

## **Improving Knowledge Management for Better Competitive Advantage Through Strategy Execution: A Theoretical Model Proposal**

**Wirawan Tedja<sup>1</sup>**

<sup>1</sup>Widya Mandala Catholic University Surabaya, Indonesia

### **Abstract**

The relationship between knowledge management and competitive advantage has not reached a conclusive result based on previous studies. Therefore, this study aims to establish a theoretical foundation for the relationship between knowledge management and competitive advantage while taking into account the mediating role of strategy execution. We utilize Resource-Based Theory and knowledge management as our basis to explore this relationship. This paper is mainly based on prior literature and findings; thus, it is conceptual research. Through the literature review process, we construct propositions and reasoning for every relationship discussed in this study. The model and propositions we provide serve as a theoretical research model for future studies interested in exploring this model in various contexts, both empirically and theoretically. By providing this model, we proposed a novel theoretical perspective exploring knowledge management theory and the theoretical foundation of strategy execution.

**Keywords:** *Resource-based theory; knowledge management; competitive advantage; strategy execution; strategy implementation; strategy management*



This is an open access article under the CC-BY-NC license.

### **INTRODUCTION**

These days, companies are facing intense competition. The uncertain and ever-changing nature of the market condition makes companies constantly face various challenges, such as reducing production costs, improving customer service, and global expansion (Lee et al., 2016). All these challenges require companies to be superior over their competitors to ensure their survival and sustainability in their industry. A company's capability to gain an overall superior position to its competitors is a competitive advantage.

Competitive advantage is essential for companies due to several reasons. First, competitive advantage allows companies to gain superior profitability (Christensen, 2010). Furthermore, competitive advantage significantly impacts long-term business success and sustainability (Venza, 2015). If the company does not have a competitive advantage, it will be in danger of not surviving in the existing competition (Brill, 2011). Hence, creating and maintaining a competitive advantage is crucial for the success and existence of a company (Anwar et al., 2018).

Resource-Based Theory (RBT) states that company resources are strategic when they have several characteristics. Strategic company resources provide value and enable the company to take advantage of opportunities (valuable), not owned by other competitors (rare), cannot be imitated (inimitable), and cannot be replaced by other resources (non-substitutable) (Nothnagel, 2008). A competitive advantage can be obtained when the company can execute the right strategy based on the available resources to protect the company from the existing competition and create an entry barrier to maintain its advantage (Barney, 1991). Therefore, resources and their utilisation are the main factors determining whether a company can gain and maintain a competitive advantage.

In the era of information and technology today, intangible assets play an essential role as critical sources of competitive advantage (Lee et al., 2016). Knowledge is an intangible asset that becomes a strategic resource that can improve the competitive performance of an organization if it can be managed appropriately (Mahdi et al., 2019). Numerous studies have demonstrated the critical role of knowledge as a source of competitive advantage at the organizational level (Arsawan et al., 2020; Quartey, 2019). Since knowledge can be seen as one of the company's resources, the competitive advantage also lies in how a company develops and disseminates strategic value (Grant, 1991). This way of developing and disseminating knowledge is known as knowledge management.

Knowledge management is a process when organizational knowledge can be generated in forms that can provide added value and are available to all organization members to produce high-quality products or services (Husain & Ermine, 2021). This process consists of various management practices to create, identify, store, distribute, replicate, and apply knowledge (Grant, 2018). Knowledge management focuses on managing knowledge as a resource and managing business processes that utilize this resource (Jelenic, 2011).

Even though knowledge management has a theoretical relationship with a competitive advantage, previous empirical studies on this relationship have not reached conclusive results. Some studies have found that knowledge management positively impacts competitive advantage (e.g., Jyoti et al., 2015; Kanya et al., 2010; Lee et al., 2016; Mahdi et al., 2019; Mao et al., 2016). On the other hand, other studies indicate that knowledge management has a negligible effect on competitive advantage (Alaneme, 2017; Aydin & Dube, 2018). If we analyse these findings in detail, we find that not all dimensions of knowledge management significantly affect competitive advantage (Alaneme, 2017). The research provides no consistent results in some instances (Aydin & Dube, 2018). The disparity between these studies results in a research or empirical gap related to the relationship between knowledge management and competitive advantage.

