A TRIAD OF EXCELLENCE: HOW STRATEGIC LEADERSHIP, INTELLECTUAL CAPITAL AND IT INNOVATION DRIVE COMPETITIVE ADVANTAGE IN HIGHER EDUCATION INSTITUTIONS

Syukron Sazly¹, Harun Al Rasyid², Agus Tri Indah K³

^{1,2,3)} Universitas Bina Sarana Informatika Email: <u>syukron.szy@bsi.ac.id</u>

Artikel History:

Artikel masuk: 26/02/2025 Artikel revisi: 24/03/2025 Artikel diterima: 30/04/2025

Keywords:

Strategic Leadership, Intellectual Capital, Innovation, Competitive Advantage

Penelitian ini menganalisis faktor penentu keunggulan kompetitif berkelanjutan melalui pendekatan Resource-Based View (RBV), dengan fokus pada kepemimpinan strategis, modal intelektual, dan inovasi teknologi. Metode kualitatif diterapkan melalui tinjauan sistematis terhadap 27 literatur terpilih (Scopus dan nasional terakreditasi). Hasil mengungkap: (1) kepemimpinan strategis berperan sebagai pengarah visi jangka panjang, (2) modal intelektual (pengetahuan, keterampilan, inovasi) menjadi aset tak tergantikan, dan (3) inovasi teknologi meningkatkan produktivitas, diferensiasi produk, dan adaptasi pasar. Interaksi ketiganya menciptakan ekosistem kompetitif yang berkelanjutan. Penelitian ini berkontribusi teoretis pada pengembangan manajemen strategis dan praktis sebagai panduan bisnis di era digital. Rekomendasi untuk riset selanjutnya meliputi perluasan variabel (budaya organisasi, jejaring bisnis, kapabilitas dinamis) dan penerapan metode campuran. Temuan ini menegaskan pentingnya sinergi antar-faktor dalam membangun keunggulan kompetitif yang tahan terhadap disrupsi.

ABSTRAK

ABSTRACT

This study analyzes the determinants of sustainable competitive advantage through the Resource-Based View (RBV) approach, focusing on strategic leadership, intellectual capital, and technological innovation. The qualitative method was applied through a systematic review of 27 selected literature (Scopus and nationally accredited). The results reveal: (1) strategic leadership plays a role as a guide for long-term vision, (2) intellectual capital (knowledge, skills, innovation) becomes irreplaceable assets, and (3) technological innovation increases productivity, product differentiation, and market adaptation. The interaction of the three creates a sustainable competitive ecosystem. This research contributes theoretically to the development of strategic and practical management as a business guide in the digital era. Recommendations for further research include the expansion of variables (organizational culture, business networking, dynamic capabilities) and the application of mixed methods. These findings underscore the importance of inter-factor synergy in building a competitive advantage that is resistant to disruption.



INTRODUCTION

The contemporary global business environment exhibits continuous and dynamic transformations, presenting organizations with substantial challenges in effectively adapting to shifting ecological conditions. This phenomenon assumes particular urgency for Small and Medium Enterprises (SMEs) in agrarian economies such as Indonesia. Within the framework of the ASEAN Economic Community (AEC) strategy, Indonesia as the most populous nation in the ASEAN region faces both opportunities and imperatives to enhance its competitive positioning within this integrated economic bloc. Modern organizational success metrics extend beyond mere product offerings to encompass customer loyalty as a critical determinant. The capacity to attract and retain clientele while maintaining competitive superiority necessitates a comprehensive understanding of and responsiveness to evolving consumer demands. To achieve sustainable competitive advantage, Indonesia needs to have top-performing business entities, especially at the ASEAN level, before it can compete at the broader Asian and global levels. However, this cannot be achieved without strong human resources (HR), particularly in the field of higher education. Figure 1 presents the comparative competitive positioning of Indonesian higher education institutions as reflected in international rankings.



Figure 1. Comparative Ranking of Indonesian Higher Education Institutions

(2024 QS World University Rankings)

Source : www.katadata.com



The 2024 ASEAN university rankings reveal significant insights about the competitive position of Indonesian higher education institutions within the regional landscape. While the University of Indonesia (UI) and Gadjah Mada University (UGM) maintain their dominant positions nationally as the top two universities, their regional standing tells a different story, with UI ranking 10th and UGM 11th among ASEAN institutions. This disparity highlights a crucial gap between domestic reputation and international competitiveness that warrants serious attention. The rankings demonstrate clear regional hierarchies, with Singaporean universities occupying the top positions, followed by seven Malaysian institutions in the top 12, and two Thai universities ranking above their Indonesian counterparts.

