2017). Studies focusing on small and medium-sized enterprises (SMEs), such as those by Chaithanapat *et al.* (2022) and Munir & Beh, (2020), reinforce the argument that fostering innovation and creativity is vital to SME success. These findings underscore SMEs' need to intentionally cultivate environments that empower individuals and encourage innovative practices at all organizational levels.

Beyond its importance as an internal capability, creativity—alongside innovative behavior—is increasingly viewed as an essential human resource management (HRM) practice, particularly within the framework of digital transformation (Colakoglu *et al.*, 2019; Friedman & Carmeli, 2018; Lin & Sanders, 2017). As the business landscape continues to be reshaped by technological advancement, integrating innovation into HRM practices helps organizations remain competitive by attracting, developing, and retaining talent equipped to navigate change. Furthermore, leveraging technology effectively has been shown to strengthen innovation capacity and enhance overall organizational performance (DeLuca *et al.*, 2017). In this context, digital leadership has emerged as a strategic imperative in driving modern business models and facilitating digital transition. Leaders are responsible for setting strategic direction and playing a critical role in guiding their organizations through complex digital transformations. According to Mihardjo & Rukmana, (2018), digital leadership is essential for maximizing business performance, while AlAjmi (2022) highlights its role in improving employee performance. Moreover, Benitez *et al.*, (2022) and Wasono & Furinto, (2018) highlight how digital leadership fosters a culture of innovation, which is crucial for sustainable growth. As such,

creativity, innovative behavior, and digital leadership are inherently interconnected in advancing SMEs' competitive positioning, particularly in rapidly changing and technology-driven business environments.

Although numerous studies have examined the relationships among creativity, innovative behavior, and technological utilization in the development of SMEs, a significant gap remains between these studies and the current empirical realities and theoretical advancements. Most existing research tends to investigate these variables in isolation or within limited scopes without explicitly addressing the moderating role of digital leadership. In today's era of rapid digital transformation, digital leadership can significantly amplify the impact of creativity and innovation on competitive advantage. However, this potential has yet to be fully explored in integrated models. The absence of comprehensive frameworks that incorporate digital leadership as a moderating factor reflects a theoretical limitation, particularly given the growing need for SMEs to respond to digital disruption with multidimensional strategies. While psychological empowerment has been identified as a critical antecedent to fostering creativity and innovation (Afsar & Badir, 2016), its integration into a unified model alongside digital leadership within the SME context remains scarce. Studies conducted by (Elidemir *et al.*, 2020; Ferreira *et al.*, 2020; Safari *et al.*, 2020) primarily focus on two or three variables without fully addressing their interrelationships. This reveals an important theoretical and empirical gap, especially given that Indonesian SMEs urgently require comprehensive frameworks that incorporate creativity, innovation, psychological empowerment, and digital leadership to achieve sustainable competitive advantage.

Building on the aforementioned discussion, this study offers a novel contribution by developing a comprehensive quantitative model that integrates psychological empowerment, creativity, and innovative behavior to enhance SMEs' competitive advantage, while positioning digital leadership as a moderating variable that strengthens the relationships among these constructs. Unlike prior studies focusing on isolated or partially connected variables, this research provides a holistic framework that captures the complex dynamics of SME competitiveness in the digital era. By incorporating digital leadership—an increasingly essential capability in navigating disruption and technological change—into the model, the study advances theoretical understanding and practical application within the field of SME development. Furthermore, integrating psychological empowerment as a foundational antecedent highlights the role of internal employee motivation and autonomy in fostering innovation. Thus, this study seeks to fill the existing theoretical and empirical gaps by offering a robust framework that addresses real-world challenges SMEs face in Indonesia and similar emerging markets. This research aims to examine the influence of creativity and innovative behavior on SMEs' competitive advantage and explore the moderating role of digital leadership in strengthening these relationships within the evolving context of digital transformation.

Literature Review

Dynamic Capabilities Theory

Dynamic Capabilities Theory (DCT) has emerged as a significant development in strategic management thought, advancing the limitations of the Resource-Based View (RBV). While RBV emphasizes the importance of owning valuable, rare, and inimitable resources, it fails to address how firms adapt to rapid environmental changes. Teece *et al.*, (1997) introduced DCT as a framework for understanding how firms can sustain competitive advantage by continuously developing and renewing their internal competencies. This theory argues that sustainable success is derived not merely from what a firm possesses but from what it can do with those resources in response to shifting market dynamics (Teece *et al.*, 1997). In this sense, DCT provides a more dynamic, process-oriented view of competitive advantage beyond static resource control.

A central contribution of DCT lies in identifying three core capabilities—sensing, seizing, and reconfiguring. Sensing refers to a firm's ability to detect changes, identify opportunities, and anticipate threats within the external environment. Yunita *et al.*, (2024) argue that this capability is crucial in fast-changing industries where agility in recognizing shifts in consumer behavior or technological trends can determine strategic survival. Seizing involves the organization's response to those insights through resource mobilization and strategic investment. For instance, the ability of SMEs to translate market sensing into action through leadership and investment has been shown to enhance

performance outcomes significantly (Permatasari *et al.*, 2023). Finally, reconfiguring denotes the firm's internal capacity to restructure operations, processes, or organizational design to maintain alignment with new strategic directions. Violinda & Jian (2016) highlight how dynamic reconfiguration in cooperatives helps maintain relevance and competitiveness across fluctuating agricultural markets in Indonesia and China.