By reviewing previous research findings, it is necessary to mediate the discrepancy in the relationship between knowledge management and competitive advantage. Mediation is carried out to show the true relationship when there is uncertainty between the independent and dependent variables (Hair et al., 2017). Mediation also aims to explain why the independent variable has or has no influence on the dependent variable (Keele, 2015). The purpose of this study is to examine the relationship between knowledge management and competitive advantage with the mediating effect of strategy execution.

Strategy execution can theoretically mediate the relationship between knowledge management and competitive advantage for a number of reasons. First, effective knowledge management can support the coordination of critical resources (human, physical, intellectual, and financial resources) needed for strategy execution and position the company to gain and maintain a competitive advantage (Velez, 2018). Second, knowledge management is critical to a company's success since it fosters a shared understanding of where the organization's knowledge resources are located, how to use that information to produce value, and how to integrate current operations for successful strategy execution (Wang et al., 2016). Knowledge management helps the company manage and use its knowledge to become the basis for decision making, action plans, and creating helpful guidelines for the strategy execution process.

In addition, Resource-Based Theory indicates that strategy execution influences competitive advantage. If a company can execute strategies that other companies do not execute and imitate, it can gain and maintain its competitive advantage (Barney, 1991). In this case, strategy execution can

be viewed as a capability and a source of competitive advantage (Barney & Mackey, 2005). Thus, good strategy execution may provide both strategic and tangible benefits for the company.

A research model that studies the relationship between knowledge management and competitive advantage mediated by strategy execution has never been proposed before. Many studies on the relationship between knowledge management and competitive advantage use other mediators such as product innovation (Wahyono, 2019) and technological innovation (Lee et al., 2016). Even though strategy execution has interactions with knowledge management and competitive advantage theoretically (Barney & Mackey, 2005; Velez, 2018), there are no empirical or theoretical studies examining these interactions. Previous studies have focused more on the antecedents and impact of strategy execution on other variables, such as organizational culture (Murunga & Karugu, 2019), strategy engagement (Chuah et al., 2016), leadership (Barrick et al., 2015), strategy innovativeness, strategic strength, strategic clarity (Huber, 2011), and marketing capabilities (Morgan et al., 2012). Moreover, the results of knowledge management (innovation, productivity, and competitive advantage) are still little studied in the knowledge management literature (Pellegrini et al., 2020). Additionally, there is still little research that incorporates knowledge management in the study of strategy execution, even though it is still in the form of a conceptual model (e.g., Okfalisa et al., 2009). Therefore, this study provides a novel research model for the relationship between knowledge management and competitive advantage that incorporates the effect of strategy execution.

Research on strategy execution is also critical and exciting for practitioners and scholars. Strategy execution is seen as the most challenging stage in strategic management due to discipline, commitment, and personal sacrifice, which are required in strategy execution (Rofiaty, 2019). Despite these facts, academic research studies more on strategy formulation, even though strategy formulation and execution are interrelated. The majority of research on strategy execution was conducted by consultants and practitioners (de Oliveira et al., 2019). Nowadays, the focus of the strategic management field today has shifted from strategy formulation to its implementation (Obeidat et al., 2017). This shift helps us expand our knowledge related to strategy execution.

This proposed research model provides a novel theoretical perspective by considering the effect of rarely-studied strategy execution in examining the relationship between knowledge management and competitive advantage by demonstrating the importance of this research model for developing knowledge management theory in particular and Resource-Based Theory in general. The goal of this study is to perform a literature review of existing theories (Resource-Based Theory and Knowledge Management) and a review of prior research findings relevant to this research model. It is hoped that this model can provide a strong and valid basis for future empirical testing in different demographic, industrial, and other settings.