When examining specific performance metrics, Indonesian institutions lag behind regional peers in critical indicators such as citation impact (15% lower than ASEAN averages), faculty-student ratios (1:28 compared to 1:18 in leading ASEAN universities), and international faculty representation (8% versus 35%) in top institutions, (www.monitor.icef.com). The success of Singapore and Malaysia in particular offers valuable lessons, showcasing how strategic investments in research infrastructure, international talent acquisition, and clear policy frameworks can elevate university rankings.



Figure 2. University Rankings in ASEAN Countries in 2024

Source : www.katadata.com

In achieving competitive advantage, it is essential to maintain the factors that create and sustain such an advantage. Competitive advantage significantly supports marketing performance and helps companies survive in a competitive environment. Several factors influencing competitive advantage and company performance



include strategic leadership, intellectual capital, and technological innovation, particularly information technology. Previous studies have shown that strategic leadership has a positive impact on competitive advantage and company performance. Ireland and Hitt (1999) developed six indicators of activity to determine the effectiveness of strategic leadership, including the ability to be a specific and enduring differentiator, as well as fostering an innovative mindset.Company performance refers to an organization's ability to achieve its goals, strategies, and objectives while effectively utilizing resources (Saeidi et al., 2021). It reflects how well a company can implement its plans efficiently and effectively using the available resources. Although many factors can influence company performance, leadership plays a significant role in contributing to it. Leaders not only shape business policies but also have a substantial impact on building competitive advantage (Rahman et al., 2018).

Competitive advantage is a key factor that distinguishes a company from its competitors by offering unique elements in the market, enabling it to outperform others and take the lead. This advantage refers to a company's ability, derived from its characteristics and resources, to achieve superior performance compared to others operating within the same industry or market. According to Michael E. Porter (1996), a company is considered superior if it can establish distinctive and sustainable differentiators along with an inventive mindset that provides a competitive edge. This advantage allows the company to endure and enhances its performance by reinforcing its competitiveness. Previous literature and studies have identified several factors that influence competitive advantage and organizational performance, such as strategic leadership, intellectual capital, and information technology (IT) innovation. The critical role of strategic leadership in achieving competitive advantage is supported by studies like those of (Hunitie, 2018) and (Jaleha & Machuki, 2018), which show its positive influence on both competitiveness and organizational performance.

Research also shows that beyond strategic leadership, IT innovation and intellectual capital significantly impact competitive advantage and business success. Intellectual capital encompasses all the knowledge possessed by an organization and its employees, along with their collective capacity to deliver value and sustain a competitive edge (Nengah et al., 2021). It includes human capital, structural capital, and relational capital (Handayani & Karnawati, 2020). IT innovation facilitates the collection, storage, and distribution of information, playing a crucial role in driving change and improving a company's financial performance (Lisandra & Suwandi, 2023). To outperform competitors, businesses must develop innovative approaches tailored to their operations (Renaldi Wahyudin, 2022). From the literature review, it appears that previous studies have primarily focused on non-educational sectors



such as hospitality, banking, manufacturing, food and beverages, and consumer goods.

Research in the academic or educational sector remains limited, even though private educational institutions also face intense competition and strive to attain competitive advantage. Furthermore, existing studies in education often focus on human resource management and employee performance, typically employing only one intervening variable.. Therefore, this study proposes adding new variables to the existing models to enrich and better define the elements influencing competitive advantage. Based on the outlined issues, the researcher aims to investigate the relationship between strategic leadership and competitive advantage in the academic and educational sectors, incorporating two intervening variables: IT innovation and intellectual capital. This approach seeks to expand current models by confirming a broader set of factors affecting competitive advantage within non-business organizations, particularly in higher education institutions.

THEORITICAL REVIEW

Resource Based View Theory

Wernerfelt first introduced the concept of the Resource-Based View (RBV) in 1984 (Gupta et al., 2018). This theory has since become widely applied in the fields of marketing and strategic management, with its primary focus being an internal assessment of a company's strengths and weaknesses. RBV serves as a framework to explain how firms can achieve competitive advantage and improve performance based on the resources they possess (Wanjiru et al., 2019). The theory emphasizes the importance of evaluating the variety and uniqueness of resources within an organization. Resource-Based Theory (RBT) suggests that an organization's internal resources are the foundation for gaining and sustaining a competitive edge. It highlights the significance of unique capabilities and resources in determining a company's long-term performance. According to this theory, not all resources are equally valuable or rare. Competitive advantage can be achieved when a company possesses resources that are valuable, rare, imperfectly imitable, and nonsubstitutable criteria commonly known as the VRIN framework. These unique and hard-to-replicate capabilities form the core of a firm's strategic advantage and help establish a strong market position.

Unlike other strategic theories that emphasize external factors such as industry competition or market trends, RBT focuses primarily on internal resources and capabilities. However, despite its strengths in explaining sustained competitive advantage, RBT is not without limitations. One of the main criticisms lies in the difficulty of identifying and accurately measuring resources that meet all VRIN



criteria, which poses a challenge for both researchers and practitioners aiming to apply the theory effectively.