These capabilities are not discrete; they operate as an integrated system that must be continually developed and leveraged to maintain strategic advantage. Helfat & Raubitschek, (2018) emphasize that dynamic capabilities enable firms to manage innovation and digital transformation more effectively by ensuring that sensing and seizing are not isolated events but are embedded within the organizational learning process. In this study, psychological empowerment, creativity, and innovative work behavior can be viewed as micro-foundations of sensing and seizing. At the same time, digital leadership plays a pivotal role in enabling reconfiguration. As supported by empirical work by Teece *et al.*, (1997) and Cahaya *et al.*, (2024), dynamic capabilities offer a robust lens for analyzing how individual-level behaviors translate into organizational-level outcomes, particularly for SMEs seeking sustainable competitive advantage in volatile environments.

Competitive Advantage

Competitive advantage refers to an organization's ability to generate more excellent value than its competitors and sustain that superiority over time. It is achieved through various strategic means, such as differentiation, cost efficiency, and innovation-driven responsiveness to market needs. Rather than focusing solely on cost leadership, businesses today must prioritize value creation as a core strategic objective. In particular, product quality, customer focus, and digital marketing have become pivotal in strengthening competitive advantage, especially for SMEs operating in dynamic markets (Kusuma *et al.*, 2022). Business strategy is no longer confined to static positioning; it is now shaped by continuous adaptation and alignment with customer expectations. Maryani & Chaniago, (2019) argued that a business's ability to adapt its strategy to evolving fashion trends significantly enhances its competitive edge. Moreover, customer orientation and entrepreneurial behavior have been identified as integral components in enhancing marketing performance through sustainable competitive advantage (Christian & Yoestini, 2023), suggesting that internal organizational capabilities are critical drivers of long-term success.

In the context of SMEs, competitive advantage is deeply rooted in innovation, creativity, and proximity to the local market. The agility of SMEs enables them to respond to consumer feedback rapidly, and such responsiveness is a source of value creation. Studies show that creativity and innovation must be nurtured internally through empowerment and leadership to be converted into tangible business outcomes. Violinda (2018) highlighted that the ability of SMEs to maintain competitiveness lies not in the abundance of resources but in strategic decision-making and market alignment. Furthermore, the use of digital platforms and literacy has transformed the competitive landscape for micro-enterprises, where digital marketing and brand awareness have demonstrated significant roles in purchasing behavior and business resilience (Jayanti & Karnowati, 2023). Therefore, competitive advantage in this context is no longer a static achievement but an ongoing process powered by empowered employees, innovative culture, and adaptive leadership that create unique market value. This study positions competitive advantage as the strategic outcome of psychological empowerment, creativity, and innovative work behavior, all moderated by digital leadership to reflect the real-world demands of modern entrepreneurship.

Psychological Empowerment

Psychological empowerment has been widely recognized as a critical construct in fostering proactive and innovative employee behavior within organizations. Spreitzer (1995) defines this concept as encompassing four key dimensions: meaning, competence, self-determination, and impact. These elements shape how employees perceive their role and contribution to organizational goals, creating a motivational state that encourages them to act autonomously and meaningfully. When individuals perceive their work as purposeful and aligned with their values, they are more likely to demonstrate confidence and initiative in performing their tasks (Simamora *et al.*, 2021). This sense of

agency enhances individual motivation and supports the development of a psychologically safe climate, which is vital for innovation. Suryani *et al.*, (2020) emphasize that when employees feel competent and trusted, they are more inclined to take risks, offer creative ideas, and experiment with new problem-solving approaches. Consequently, psychological empowerment is a strategic foundation for cultivating an engaged workforce capable of adapting to complex organizational demands.

In the context of SMEs, psychological empowerment is incredibly crucial, given the limitations in financial and technological resources. Rather than relying on external factors, SMEs must maximize internal capabilities, particularly those related to human capital. Empowered employees are more committed and exhibit more substantial ownership of their roles, translating to higher levels of innovative work behavior. This is supported by empirical findings from Suryani *et al.* (2020), who revealed that psychological empowerment significantly predicts innovative behavior among SME employees. Organizational leadership is critical in reinforcing empowerment through recognition, feedback, and autonomy support (Gibran & Suryani, 2019). This research aligns with the broader view that empowering employees is not merely a human resources initiative but a strategic tool for driving innovation and long-term success. By embedding empowerment within the organizational culture, SMEs can stimulate creativity, foster resilience, and build a competitive edge in increasingly dynamic business environments.

Creativity

Creativity is widely recognized as a fundamental element of organizational resilience and adaptability. It refers to the ability of individuals or teams to generate original, relevant, and valuable ideas, not only in product development but also in improving work processes and responding to dynamic market demands. In a business environment where agility is essential, creativity becomes the cornerstone of building an innovative culture that sustains competitive advantage. Research has shown that creativity fosters organizational differentiation by enabling firms to offer unique value propositions (Kurniasari, 2018). In the context of SMEs, where resource limitations are common, creativity is a strategic internal asset that drives innovation and responsiveness. Praningrum *et al.*, (2022) assert that creative self-efficacy significantly influences innovative behavior, emphasizing that creativity is not an isolated trait but a skill nurtured by empowerment and leadership. Moreover, Puspita Sari & Fiona, (2023) highlight the critical role of creativity in entrepreneurship, especially among food SMEs, in establishing competitive positioning through distinctive offerings and operational improvements.