## **LITERATURE REVIEW**

### **Resource-Based Theory**

Research on strategy explains factors that give a company a sustainable competitive advantage over its competitors (Feldman, 2020). The Resource-Based Theory (RBT), or what is frequently referred to as the Resource-Based View, is a theory that aims to explain the source of a company's competitive advantage (RBV). This theory was first proposed in the mid-1980s by Wernerfelt (1984) and Barney (1986). RBT emphasises the importance of a company's internal resources and capabilities to achieve sustainable competitive advantage and superior performance (Nothnagel, 2008).

RBT makes a number of assumptions about the sources of competitive advantage. As is the case with the majority of strategic management theories, RBT assumes bounded rationality, that is, rational decisions that account for decision makers' cognitive limitations (Simon, 1990) and the assumption that firms seek to maximise profits. Two additional assumptions distinguish RBT from other theories: resource heterogeneity and resource immobility. First, RBT assumes that the resources owned by companies in an industry are heterogeneous. Second, RBT assumes that these resources are imperfectly mobile between firms. Therefore, the diversity (heterogeneity) of resources can last for a long time (Barney, 1991).

When a business successfully executes a value creation strategy that other competitors do not, generates more economic value than other businesses in the same industry, and other businesses are unable to replicate the benefits of this strategy, the business gains a sustainable competitive advantage (Barney, 1991; Barney & Clark, 2007). Therefore, the RBT strategy involves two main issues: (1) exploiting existing resources and capabilities to maximise the company's advantages and (2) building resources and capabilities for the future (Robert Morris Grant, 2005).

A resource can contribute to a sustainable competitive advantage or provide strategic value if valuable, rare, inimitable, and non-substitutable (Barney, 1991). A resource is valuable when it can generate significant benefits for the customer or increase an organization's efficiency and effectiveness. A resource is rare as long as it is available in limited quantities. A resource is inimitable when it cannot be imitated perfectly or competitors cannot imitate the same strategy. Moreover, a resource is non-substitutable when there is no opportunity to replace it with other alternative resources with the same potential.

### **Knowledge Management**

Knowledge management is the process of managing the knowledge possessed by the organization to support the achievement of organizational goals (Becerra-Fernandez & Sabherwal, 2015; Dalkir, 2011; Husain & Ermine, 2021). This process consists of various management practices to create, identify, store, distribute, replicate, and apply knowledge (R. Grant, 2018). Knowledge management focuses on managing knowledge as a resource and managing business processes that utilize this resource (Jelenic, 2011).

There are two main objectives of knowledge management. First, it leverages what the organization already knows to maximise the utilisation of its knowledge assets. Second, it connects knowledge producers, holders, and users to facilitate knowledge flow throughout the organization (Jennex, 2015). Knowledge management helps organizations by providing a collaborative knowledge-sharing platform to promote learning and increase performance within the organization. By managing knowledge and developing managerial competencies, the execution of organizational processes can be done in a better way (Hebibi et al., 2019).

Knowledge management can be seen as an extension of RBT because it specifically identifies organizational knowledge as the most important strategic resource for an organization (Curado, 2006; Guerras-Martín et al., 2014). With this framework, we can see that for knowledge management, knowledge is a source of sustainable competitive advantage (Jelenic, 2011). The company's competitiveness depends on the ability to combine internal knowledge generated from company resources, both in the form of physical or human resources, and the ability to obtain knowledge from the external environment (Wahyono, 2019). In a rapidly changing world, a knowledge that can encourage innovation is an essential source of sustainable competitive

advantage (Nikolaou, 2019; Nonaka, Ikujiro; Toyama, Ryoko; Nagata, 2000). Hence, knowledge management helps companies utilize their knowledge resources to gain a competitive advantage.

Bolisani and Bratianu (2018) argue that there are five fundamental processes in knowledge management. The first process is knowledge creation. In this process, knowledge is generated due to the learning process caused by the organization's interaction with the environment, both social and natural. The second process is knowledge acquisition. This process relates to organizational activities to increase the level of organizational knowledge.