Contingency Theory

This theory proposes that leadership is a cyclical process, where a leader's ability to exert influence depends on the group's task conditions, as well as the leader's level of initiative, character, and actions that align with the group. A person becomes a leader not solely because of their personal qualities, but also due to situational variables and the interaction between the leader and the surrounding environment (Jaleha & Machuki, 2018a). Fiedler's Contingency Model of Leadership, suggests that group performance depends on the persuasive structure of the leader and the extent to which the leader has control and influence in a given situation. Ultimately, the success or failure of an organization is influenced by the leader's motivational framework and the degree of control and influence they possess in specific circumstances. The idea of contingency in leadership emerged from a fundamental critique of universalist approaches, which claimed that there is a single ideal leadership style applicable across all organizational settings. In contrast, the contingency approach emphasizes that leadership effectiveness is dependent on matching leadership style with situational demands, which in turn fosters competitive advantage and drives superior organizational performance (Wanjiru et al., 2019). From the perspective of the resource-based view, company performance differences can be attributed to variations in resources and capabilities. This approach emphasizes examining the diverse assets a company possesses, suggesting that organizational performance is closely linked to these differences. Resources are defined as variables controlled by an organization, including both tangible and intangible components. To achieve resource diversity and heterogeneity, organizations must acquire and develop these assets. Intangible resources include capacities and assets such as information, skills, reputation, and managerial capabilities.

Competitive Advantage

According to research by (Renaldi Wahyudin, 2022), a company's competitive advantage refers to its ability to outperform its competitors within the same market or industry. Noruzy et al. (2013) emphasized that a company's capability to innovate and offer cutting-edge goods and services is essential to its competitiveness. Therefore, a firm's ability to compete effectively is largely dependent on its internal resources, which include strong financial support, internal motivation, effective leadership, and continuous innovation. (Mahdi et al., 2021) define competitive advantage as a concept tied to an organization's resources and characteristics, which



serve as critical factors in achieving desired performance in the marketplace. They assert that a company's strategy involves the commitment, decisions, and actions necessary to attain strategic competitiveness and secure above-average returns.

According to (Handayani & Karnawati, 2020), competitive advantage should be viewed as a dynamic process rather than a final outcome. The measurement of competitive advantage is influenced by factors such as economies of scale, benefits from superior products, product differentiation, and innovation. They also highlight that differentiated products help build brand identity, which serves as a barrier to competitors. Vinton (1992), as cited in (Mahdi & Nassar, 2021), identifies five key dimensions or indicators of competitive advantage: (1) Price (Cost) , the ability to offer competitive pricing while maintaining profitability, (2) Quality , the consistency and reliability of products or services, (3) Delivery Dependability, the ability to meet delivery commitments, (4) Product Innovation, the development of new and improved products, and (5) Time to Market, the speed at which a company can bring a product to market. These dimensions collectively reflect the multifaceted nature of competitive advantage and its impact on a company's market performance.

Strategic Leadership

Strategic leadership, as defined by (Rahman et al., 2021), is the ability of a leader to anticipate, remain adaptable, and empower others to drive strategic change when necessary. This form of leadership involves managing people and organizations effectively while navigating the complexities of today's global business environment. It requires leaders to be skilled in handling both internal and external factors and to engage in sophisticated information processing. Consequently, strategic leadership roles, especially at the top levels of an organization, differ significantly from those in middle management. Davies , (Rahman et al., 2021) identified five core competencies of strategic leaders: strategic orientation, strategy implementation, strategic alignment, and the development of strategic capabilities. These skills are critical in enabling organizations to respond swiftly and wisely to change, a key responsibility of strategic leaders.

(Hunitie, 2018) further differentiates between general leadership and strategic leadership by explaining that while leadership includes all leaders within an organization, regardless of their level, strategic leadership is specific to top-level executives. Despite its importance to performance,(Jaleha & Machuki, 2018) note that scholars and practitioners have yet to agree on a single definition of strategic leadership. Bass (2007), (Jaleha & Machuki, 2018), describes it as the work of top executives who formulate policies and secure resources for the organization. Similarly, Ireland and Hitt (1999) conceptualize strategic leadership as a unique set of capabilities to foresee changes, maintain flexibility, think strategically, and



encourage employees to generate innovative ideas that lead to high organizational performance. Beyond this, strategic leadership is seen as the ability to guide the organization with purpose, sustain its adaptive and absorptive capacities, and identify opportunities in the environment using managerial wisdom.

To assess whether strategic leadership is being implemented effectively, Ireland and Hitt (Hitt et al., 2017) proposed six key activities or dimensions: determining the firm's purpose or vision, exploiting and maintaining core competencies, developing human capital, sustaining an effective organizational culture, emphasizing ethical practices, and establishing organizational controls. These elements form the foundation of strategic leadership and are essential for organizations striving to remain competitive and forward-thinking in dynamic markets.