Creativity, however, cannot stand alone; it must be translated into action to deliver value. This perspective positions creativity as the foundation of innovative work behavior, bridging psychological empowerment with tangible organizational outcomes. Siregar *et al.*, (2024) emphasize that while creative ideas spark innovation, they require supportive structures and leadership to be implemented effectively. This research conceptualizes creativity as a mediating variable that transforms psychological empowerment into innovative practices. Innovation management strategies rooted in creative thinking significantly impact organizational competitiveness. Nguyen *et al.*, (2023) suggest that leadership styles influence how employees express their creativity and align it with organizational goals. In SMEs, where flexibility and market closeness are core strengths, leveraging creativity is essential for developing tailored strategies that resonate with local consumers. However, as Labudo, (2013) argues, creativity must be paired with discipline and strategic execution to yield long-term performance gains. Therefore, while creativity is indispensable, it requires integration with innovation processes and digital leadership to ensure it leads to sustained competitive advantage.

Innovative Work Behavior

Innovative work behavior (IWB) is crucial to organizational effectiveness, particularly in dynamic and competitive business environments. It encompasses a series of employee-driven actions involving idea generation, promotion, and realization in the workplace. Rather than being confined to creativity alone, IWB extends the creative process by ensuring that ideas are actively communicated, tested, and implemented to improve organizational processes and outcomes. Asbari *et al.*, (2019) argue that

IWB emerges from individual capacity and conducive leadership and organizational culture that foster innovation readiness. These behaviors become even more critical in resource-constrained settings, such as small and medium-sized enterprises (SMEs), where individual contributions can significantly shape strategic outcomes.

The mediating role of IWB is further reinforced by recent studies that position it between psychological empowerment and competitive advantage. Berliana & Arsanti (2018) suggest that while creativity offers the raw material for innovation, IWB transforms these creative insights into practical changes and competitive offerings. Yulianti & Etikariena, (2021) highlight how employees with a strong attitude toward self-development are more likely to engage in innovative actions, particularly when their workplace supports autonomy and personal growth. In this context, IWB functions as the behavioral mechanism through which empowered employees enact strategic value. IWB leads to enhanced work outcomes, even in public-sector organizations, when supported by leadership and recognition structures. Hadi *et al.*, (2020) demonstrate that aligning IWB and organizational goals significantly boosts employee performance. Within SMEs, where flexibility and responsiveness are vital, Srirahayu *et al.*, (2023) assert that fostering IWB enables businesses to adapt more rapidly and innovate at the grassroots level. Therefore, this research positions IWB as a theoretically and practically central construct that links individual empowerment and creativity to the broader goal of achieving sustainable competitive advantage.

Digital Leadership

Digital leadership is a transformative model in which technological vision and strategic organizational direction converge to drive innovation and competitive advantage. Unlike traditional leaders, digital leaders are fluent in emerging technologies and can foster an organizational culture that is agile, collaborative, and resilient to change. As Ghamrawi & Tamim, (2023) describe, digital leadership involves fostering a digital mindset across organizational levels and ensuring that technological tools are seamlessly integrated with strategic objectives. This integration is essential, particularly in dynamic environments where responsiveness and speed are critical. In practice, digital leaders empower teams to experiment, facilitate cross-functional collaboration using digital platforms, and guide employees through the uncertainties of digital transformation (Al-Hadrawi & Reniati, 2023). Such capabilities are especially vital in SMEs, where resource limitations require leaders to maximize digital agility and foster a proactive innovation culture.

This study conceptualizes digital leadership as a moderating variable that amplifies the relationship between creativity, innovative work behavior, and competitive advantage. The moderating effect is evident when digital leaders provide direction, psychological safety, and access to digital tools, thereby converting creative potential into tangible innovations. Digital leadership is about adopting technology and mobilizing people to engage with it purposefully. According to Claassen *et al.*, (2023), organizations led by digitally competent leaders are more likely to translate innovative behaviors into sustained competitive outcomes. Public service institutions with digitally savvy leaders experienced faster growth in digital competence and more responsive decision-making processes. Ly, (2024) argues that digital transformational leadership catalyzes organizational agility, enabling quicker response to market shifts. In the context of SMEs, digital leadership plays a critical role in transforming ideas into action and streamlining operations through digitization. Therefore, fostering digital leadership within SMEs is a managerial enhancement and a strategic imperative for building long-term competitiveness in today's technology-driven business landscape.

Research Design and Methodology

This study employed a quantitative research design to examine the relationships among psychological empowerment, creativity, innovative work behavior, digital leadership, and competitive advantage. A cross-sectional survey method was used to gather data from SME actors in South Sulawesi, Indonesia. This design was chosen to enable hypothesis testing and to generalize findings across a broad population of SMEs. The population for this study consisted of Small and Medium Enterprises (SMEs) located in South Sulawesi. According to the 2020 estimation by Statistics Indonesia (BPS), 94,392 SMEs were operating in the region. Slovin's formula determined a sample size of 383 SMEs to ensure

representativeness. Surveys were distributed accordingly, and 254 valid responses were obtained, yielding a response rate of 66.3%. Given the large population and the need for a manageable yet statistically significant sample size, this sampling approach was deemed appropriate.

Data collection was conducted using a structured questionnaire based on previously validated scales. All items were measured using a five-point Likert scale. The measurement for Psychological Empowerment (PE) was adopted from Safari *et al.*, (2020), Creativity (CR) by Horkoff *et al.*, (2019), and Innovative Work Behavior (IWB) by Taherparvar *et al.*, (2018). Digital Leadership (DL) was measured using the instrument developed by Mihardjo & Rukmana, (2018) while Competitive Advantage (CA) was measured using the scale proposed by Ferreira *et al.* (2020). The questionnaire was refined to ensure clarity and content validity before distribution. For data analysis, the study employed Structural Equation Modeling using the Partial Least Squares (SEM-PLS) approach developed by Hair *et al.* (2014). This method was chosen for its ability to handle complex models and its suitability for exploratory studies. Analyses included assessments of discriminant validity, factor loadings, composite reliability, Average Variance Extracted (AVE), and structural modeling to test the proposed relationships.