The third process is knowledge sharing. Knowledge sharing focuses on the distribution of knowledge that contributes to the increase in the average level of knowledge of the team or organization. The fourth process is knowledge transformation. In this process, knowledge is converted from tacit knowledge to explicit knowledge or vice versa. The last process is knowledge application. This process involves utilizing organizational knowledge to solve business problems and make decisions. This process is vital because it applies organizational knowledge to products or services produced by the organization. Essentially, applying the knowledge is the core of knowledge management.

Many previous studies have analysed the importance of the knowledge management process in the strategy formulation process, both theoretically (e.g., Sveiby, 2001) and empirically (e.g., Aktürk & Kurt, 2016). Even though some studies have explained the significance of knowledge management in realising corporate strategy in the strategy execution process (e.g., Hebibi, Raimi and Miličićević, 2019; Spender and Grant, 1996; Velez, 2018; Wang et al., 2016), there are still no studies that have studied the effect of knowledge management on strategy execution in detail, both theoretically and empirically.

On the other hand, although knowledge management theoretically has a relationship with a competitive advantage, the current research results have not provided conclusive results. Several studies have found that knowledge management affects competitive advantage significantly (e.g., Jyoti et al., 2015; Kamyra et al., 2010; Lee et al., 2016; Mahdi et al., 2019; Mao et al., 2016). Many studies, on the other hand, have discovered that knowledge management does not affect competitive advantage (Alaneme, 2017; Aydin & Dube, 2018). Other studies also found that all dimensions of knowledge management significantly affect competitive advantage (Alaneme, 2017). In another study, research results did not provide consistent results in some instances (Aydin & Dube, 2018). This issue results in a theoretical and empirical research gap explaining the relationship between knowledge management and competitive advantage.

### **Strategy Execution**

Strategy execution is the effort of a company's management to pursue the achievement of strategic goals or objectives and monitor the progress of this process (Barrick et al., 2015; de Oliveira et al., 2019; Hrebiniak, 2013). Although many researchers differentiate between the definitions of strategy implementation and strategy execution (Favaro, 2015), the definitions of strategy execution and implementation will be equal in this study. In the Oxford English Dictionary, the word "implementation" means "to complete, perform, or carry something into effect," while the word "execution" means "to follow out, or carry something into effect." Based on these definitions, we can argue that implementation and execution have nearly identical meanings (Andersen & Lie, 2013). In much literature, strategy implementation and execution are also used interchangeably

(e.g., Bhimavarapu et al., 2019; Chrisman et al., 2016; Chua et al., 2012; Chuah et al., 2016; Radomska & Kozyra, 2020).

Strategy execution plays an essential role in the continuity of a company. Strategy execution relates directly or indirectly to all management aspects (Okumus, 2003). Strategy execution also includes the entire design of the organization. How a company is organized determines its capacity to execute its strategy (Grant, 2016). With the increasing market competition, the challenge faced by organizations is how to design strategies to enable them to compete and execute strategies quickly and effectively (Chen, 2005). Executing an organization's strategic plans is as important, or even more important, than the strategy itself (Slater et al., 2010). No strategy can succeed without effective strategy execution (Rofiaty, 2019). Failure to execute the strategy can lead to failed exploitation of available opportunities (Obeidat et al., 2017). Therefore, understanding all factors that can affect strategy execution is vital for a company.

From the RBT perspective, strategy execution can be viewed as a source of competitive advantage. When a company can execute strategies that its competitors do not execute, it can have a competitive advantage. When other companies cannot imitate this strategy, they can maintain their competitive advantage (Barney, 1991). Companies capable of seizing existing opportunities and managing their resources and capabilities can execute their strategies. When this strategy is unique and well-executed, it can help the company generate competitive advantage (Barney & Mackey, 2005).