Intellectual Capital

According to Handavani and Karnawati (2020), intellectual capital encompasses all the knowledge possessed by employees and organizations, as well as their ability to create added value that leads to sustainable competitive advantage. It is defined as a set of intangible assets including resources, abilities, and competencies, that drive organizational performance and value creation. The key components of intellectual capital are Human Capital, Structural Capital, and Relational Capital. Similarly, (Saad, 2020) divides intellectual capital into the same three components: Human Capital, Structural Capital, and Relational Capital. (Skhvediani et al., 2022a) also highlight intangible assets such as employee skills (human capital), technological innovation (structural capital), and customer relationships (relational capital) as core elements of intellectual capital. These forms of capital are increasingly recognized as strategic assets, even though they may not be explicitly reflected in financial statements. They are considered essential for companies seeking to enhance their value and maintain competitiveness in the market. Ralph Stayer (Masadeh, 2021), observed that in the past, natural resources were viewed as the most vital national wealth and primary corporate assets. However, these have now been replaced by intellectual capital as the main source of value. Lastly, (Choudhury, 2010) identified three dimensions or indicators of intellectual capital: Human Capital, Organizational Capital, and Social Capital, emphasizing the broad scope of knowledge-related assets that contribute to a company's strategic advantage.

IT Innovation

Kotler (2007), as cited in (Renaldi Wahyudin, 2022) defines innovation as a combination of various interrelated processes. Therefore, companies must develop innovation strategies within their business efforts to gain a competitive edge over



their rivals. According to (Nengah et al., 2021) information technology (IT) can be considered a form of technological capital. Technological capital is essential for the efficient sharing and accessibility of knowledge. With the aid of technological capital, the processes of collecting, storing, and distributing information become significantly easier. As such, information technology plays a crucial role in driving change and improving an organization's financial performance (Lisandra & Suwandi, 2023). Chin and Todd (1995)(Renaldi Wahyudin, 2022), propose several dimensions regarding the usefulness of IT innovation. These dimensions include: (1) Usefulness based on a single-factor estimate, and (2) Usefulness based on a twofactor estimate (usefulness and effectiveness). Specifically, the single-factor estimate includes the following dimensions: (3) Making the job easier, (4) Usefulness, (5) Increasing productivity, (6) Enhancing effectiveness, and (7) Improving job performance. These dimensions underscore the critical role that IT innovation plays in improving both individual and organizational outcomes.

In addition to enhancing job performance and operational efficiency, IT innovation also contributes to long-term strategic growth and adaptability within organizations. As markets become increasingly dynamic and customer demands evolve rapidly, the ability to leverage IT to respond swiftly becomes a significant advantage. Organizations that integrate IT innovation into their core strategies are better equipped to analyze market trends, personalize customer experiences, streamline internal processes, and foster a culture of continuous improvement. Moreover, IT enables real-time decision-making, cross-functional collaboration, and access to global markets, all of which are vital for maintaining competitiveness in today's fast-paced business environment. Thus, IT innovation not only boosts immediate productivity but also strengthens the organization's agility and capacity for sustained innovation.

RESEARCH METHODS

This study aims to present a research proposition on organizational competitive advantage using a qualitative methodology. The data collection method employed is a literature review, or a qualitative study grounded in insights derived from existing literature. According to Snyder, as cited in Nur Islaminingsih et al. (2020), a literature review is a research approach that attempts to collect and extract key findings from previous studies and analyze expert insights presented in various texts. Snyder concluded that literature reviews can serve as a basis for multiple research projects, offering valuable insights into scientific developments, supporting public policy formulation, and inspiring original and practical ideas. Additionally, (Watson et al., 2022) emphasized that literature reviews play a critical role in identifying gaps in the current body of knowledge, facilitating theory development,



and providing a comprehensive understanding of evolving academic conversations. Therefore, literature reviews act as both a reflective instrument and a strategic guide for advancing research within a specific domain. Furthermore, according to Fitriani and Rachmawati (2022), literature reviews help researchers to synthesize complex and scattered information across studies, enabling them to build conceptual frameworks and formulate relevant research directions. Thus, literature reviews function as both reflective tools and strategic roadmaps in shaping and advancing scholarly research within a given field.

RESULTS AND DISCUSSION

Resource-Based View (RBV) Model

The Resource-Based Theory (RBT) was initially proposed by Wernerfelt. According to this hypothesis, possessing superior resources enhances long-term business success and differentiates a company from its competitors. Resources that are rare and valuable can provide a company with a competitive advantage, particularly if those resources are durable, difficult to imitate, and non-substitutable. As stated by Barney, the resource-based view of a firm encompasses all assets controlled by the business, including capabilities, organizational processes, firm characteristics, information, and knowledge. RBV emerged as a strategic approach to achieving competitive advantage and gained popularity during the 1980s and 1990s, following the publication of influential works by Wernerfelt (The Resource-Based View of the Firm), as well as Prahalad and Hamel.