Findings and Discussion

Findings

Validity and Reliability Test

The validity and reliability of the instruments were assessed using the Fornell-Larcker Criterion, Average Variance Extracted (AVE), Cronbach's Alpha, Composite Reliability, and the coefficient of determination (R^2) to assess the contribution of each variable.

Table 1. Measurement Model

	CA	CR	DL	IWB	PE	Cronbach Alpha	Composite Reliability	AVE	R^2
CA	0.803					0.726	0.845	0.645	0.292
CR	0.399	0.759				0.753	0.844	0.576	0.296
DL	0.420	0.408	0.743			0.737	0.831	0.552	
IWB	0.450	0.555	0.421	0.791		0.801	0.870	0.626	0.394
PE	0.411	0.515	0.490	0.513	0.798	0.810	0.875	0.637	

Source: Research Data Processed, 2025

It can be observed that the Average Variance Extracted (AVE) values for all constructs exceed the minimum threshold of 0.50, and higher AVEs confirm discriminant validity relative to the squared inter-construct correlations. Additionally, the composite reliability scores for all constructs surpass the minimum value of 0.70. All reliability values are well above the Cronbach's Alpha threshold of 0.70. Therefore, all research constructs satisfy the requirements (Hair *et al.*, 2014).

Structural Model and Hypothesis Testing

Direct effects were examined using Structural Equation Modeling - Partial Least Squares (SEM-PLS), with the bootstrapping approach used to estimate direct, indirect, and total effects. Bootstrapping was performed with 500 subsamples and a 95% bias-corrected confidence interval.

Direct Effects: The proposed model fits the data well—hypotheses H1a-H1c state that PE influences CR, IWB, and CA. Table II shows that H1a is supported with a coefficient of 0.413 ($p = 0.000$), H1b is supported with 0.253 ($p = 0.001$), but H1c is not supported (0.124, $p = 0.172$). This implies that PE significantly influences CR and IWB but not CA. Psychological empowerment enhances employees' creativity and innovative behavior but does not directly improve business competitiveness. Therefore, H1a and H1b are supported, while H1c is not.

Hypotheses H2a-H2b proposed that CR influences IWB and CA. Table II reveals that CR affects IWB (0.367, $p = 0.000$), but not CA (0.122, $p = 0.175$). Thus, individual creativity fosters innovative behavior and ultimately contributes to business advantage. However, creativity alone is insufficient—it must be transformed into innovative behavior to generate impact. This is confirmed by H3, which shows that IWB significantly affects CA (0.230, $p = 0.015$). H6 is also supported, showing that DL positively influences CA ($\beta = 0.212$, $p = 0.006$). Accordingly, H2a, H2b, H3, and H6 are supported, while H2c is not.

Mediating Effects: The bootstrapping analysis with a 95% bias-corrected confidence interval (Table II) shows that CR mediates the relationship between PE and IWB but not between PE and CA. This indicates that employee creativity supports the development of innovative behavior, with psychological empowerment as its antecedent. However, creativity alone does not directly influence competitive advantage, even when preceded by high psychological empowerment. On the other hand, IWB mediates the influence of both PE and CR on CA. Thus, innovative behavior emerges as a crucial factor in achieving competitive business advantage. H4a (PE → CR → IWB) is supported ($p = 0.000$), while H4b is not ($p = 0.193$). Similarly, H5a and H5b (IWB as mediator for PE and CR to CA) are supported with p-values of 0.037 and 0.039, respectively.

Moderating Effects: The study also examined the moderating role of digital leadership (Table II). First, DL significantly moderates the relationship between CR and IWB ($\beta = 0.405$, $p = 0.000$), indicating that digital leadership accelerates the transformation of creativity into innovative behavior. However, DL does not significantly moderate the effect of PE ($\beta = 0.033$, $p = 0.125$) or CR ($\beta = 0.061$, $p = 0.197$) on CA. This suggests that even in the presence of high psychological empowerment and creativity, digital leadership alone does not amplify business competitiveness. In contrast, DL does significantly moderate the relationship between IWB and CA ($\beta = 0.325$, $p = 0.004$), confirming that digital leadership enhances the impact of innovative behavior on competitive advantage. Therefore, H7 and H8c are supported, while H8a and H8b are not.

Coefficient of Determination: Table 1 shows that PE explains 29.6% of CR. Combined, PE and CR explain 39.4% of the variance in IWB. Lastly, PE, CR, IWB, and DL together explain 29.2% of the variance in CA.