To acquire a competitive advantage, a company must possess strategy execution skills suited to the specific strategies being implemented. If other companies share the same skill, it is no longer considered a source of competitive advantage. Unlike the traditional strategy execution perspective, this view assumes that strategy execution can be understood without considering strategy content. In this sense, resource-based theory can be understood as an alternative to the traditional strategy execution perspective (Barney & Zajac, 1994).

Strategy execution is a complex concept and remains a challenge for most companies. Therefore, strategy execution may consist of integrated and interdependent components. Tawse and Tabesh (2021) suggested that components of strategy execution include: (1) management actions that affect the execution process, both structural and interpersonal actions; (2) necessary conditions to achieve effective strategy execution (competency, commitment, coordination), and (3) the underlying dynamic managerial capabilities for generating the optimal set of conditions through the use of the most appropriate managerial actions. Hence, we can conclude that strategy execution needs proper capabilities, actions, and conditions to allow companies to get the most out of their strategies and achieve organizational goals.

### **Competitive Advantage**

A competitive advantage can be seen as a company's capability to have an overall superior position over its competitors (Arduyan et al., 2017; Barney, 1991; Chen, 2018). A company is said to have an advantage when it is in a better position than its competitors. Competitive advantage is best understood not as a financial result or as a critical company attribute but as an intermediate performance result that shows differences in the extent to which different competitors create value (Maritan & Peteraf, 2018).

Intense competition in the market requires companies to continuously innovate to meet the needs and expectations of consumers and society in general. Thus, companies need to obtain new sources

of competitive advantage to survive (Chopra et al., 2021). From the RBT perspective, the source of the company's competitive advantage is the company's resources, capabilities, knowledge, brand, and value (Cho et al., 2021), which enables the company to carry out its activities at a certain level of efficiency and effectiveness (Maritan & Peteraf, 2018).

### **Previous Studies**

To the best of our knowledge, there are only two studies that specifically examine the relationship between knowledge management. Rofiaty (2019) found that in the context of Islamic boarding schools, knowledge management significantly influences strategy execution. Paisittanand et al. (2007) also found that knowledge management significantly influences the effectiveness of strategy execution. On the other hand, there are many empirical studies that delve into the relationship between knowledge management and competitive advantage (e.g., Jyoti et al., 2015; Kamya et al., 2010; Mahdi et al., 2019; Wahyono, 2019). Surprisingly, there is no study that examines the relationship between strategy execution and competitive advantage, although this relationship has been theoretically established by Barney & Mackey (2005) and one of the earliest studies in Resource-Based Theory (e.g., Barney, 1991). Based on these findings, we try to propose a model that integrates knowledge management, strategy execution, and competitive advantage.

### **RESEARCH METHOD**

This research design is conceptual research that intends to provide a theoretical basis for examining the relationship between knowledge management, strategy execution, and competitive advantage. The relationship between these three variables has not previously been investigated, particularly with respect to strategy execution. We use literature review as the method of research to construct the theoretical relationship among these variables. Then, we propose a theoretical research model and propositions/hypotheses that can be tested by future studies in various industrial and demographic situations based on the results of the literature review and previous studies related to knowledge management, strategy execution, and competitive advantage.

### **FINDINGS AND DISCUSSION**

Based on previous studies and literature reviews, this study proposes a research model that shows that knowledge management significantly impacts competitive advantage and strategy execution. Furthermore, strategy execution is a mediating variable of the relationship between knowledge management and competitive advantage.

#### **Relationship Between Knowledge Management and Competitive Advantage**

Practically, in an information and knowledge-based economy, today's business competition is becoming more knowledge-based, and the source of competitive advantage shifts from physical assets to the intellectual capabilities of a company and other intangible assets (Carrasco-Hernández & Jiménez-Jiménez, 2016; Lee et al., 2016). This condition makes knowledge a strategic resource that can increase organizational competitiveness if managed appropriately (Mahdi et al., 2019). This situation occurs due to the nature of knowledge that cannot be seen and is difficult to imitate to become a valuable company asset (Kamya et al., 2010). Hence, companies must identify, create, disseminate, utilize, and manage their knowledge properly to outperform their competitors and survive in the competition.