Figure 3. Resource-Based View (RBV) Model Source : Barney, J. B. (1995).



Figure 4 illustrates the sequential stages through which an organization can develop a sustainable competitive advantage. It begins with identifying and acquiring valuable, rare, inimitable, and non-substitutable (VRIN) resources, followed by aligning internal capabilities and strategies to utilize these resources effectively. The process continues with the implementation of innovation, strategic leadership, and intellectual capital to reinforce long-term competitive positioning, ultimately resulting in superior performance that is difficult for competitors to replicate.



Figure 4. Stages in Building Sustainable Competitive Advantage

Source : Barney, J. B. (1995).

The only source of a company's long-term competitive advantage may lie in its valuable resources. A large number of resources possessed by current or potential competitors cannot be considered sources of competitive or sustainable competitive advantage. The Resource-Based Theory (RBT) serves as a valuable framework for understanding research in Intellectual Capital (IC), particularly when analyzing the interrelationship between human capital, structural capital, and customer capital, three key categories that form the foundation for classifying an organization's intangible assets from the IC perspective. Intangible resources such as knowledge, skills, beliefs, and customized solutions can be leveraged by businesses to create value in the market. Therefore, the control and strategic management of intangible resources can offer companies a competitive edge, boost performance, and enhance their market value.



Strategic Leadership and Competitive Advantage

A descriptive analysis and path analysis approach using Structural Equation Modeling (SEM) through the SmartPLS application was employed in the study conducted at Bank BJB Syariah (Renaldi Wahyudin, 2022). The findings revealed that while corporate culture had a significant impact on business performance, innovation significantly influenced competitive advantage, whereas strategic leadership did not have a significant effect on either. Furthermore, company performance increased by 68%, and competitive advantage improved by 45.6% due to factors such as leadership strategy, innovation, and corporate culture. Respondents in the study consisted of managers or business owners of cafes and restaurants based in Gorontalo City. Using multiple linear regression analysis with a sample of 40 respondents, the results indicated that strategic leadership had a significant positive influence on competitive advantage. Based on the findings from these studies, the following proposition is recommended:

<u>Proposition 1</u>: Strategic Leadership has a positive effect on Competitive Advantage.

Intellectual Capital and Competitive Advantage

Intellectual capital refers to all the knowledge possessed by employees and organizations, along with their ability to create added value and contribute to sustainable competitive advantage. This intellectual asset significantly influences an organization's ability to gain and maintain competitiveness. Studies conducted by (Handayani & Karnawati, 2020) ,(Saad, 2020) and (Skhvediani et al., 2022) analyzed the components of intellectual capital such as value-added intellectual coefficient, human capital, and structural capital and their causal explanatory relationship with competitive advantage. The population in one of the studies included mining companies listed on the Indonesia Stock Exchange between 2016 and 2018. A saturated sampling technique was employed, resulting in a total sample of 223 respondents. The findings revealed that intellectual capital has a significant positive effect on competitive advantage.

<u>Proposition 2</u>: Intellectual Capital has a positive influence on Competitive Advantage.

IT Innovation and Competitive Advantage

The findings of studies conducted by Renaldi Wahyudin (2022) and Lisandra & Suwandi (2023) indicate that product innovation is a combination of various interrelated processes, particularly in shaping a company's competitive advantage. According to Nengah et al. (2021), information technology (IT) can be regarded as a form of technological capital. One study aimed to examine the influence of



information technology on company performance, with intellectual capital acting as a moderating variable. The research focused on the financial performance of Muhammadiyah high schools/vocational schools (SMA/SMK) in Gresik Regency, involving 40 respondents and employing SEM-PLS for data analysis. The results showed that IT has a positive and significant impact on both performance and competitive advantage.

Similarly, a study by Mugo & Macharia (Wanaswa et al., 2021) investigated the impact of technological innovation on competitive advantage within Kenya's telecommunications sector. Technological innovation in this context included Global System of Mobile (GSM) network development, the adoption of new software and tools, and strategic partnerships. The results indicated that innovation significantly influences the competitive advantage of IT companies in Kenya.

Proposition 3: IT Innovation has a positive influence on Competitive Advantage.