Table 2. Hypothesis Testing Results

Hypothesis	T-Statistic	P-Value	Result
Direct Effects			
PE → CR	0.413	6.254	0.000
PE → IWB	0.253	3.305	0.001
PE → CA	0.124	1.368	0.172
CR → IWB	0.367	5.715	0.000
CR → CA	0.122	1.357	0.175
IWB → CA	0.230	2.431	0.015
DL → CA	0.212	2.736	0.006
Mediating Effects			
PE → CR → IWB	0.152	4.408	0.000
PE → CR → CA	0.050	1.304	0.193
PE → IWB → CA	0.058	2.094	0.037
CR → IWB → CA	0.084	2.072	0.039
Moderating Effects			
CR × IWB	0.405	4.890	0.000
PE × CA	0.033	1.538	0.125
CR × CA	0.061	1.292	0.197
IWB × CA	0.325	2.872	0.004

Source: Research Data Processed, 2025

To explain the results of this study, we simplify them in the following figure:

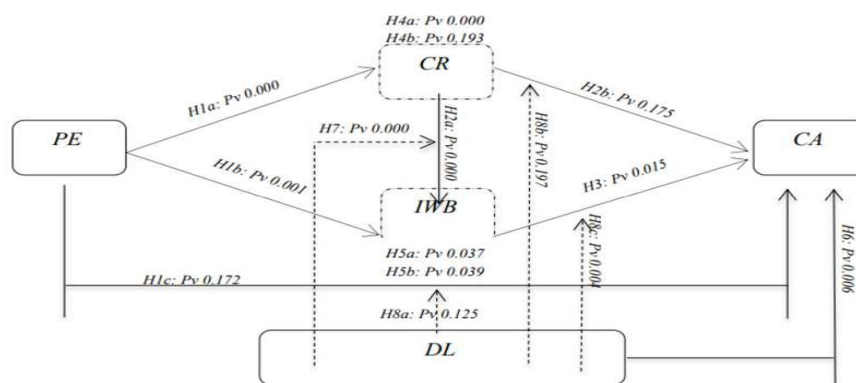


Figure 1. Research Results and Findings

Discussion

Effect of Psychological Empowerment (PE) on Creativity (CR)

The findings of this study indicate a significant positive relationship between psychological empowerment (PE) and employee creativity (CR), suggesting that when employees feel empowered—through autonomy, competence, and meaning in their work—they are more likely to engage in creative thinking and idea generation. This supports the foundational premise of the Dynamic Capabilities Theory. Teece *et al.*, (1997), which posits that organizations must develop internal capabilities, such as employee creativity, to adapt to rapidly changing environments. In this context, it is an enabling mechanism that enhances employees' confidence and intrinsic motivation, allowing them to explore novel approaches and contribute innovative ideas. This result aligns with prior research by Liu and Huang and Safari *et al.*, (2020) Who emphasized that empowerment cultivates a sense of ownership and motivation, which drives creativity. The present study extends these insights by reaffirming the critical role of psychological factors in fostering dynamic and creative behaviors within organizational settings. Furthermore, the result is consistent with the view that creativity is not merely an individual trait but a strategic resource that can be developed through supportive leadership and organizational culture.

Effect of Psychological Empowerment (PE) on Innovative Work Behavior (IWB)

The findings of this study demonstrate that psychological empowerment (PE) has a meaningful and positive influence on innovative work behavior (IWB) among employees. This result suggests that when employees feel psychologically empowered—through experiences of autonomy, role significance, and self-efficacy—they are more likely to take the initiative, challenge the status quo, and implement novel solutions in their daily work. These behaviors reflect a proactive orientation essential for innovation, especially within dynamic business environments. In line with the Dynamic Capabilities Theory Teece et al. (1997) This finding reinforces the idea that internal organizational capacities, such as empowered human capital, are vital for sensing, seizing, and transforming opportunities into value-creating actions. The results align with prior studies by Ghosh *et al.*, Iqbal *et al.*, and Singh & Sarkar, (2019) who found that empowered employees exhibit higher levels of innovative behavior due to increased intrinsic motivation and psychological safety. By fostering empowerment, organizations facilitate an environment where individuals feel confident to experiment, voice ideas, and take calculated risks. This study thus strengthens the argument that psychological empowerment benefits employee well-being and serves as a strategic resource for cultivating innovation. These insights affirm that empowering employees is essential to achieving sustained competitiveness, particularly for SMEs operating in fast-paced, uncertain markets.

The effect of Psychological Empowerment (PE) on Competitive Advantage (CA)

The results of this study reveal that psychological empowerment (PE) does not directly affect competitive advantage (CA), indicating that empowering employees alone is insufficient to enhance a firm's competitive position without the involvement of other key behavioral mechanisms. This finding suggests that while PE may foster a sense of confidence and autonomy among employees, these psychological states must be translated into tangible value-creating behaviors—such as creativity and innovation—before any meaningful impact on competitive outcomes can occur. From the perspective of the Dynamic Capabilities Theory (Teece *et al.*, 1997), this result highlights that internal capabilities require activation and integration through dynamic processes to sustain competitive advantage. In contrast to studies that suggest a direct link between empowerment and organizational performance, this research emphasizes that PE's influence is more indirect and contingent on other mediating behaviors. It aligns with recent literature that positions innovative work behavior and creativity as critical pathways through which empowerment translates into competitive outcomes. Therefore, while PE remains an important foundation, it is not a standalone driver of competitive success. The absence of a direct effect underlines the complexity of achieving advantage in dynamic markets, reinforcing the importance of embedding empowerment within a broader strategic context that includes innovation-driven practices and leadership engagement.

The effect of Creativity (CR) on Innovative Work Behavior (IWB)

The results of this study indicate that creativity (CR) does not directly affect competitive advantage (CA), suggesting that the generation of novel ideas alone is insufficient to enhance a firm's competitive position. While creativity is undoubtedly a valuable internal resource, its strategic impact depends on translating creative ideas into innovative actions and implementing them within organizational processes. This finding aligns with the Dynamic Capabilities Theory. Teece et al. (1997), which posits that competitive advantage arises from internal capabilities and the ability to mobilize, transform, and apply those capabilities in response to environmental demands. Compared to previous studies highlighting a strong association between creativity and performance outcomes, this study suggests a more nuanced understanding: creativity may be necessary but insufficient for achieving sustained competitive advantage. The result aligns with recent literature emphasizing the importance of execution and behavioral application—namely, innovative work behavior—as the essential link between creative potential and organizational success. Therefore, this study reinforces the notion that creative capacity must be coupled with mechanisms that enable its practical application. Without such a transformation, the value of creativity remains latent and disconnected from the organization's broader strategic goals. In this context, innovation becomes the operational pathway through which creativity contributes to competitive outcomes.

Effect of Creativity (CR) on Competitive Advantage (CA)

The results of this study indicate that creativity (CR) does not directly affect competitive advantage (CA), suggesting that the generation of novel ideas alone is insufficient to enhance a firm's competitive position. While creativity is undoubtedly a valuable internal resource, its strategic impact depends on translating creative ideas into innovative actions and implementing them within organizational processes. This finding aligns with the Dynamic Capabilities Theory. Teece *et al.*, (1997), which posits that competitive advantage arises from internal capabilities and the ability to mobilize, transform, and apply those capabilities in response to environmental demands. Compared to previous studies highlighting a strong association between creativity and performance outcomes, this study suggests a more nuanced understanding: creativity may be necessary but insufficient for achieving sustained competitive advantage. The result aligns with recent literature emphasizing the importance of execution and behavioral application—namely, innovative work behavior—as the essential link between creative potential and organizational success. Therefore, this study reinforces the notion that creative capacity must be coupled with mechanisms that enable its practical application. Without such a transformation, the value of creativity remains latent and disconnected from the organization's broader strategic goals. In this context, innovation becomes the operational pathway through which creativity contributes to competitive outcomes.

The effect of Innovative Work Behavior (IWB) on Competitive Advantage (CA)

The findings of this study confirm that innovative work behavior (IWB) significantly contributes to achieving competitive advantage (CA). This suggests that when employees consistently engage in idea implementation, experimentation, and continuous improvement, their actions drive meaningful advancements that help organizations distinguish themselves in the market. IWB represents the tangible execution of creative ideas, transforming abstract innovation into practical strategies, products, or services that deliver value. This aligns strongly with the Dynamic Capabilities Theory. Teece et al., (1997), emphasizing that firms must develop and reconfigure internal competencies, such as employee-driven innovation, to respond effectively to rapidly changing environments and sustain long-term success. The results are consistent with earlier studies by Banmairuoy et al. and Stojcic and Orlic, who demonstrated that organizations with high levels of employee innovation are better positioned to adapt, compete, and thrive in dynamic markets. These findings reinforce the understanding that innovative work behavior is a critical operational mechanism through which organizations leverage internal capabilities to generate external performance outcomes. Unlike creativity, which captures the potential for innovation, IWB reflects its realization. Thus, this study supports the view that promoting and institutionalizing innovative behavior among employees is

essential for organizations—particularly SMEs—to remain agile, future-ready, and competitively superior in a constantly evolving business landscape.

The role of Creativity (CR) in mediating the effect of Psychological Empowerment (PE) on Innovative Work Behavior (IWB)

The results of this study reveal that creativity (CR) plays a significant mediating role in the relationship between psychological empowerment (PE) and innovative work behavior (IWB). This finding highlights that while psychological empowerment fosters a sense of autonomy, meaning, and confidence among employees, it is through the development of creativity that these psychological states are transformed into innovative actions. Empowered employees are more likely to engage in creative thinking, and this creative mindset, in turn, becomes the foundation for initiating and sustaining innovative behavior within organizational contexts. This process aligns with the core principles of the Dynamic Capabilities Theory. Teece et al. (1997), emphasizing the importance of building, integrating, and reconfiguring internal resources—such as employee creativity—to adapt and innovate in dynamic environments. This finding is consistent with previous research by Schuckert *et al.*, who argued that creativity serves as a conduit through which psychological empowerment translates into innovation. It extends the literature by empirically validating creativity's role as a dynamic mechanism that bridges psychological factors and behavioral outcomes. The result affirms that psychological empowerment alone cannot stimulate innovation; it must be channeled through creative expression. Therefore, organizations seeking to enhance innovative behavior should empower employees and invest in cultivating creativity as a strategic capability, strengthening their dynamic capacity to respond to market challenges and drive sustained competitive advantage.

The role of Creativity (CR) in mediating the effect of Psychological Empowerment (PE) on Competitive Advantage (CA)

The findings indicate that creativity (CR) does not significantly mediate the relationship between psychological empowerment (PE) and competitive advantage (CA), suggesting that while PE may encourage creative thinking, this alone is insufficient to yield strategic outcomes unless it leads to actionable innovation. This implies that creativity, in the absence of its transformation into concrete innovative behaviors, remains a latent capability that does not directly contribute to an organization's competitive positioning. From the lens of the Dynamic Capabilities Theory (Teece *et al.*, 1997), this finding reinforces the notion that competitive advantage arises not simply from possessing internal resources such as creativity, but from effectively deploying and integrating them within organizational routines that generate value. This result contrasts with prior studies suggesting a direct link between creativity and firm performance. However, it aligns with recent perspectives asserting that creativity must be activated through innovative work behavior to translate into competitive outcomes. The finding also suggests that the process from psychological empowerment to performance is multi-staged and complex, requiring cognitive and behavioral alignment. Therefore, although creativity is a critical capability, it must be harnessed and operationalized through innovation-focused mechanisms. Organizations should not only empower and encourage creative thinking but also build structures that facilitate the conversion of creative ideas into innovations that tangibly enhance their market position.