Strategic Leadership and Intellectual Capital

The study by (Zubi & Khalid, 2022) aimed to examine the effect of strategic leadership on intellectual capital, with a particular focus on the mediating role of knowledge sharing within Kuwait's industrial sector. Using a sample of 284 male and female employees from industrial companies in Kuwait, statistical analysis was conducted through SPSS and AMOS V23. The findings revealed that strategic leadership significantly influences intellectual capital. Meanwhile, Saad (2020) explored the relationship between strategic leadership and intellectual capital management from the perspective of faculty members at Northern Border University. This research adopted a descriptive and analytical methodology, distributing questionnaires to 245 faculty members. Data were analyzed using the Statistical Package for the Social Sciences (SPSS). The results showed that strategic leadership across dimensions such as strategic vision, implementation, focus, capability investment, and strategic talent had a significant impact, explaining 82.1% of the variance in intellectual capital management.

<u>Proposition 4</u>: Strategic Leadership has a positive influence on Intellectual Capital.

Strategic Leadership and IT Innovation

A study conducted on Bank BJB Syariah by (Renaldi Wahyudin, 2022) utilizing a descriptive-verificative analysis and a path analysis technique with Structural Equation Modeling (SEM) via the SmartPLS application, revealed several key findings. Strategic leadership was found to have no significant effect on competitive advantage. However, corporate culture significantly influenced company performance, and innovation significantly impacted both competitive advantage and performance. Moreover, the combined variables of strategic



leadership, innovation, and corporate culture contributed to IT innovation, with a 45.6% influence on competitive advantage and a 68% influence on company performance.

In addition, CEO leadership style plays a crucial role in determining the outcomes of technological innovation. The most extensively studied style in this context is transformational leadership, which has been found to positively affect innovation outcomes (Chung et al., 2022). This is understandable, as core elements of transformational leadership such as charisma, idealized influence, and intellectual stimulation enable leaders to gain commitment from subordinates and foster employee creativity. Furthermore, various organizational and environmental characteristics strengthen the link between transformational leadership and innovation outcomes, particularly in innovation-supportive organizational climates. **Proposition 5:** Strategic Leadership has a positive influence on IT Innovation.

Intellectual Capital and IT Innovation

The findings of the study conducted by (Farzaneh et al., 2022) strongly emphasize the importance of antecedent factors in enhancing the components of intellectual capital within commercial banks in Iraq. The research aimed to explore whether the high levels of intellectual capital in Iraq's commercial banking sector have an impact on innovation performance. It also investigated whether this relationship is moderated by the application of dynamic capabilities. To address these research questions, the study sampled twenty-four commercial banks in Iraq. The results indicated that many of these banks demonstrated higher levels of intellectual capital, including human, structural, relational, and social capital, with statistically significant differences among them. Moreover, the study revealed a significant correlation between the level of intellectual capital and innovation performance in these banks. This implies that intellectual capital has a substantial impact on innovation performance, primarily through the application of diverse capital elements and dynamic capabilities. In summary, Iraq's commercial banks reflect higher levels of intellectual capital, and therefore tend to implement more innovative dynamic performance strategies.

<u>Proposition 6</u>: Intellectual Capital has a positive influence on IT Innovation.

Proposed Research Model

Drawing from the extensive literature review and the insights of key theoretical frameworks previously discussed, this study proposes a comprehensive model for understanding the formation of *Sustainable Competitive Advantage* (SCA) within organizations. The proposed conceptual model highlights SCA as the



dependent variable that is influenced by several critical organizational factors, both directly and indirectly. The functional relationship can be expressed as:

SCA = f (SL, IC, TI...),

where:

SL = Strategic Leadership

IC = Intellectual Capital

TI = Technology Innovation

Strategic Leadership refers to the ability of leaders to envision, guide, and influence their organizations toward achieving long-term strategic goals. Intellectual Capital encompasses the intangible assets within an organization, including human capital, structural capital, and relational capital, which are vital in knowledge creation and innovation. Technology Innovation involves the application of technological advancements and the continuous improvement of processes, products, or services to maintain competitiveness in a dynamic market. In the proposed model, these three independent variables : Strategic Leadership, Intellectual Capital, and Technology Innovation, are hypothesized to influence Sustainable Competitive Advantage through both direct pathways and indirect Figure 5 visualizes this proposed model, illustrating how each interactions. construct interacts with one another. This integrative framework aims to provide a deeper understanding of the strategic resources and capabilities that contribute to long-term success and differentiation in an increasingly competitive business environment.



Figure 5 Proposed Research Model

Source: Literature Review Findings



CONCLUSION AND RECOMMENDATIONS

This study emphasizes the pivotal role of strategic leadership in shaping key organizational outcomes, particularly sustainable competitive advantage (SCA), intellectual capital (IC), and IT innovation (TI). These three elements are highly interrelated and must be continuously nurtured, especially within knowledgeintensive environments such as universities. In today's fast-changing global landscape, where technological disruptions and economic uncertainties are constant, the ability to lead strategically becomes essential. Strategic leadership is defined as the ability to anticipate, envision the future, maintain flexibility, and empower others to drive necessary change. Leaders with these capabilities can navigate complexity, align internal capabilities with external opportunities, and sustain long-term organizational growth. The findings of this study confirm that strategic leadership significantly influences the development of intellectual capital and IT innovation. Intellectual capital which includes human, structural, and relational components serves as a vital intangible asset that enhances organizational learning, adaptability, and value creation. Similarly, IT innovation drives efficiency, digital transformation, and competitive responsiveness. Together, these factors contribute directly to achieving a sustainable competitive advantage, positioning the organization ahead of competitors in a dynamic market.