The role of Innovative Work Behavior (IWB) in mediating the effect of Psychological Empowerment (PE) on Competitive Advantage (CA)

The results of this study reveal that innovative work behavior (IWB) significantly mediates the relationship between psychological empowerment (PE) and competitive advantage (CA). This indicates that while psychological empowerment may not directly influence a firm's competitive edge, it becomes impactful when it fosters innovative behaviors among employees. Empowered individuals—those who feel competent, autonomous, and psychologically safe—are more inclined to take initiative, explore new ideas, and apply creative solutions in their work. These behaviors, in turn, translate into improvements in products, processes, and services that enhance an organization's

market position. This finding aligns well with the Dynamic Capabilities Theory. Teece et al. (1997), which asserts that competitive advantage stems from the organization's ability to integrate, build, and reconfigure internal capabilities to adapt to external changes. The study supports earlier research that positions IWB as a critical behavioral mechanism linking psychological states to strategic outcomes. It echoes findings from Iqbal et al. and Schuckert *et al.*, who emphasized the importance of innovative action in translating individual empowerment into organizational performance. Rather than functioning as a static resource, PE is a dynamic enabler that must be expressed through innovation to contribute to long-term competitiveness. Therefore, organizations should aim to empower their employees psychologically and nurture an environment that supports and rewards innovation as a bridge to achieving sustainable competitive advantage.

The role of Innovative Work Behavior (IWB) in mediating the effect of Creativity (CR) on Competitive Advantage (CA)

This study finds that innovative work behavior (IWB) plays a significant mediating role in the relationship between creativity (CR) and competitive advantage (CA), indicating that the presence of creative ideas alone does not directly enhance organizational competitiveness unless those ideas are actively implemented through innovative actions. Creativity provides the cognitive foundation for innovation, but it is the behavioral execution—manifested through exploration, experimentation, and application—that transforms ideas into value-generating outcomes. This supports the central tenet of the Dynamic Capabilities Theory. Teece et al. (1997), which asserts that firms must not only possess valuable internal resources, such as creativity, but also develop the capability to reconfigure and apply them in dynamic, competitive environments. The findings align with prior research by Banmairuoy et al. and Jaiswal and Dhar, who emphasize that creativity becomes strategically relevant only when it leads to concrete, innovative behaviors. Rather than functioning in isolation, creativity must be part of a more extensive behavioral process to contribute to long-term competitive advantage. These results suggest that organizations aiming to harness creativity must foster a culture that encourages innovation at all levels. Only through this conversion process can creative potential be fully realized and contribute meaningfully to a firm's adaptive capacity and sustained performance in a rapidly evolving market landscape.

The effect of Digital Leadership (DL) on Competitive Advantage (CA)

The findings of this study demonstrate that digital leadership (DL) significantly influences competitive advantage (CA), underscoring the critical role of leaders in navigating digital transformation to enhance organizational competitiveness. In an era of technological disruption, leaders with digital acumen and the vision to integrate technology into strategic decision-making are instrumental in driving innovation, operational efficiency, and adaptability. This aligns closely with the Dynamic Capabilities Theory (Teece *et al.*, 1997), highlighting the importance of leadership in reconfiguring organizational resources to respond to rapidly changing environments. This result is consistent with earlier studies by Mihardjo & Rukmana (2018), who emphasized that digital leadership enables firms to build agile strategies, adopt digital solutions, and respond to market dynamics more effectively. Unlike traditional leadership approaches that focus solely on administrative efficiency, digital leadership promotes a culture of experimentation, technological adoption, and continuous learning—all essential for sustaining competitive advantage. The study affirms that digital leaders serve as strategic guides, empowering their teams to leverage digital tools and insights to drive business growth. Therefore, organizations that aim to thrive in competitive, volatile markets must prioritize developing digital leadership as a core capability within their strategic framework.

The role of Digital Leadership (DL) in moderating the effect of Creativity (CR) on Innovative Work Behavior (IWB)

The results of this study confirm that digital leadership (DL) significantly moderates the relationship between creativity (CR) and innovative work behavior (IWB), suggesting that the presence of a digital leader strengthens the transformation of creative ideas into innovative actions. In environments where digital leadership is effectively practiced, employees are more likely to feel

supported in taking risks, utilizing digital tools, and exploring unconventional solutions. This leadership approach provides strategic direction and fosters a digital culture encouraging experimentation and agility. In this context, DL acts as a catalyst that amplifies the impact of creativity on actual innovation in the workplace. These findings resonate with the principles of the Dynamic Capabilities Theory. Teece et al. (1997), which underscores the importance of leadership in orchestrating internal capabilities to adapt and respond to environmental changes. DL enables organizations to reconfigure resources—including human creativity dynamically—into innovative outputs. Prior research by AlAjmi and Jackson & Dunn-Jensen (2021) Supports this view by showing that digital leaders facilitate environments where innovation thrives. The present study further validates this by demonstrating that even when creativity is present, its influence on innovation is enhanced when guided by a leader who embraces and enables digital transformation. Thus, digital leadership is not merely a managerial style but a dynamic enabler that bridges the gap between ideation and innovation to pursue organizational competitiveness.

The role of Digital Leadership (DL) in moderating the effect of Creativity (CR) on Innovative Work Behavior (IWB)

The findings reveal that digital leadership (DL) does not significantly moderate the relationship between psychological empowerment (PE) and competitive advantage (CA), suggesting that the presence of digital leadership alone is insufficient to enhance the direct impact of psychological empowerment on an organization's competitive position. While both constructs are individually important, their interaction may not yield immediate strategic benefits unless mediated by other behavioral mechanisms, such as innovation. This implies that psychological empowerment, even when supported by a digitally adept leader, may not directly translate into competitive advantage without being transformed through innovative action or strategic execution. From the perspective of the Dynamic Capabilities Theory Teece et al. (1997) This finding reflects the nuanced understanding that organizational advantage arises not merely from possessing valuable resources or leadership traits but from the ability to reconfigure and mobilize these capabilities in response to change. Prior studies, such as those by Mihardjo & Rukmana (2018) The present study has emphasized the role of digital leadership in enhancing competitiveness; however, it suggests that this influence is likely indirect and contingent on dynamic processes such as innovation or digital transformation. Therefore, while DL remains a critical enabler, its role in amplifying the effect of psychological empowerment on competitive advantage may depend on how well the organization translates internal empowerment into externally visible outcomes through strategic innovation.

The role of Digital Leadership (DL) in moderating the effect of Creativity (CR) on Competitive Advantage (CA)

The findings indicate that digital leadership (DL) does not significantly moderate the relationship between creativity (CR) and competitive advantage (CA). This suggests that while DL plays an important role in enabling digital transformation and fostering innovation, its presence alone does not amplify the direct impact of employee creativity on competitive outcomes. Creativity, although essential, remains an internal capability that must be activated through innovation and strategic implementation before it can contribute meaningfully to organizational performance. Even under strong digital leadership, creative potential may remain untapped if not operationalized through well-defined innovation processes or performance-driven behaviors. This result is aligned with the Dynamic Capabilities Theory. Teece et al. (1997), which posits that competitive advantage arises not merely from the existence of internal resources such as creativity or leadership, but from the organization's ability to integrate, transform, and apply them in response to market dynamics. Prior research, including that of Mihardjo & Rukmana (2018), has emphasized the importance of digital leadership in enhancing innovation; however, the current findings highlight that its influence on competitiveness is not immediate or automatic. Instead, DL may deliver its strategic value more effectively by enabling the transformation of creativity into actionable innovation. Thus, the synergy between creativity and DL must be complemented by systems that facilitate execution and learning to realize actual competitive gains.

The role of Digital Leadership (DL) in moderating the effect of Innovative Work Behavior (IWB) on Competitive Advantage (CA)

The results of this study confirm that digital leadership (DL) significantly moderates the relationship between innovative work behavior (IWB) and competitive advantage (CA). This suggests that, in the presence of strong digital leadership, employees' innovative actions have a substantially more substantial influence on a firm's competitive positioning. Digital leaders provide strategic direction, foster a culture of experimentation, and offer the technological support that enables employees to effectively translate their innovative behaviors into outcomes that enhance organizational performance. This finding reflects the logic of the Dynamic Capabilities Theory. Teece et al. (1997), which asserts that firms must not only possess internal competencies but must also dynamically reconfigure and apply them to achieve sustainable competitive advantage. This study is consistent with earlier research by Mihardjo & Rukmana (2018), Wasono & Furinto (2018), who argue that digital leadership facilitates the integration of innovation into core business strategies. The finding reinforces the view that innovation alone is insufficient; it must be guided and amplified through leadership that understands and embraces digital transformation. When digital leadership is present, it enhances employees' ability to implement innovative ideas, align them with strategic objectives, and drive meaningful competitive outcomes. Therefore, organizations aiming to maximize the impact of innovation must invest in developing digital leadership capabilities to enable innovation-driven success.

Conclusion

This study explored the complex relationships between psychological empowerment, creativity, innovative work behavior, and competitive advantage while examining digital leadership's moderating role. The findings confirm that psychological empowerment significantly enhances creativity and innovative work behavior, but does not directly affect competitive advantage. Creativity drives the emergence of innovative work behavior, which, in turn, contributes to achieving competitive advantage. Digital leadership emerged as a critical moderating factor, amplifying the effect of creativity and innovation on competitiveness. In the dynamic context of SMEs, digital leaders who embrace emerging technologies and guide their teams through digital transformation can create a more agile, innovative organizational environment.

The research makes an important contribution to both theory and practice. Theoretically, the study enriches the application of Dynamic Capabilities Theory by integrating psychological empowerment and digital leadership as drivers of innovation-based competitiveness. Practically, the study offers actionable insights for SME owners and managers by emphasizing the need to cultivate creativity and foster a culture of innovation through psychological empowerment and digital leadership. Encouraging digital thinking and promoting innovation at all organizational levels is vital to achieving and sustaining competitive advantage in the digital era. The originality of this study lies in its integrated model and empirical examination of digital leadership as a moderator in the SME context. This field remains underexplored in the existing literature.

Despite its contributions, this study is not without limitations. The research relied solely on quantitative data collected from SMEs in a specific region, which may limit the generalizability of the findings. Future research could employ a mixed-methods approach to yield deeper insights and expand the population to include other regions and industries. Additionally, further studies should explore individual-level factors, such as employee personality traits and digital literacy, as well as organizational factors, such as innovation culture and technological infrastructure. These efforts could offer a more comprehensive understanding of how innovation emerges, leading to sustainable competitive advantage in the rapidly evolving business landscape.

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