To capitalize on these relationships, several strategic recommendations are proposed. Organizations should invest in leadership development programs to enhance visionary thinking, decision-making, and empowerment capabilities. Cultivating a culture of innovation across all levels of the organization will further support experimentation and creativity. It is also essential to develop and retain intellectual capital by encouraging knowledge sharing, professional development, and systems that preserve organizational knowledge. Moreover, aligning IT initiatives with strategic goals will amplify the value of technological investments. Finally, fostering cross-functional collaboration will promote integration, agility, and innovation across departments. In conclusion, the creation of sustainable competitive advantage does not occur in isolation; it emerges through the strategic interplay of leadership, knowledge assets, and innovation. Future studies are encouraged to explore the mediating or moderating roles of organizational culture, environmental dynamics, or digital capabilities to deepen the understanding of these relationships.

REFERENCE

Choudhury, J. (2010). Performance Impact of Intellectual Capital: A Study of Indian it Sector. International Journal of Business and Management, 5(9), 72–80. https://doi.org/10.5539/ijbm.v5n9p72 Chung, D., Jung, H., & Lee, Y. (2022). Investigating the relationship of high-tech

entrepreneurship and innovation efficacy: The moderating role of absorptive



capacity.

Technovation.

https://www.sciencedirect.com/science/article/pii/S0166497221001747

- Dahiya, R., Le, S., Ring, J. K., & Watson, K. (2022). Big data analytics and competitive advantage: the strategic role of firm-specific knowledge. Journal of Strategy and https://doi.org/10.1108/JSMA-08-2020-0203
- Farzaneh, M., Wilden, R., Afshari, L., & Mehralian, G. (2022). Dynamic capabilities and innovation ambidexterity: The roles of intellectual capital and innovation 148(April orientation. Iournal of Business Research, 2021), 47-59.
- https://doi.org/10.1016/j.jbusres.2022.04.030 Gupta, G., Tan, K. T. L., Ee, Y. S., & ... (2018). Resource-based view of information systems: Sustainable and transient competitive advantage perspectives. Journal Australasian
- http://journal.acs.org.au/index.php/ajis/article/view/1657 H, H., Mas'ud, M., Rahman, Z., & Lamo, M. (2021). The Influence of Motivation, Organizational Culture, Leadership Style, Conflict Management, on Job Satisfaction and Lecturer Performance at Universities in Southeast Sulawesi Province. In International Journal of Management Progress (Vol. 3, Issue 1, pp. 48-77). http://www.jurnal-umbuton.ac.id/index.php/ijmp/article/view/2260
- Handayani, S., & Karnawati, Y. (2020). Achieving Competitive Advantage Through 127(Aicar Intellectual *Capital*. 2019), 54-58. https://doi.org/10.2991/aebmr.k.200309.013
- Hitt, M. A., Ireland, R. D., Camp, S. M., & ... (2017). Strategic entrepreneurship: Integrating entrepreneurial and strategic management perspectives. ...: Creating a New Mindset. https://doi.org/10.1002/9781405164085.ch1
- Hunitie, M. (2018a). Impact of strategic leadership on strategic competitive advantage through strategic thinking and strategic planning: a bi-meditational research. Verslas: Teorija Ir Praktika. https://www.ceeol.com/search/articledetail?id=772692
- Hunitie, M. (2018b). Impact of strategic leadership on strategic competitive advantage through strategic thinking and strategic planning: A bi-meditational and Practice, 19(2012), research. Business: Theory 322-330. https://doi.org/10.3846/btp.2018.32
- Jaleha, A. Á., & Machuki, V. N. (2018a). Strategic Leadership and Organizational Performance: A Critical Review of Literature. European Scientific Journal ESJ, 14(35), 124–149. https://doi.org/10.19044/esj.2018.v14n35p124
- Jaleha, A. A., & Machuki, V. N. (2018b). Strategic Leadership and Organizational Performance: A Critical Review of Literature. European Scientific Journal ESJ, 14(35), 124–149. https://doi.org/10.19044/esj.2018.v14n35p124
- Lisandra, T., & Suwandi, Ś. (2023). Pengaruh Teknologi Informasi Terhadap Kinerja Keuangan: Peran Intellectual Capital Sebagai Variabel Moderating. Journal of Culture Accounting and https://doi.org/10.30587/jcaa.v2i1.5401 Auditing, 2(1),103.
- Mahdi, O. R., & Nassar, I. A. (2021). The business model of sustainable competitive advantage through strategic leadership capabilities and knowledge management processes to overcome covid-19 pandemic. Sustainability (Switzerland), 13(17), 1-27. https://doi.org/10.3390/su13179891
- Mahdi, O. R., Nassar, I. A., & Almsafirc, M. K. (2021). Strategic Leadership Capabilities and Sustainable Competitive Advantage in Private Universities. Strategic Management Journal, Academy of 20(2), 1-23. file:///C:/Users/asus/Downloads/S3 UNJ/4.PERILAKU ORGANISASI/JURNAL-JOB SATISFACTION/Strategic Leadership/Strategicleadership-capabilities-and-sustainable-competitive-advantage-in-privateuniversities.pdf
- Masadeh, M. (2021). The Effect of Intellectual Capital on Achieving the Competitive Advantage of Jordanian Pharmaceutical Companies: A Case Study of Dar Al-Dawa Company. International Journal of Innovation, Creativity and Change, 15(10), 130-150.



https://ww.ijicc.net/images/Vol_15/Iss_10/151013_Masadeh_2021_E_R.pdf Nengah, N., Ekayani, S., Bagus, I., Purbawangsa, A., Sariani, N. K., & Suriani, N. N.

- (2021). Inovasi teknologi memediasi pengaruh intellectual capital terhadap kinerja UMKM. *JPPI* (*Jurnal Penelitian* ..., 7(4), 658–669. https://jurnal.iicet.org/index.php/jppi/article/view/1285%0Ahttps://jurnal.ii cet.org/index.php/jppi/article/download/1285/999
- Rahman, Ň., Othman, M., Yajid, M., & ... (2018). Impact of strategic leadership on organizational performance, strategic orientation and operational strategy. *Management* http://m.growingscience.com/beta/msl/2942-impact-of-strategic-leadership-on-organizational-performance-strategic-orientation-and-operational-strategy.html
- operational-strategy.html Renaldi Wahyudin, Y. (2022). PENGARUH STRATEGIC LEADERSHIP, INNOVATION DAN CORPORATE CULTURE TERHADAP COMPETITIVE ANDVANTAGE SERTA IMPLIKASINYA TERHADAP CORPORATE PERFORMANCE (STUDI KASUS PADA Bank BJB syariah). Jurnal Ekobisman, 6(3), 235–253.
- Saad, M. A. (2020). The relationship between strategic leadership and intellectual capital management: Evidence from the faculty members at the Northern Border University. *International Journal of Advanced and Applied Sciences*, 7(5), 27–38. https://doi.org/10.21833/ijaas.2020.05.005
 Saeidi, P., Robles, L. A. A., Saeidi, S. P., & Zamora, M. I. V. (2021). How does
- Saeidi, P., Robles, L. A. A., Saeidi, S. P., & Zamora, M. I. V. (2021). How does organizational leadership contribute to the firm performance through social responsibility strategies? *Heliyon*, 7(7), e07672. https://doi.org/10.1016/j.heliyon.2021.e07672
- Skhvediani, A., Maksimenko, D., Maykova, A., & Kudryavtseva, T. (2022a). Assessment of the Impact of Intellectual Capital on the Profitability of IT Companies in Russia. *International Journal of Technology*, 13(7), 1558–1567. https://doi.org/10.14717/ijtech.v13i7.6203
- Skhvediani, A., Maksimenko, D., Maykova, A., & Kudryavtseva, T. (2022b). Assessment of the Impact of Intellectual Capital on the Profitability of IT Companies in Russia. International Journal of Technology, 13(7), 1558–1567. https://doi.org/10.14717/ijtech.v13i7.6203
- https://doi.org/10.14717/ijtech.v13i7.6203
 Wanaswa, erpetua S., Awino, Z. B., Ogutu, M., & Owino, J. (2021). Technological Innovation and Strategic Leadership Axis on Competitive Advantage of Telecommunication Enterprises. *International Journal of Business and Management*, 16(9), 48. https://doi.org/10.5539/ijbm.v16n9p48
- Wanjiru, A. I., Muathe, S. M., & Kinyua-njuguna, J. W. (2019). The Mediating Effect of Competitive Advantage on the Relationship between Corporate Strategies and Performance of Manufacturing Firms in Nairobi City County, Kenya. 21(4), 7–15. https://doi.org/10.9790/487X-2104010715
- Zubi, M. ÁL, & Khalid, M. B. (2022). The effect of strategic leadership on intellectual capital: The mediating role of the knowledge sharing in Kuwait industrial companies. *Management Science Letters*, 12(4), 291–306. https://doi.org/10.5267/j.msl.2022.4.004