Within the RBT perspective, we can see how knowledge and knowledge management can be a source of competitive advantage. Organizational knowledge is mainly tacit, meaning that organizational knowledge exists in the mind of organizational members and is obtained from

experience (Bolisani & Bratianu, 2018). Moreover, this knowledge is generated from unique social and historical contexts. Because of these characteristics, organizational knowledge is difficult to imitate and easily obtained by competitors. This condition makes organizational knowledge a source of competitive advantage. This reasoning is the premise of the knowledge-based view (Barney, 1991; Nag & Gioia, 2012).

Knowledge management can theoretically be seen as an extension of RBT since knowledge management sees knowledge as the most important strategic resource for an organization (Curado, 2006; Guerras-Martín et al., 2014; Nonaka, Ikujiro; Toyama, Ryoko; Nagata, 2000). Organizational knowledge is an essential resource for competitive advantage due to its role in providing new opportunities that can be explored further and helping organizations overcome various existing problems, both internal and external (Mahdi et al., 2019). This condition helps the company compete with competitors who have different knowledge and the ability to manage knowledge. An effective knowledge management process also positively impacts the quality and development of the resulting products or services (Mao et al., 2016).

When viewed with a competitive advantage, knowledge management helps organizations utilize their organizational knowledge to create value and high-quality products or services (Husain & Ermine, 2021). Knowledge management is focused on managing knowledge as a resource and managing business processes that utilize these resources (Jelenic, 2011). The company's competitiveness depends on the company's ability to combine internal knowledge generated from company resources, both in the form of physical or human resources, and the ability to obtain knowledge from the external environment (Wahyono, 2019). Hence, knowledge management helps company utilize their knowledge resources to gain a competitive advantage.

Several empirical studies support this argument. Lee et al. (2016) found that well-applied knowledge management practices can strengthen their competitive advantage in SMEs. Jyoti et al. (2015) also found that in the Indian telecommunications sector, knowledge management helps the company create and strengthen its overall competitive position. Similar findings were also obtained by Kanya et al. (2010) on industries in developing countries. Therefore, this study proposes a proposition:

- P1. Knowledge management has a significant impact on competitive advantage.

### **Relationship Between Knowledge Management and Strategy Execution**

Most organizations succeed in carrying out strategic planning but fail in their execution due to the complexity and uncertainty faced in decision-making (Okfalisa et al., 2009). One of the decisive variables in the strategy execution process is knowledge management, which enables companies to translate their strategic goals into the required outcomes (Srivastava, 2013). In the process, high-quality knowledge management promotes productive dialogue in learning and organizational improvement in strategy execution (Bhimavarapu et al., 2019). In addition, the value of knowledge managed through knowledge management can increase if it focuses on the company's strategic priorities (Smith, 2001). Therefore, knowledge management helps organizations maximize the value and benefits of knowledge for the organization in achieving its goals.

Knowledge management is vital for the company's success in executing its strategy because knowledge management creates a shared understanding of where the organization's knowledge resources are located, how to utilize this knowledge in the value creation process, and how to integrate existing activities for successful strategy execution (Wang et al., 2016). The application of knowledge management helps the company improve its organizational processes and enlarge its

competitive capabilities (Oliva et al., 2019). This condition allows the company to achieve its goals. A case study from Akuku et al. (2021) on an agricultural research organization in East Africa supports this. They found that knowledge management activities allow companies to enhance access to their research knowledge and, in return, helps the organization achieve success in their strategy execution process.

Knowledge management is considered to contribute positively to organizational effectiveness in general by enabling individuals to leverage existing knowledge and discover new information effectively (Paisittanand et al., 2007). Knowledge management can also be used as a tool to outline internal and external changes, help organizations to create intelligent decisions, and facilitate any option for strategic orientation and execution (Srivastava & Sushil, 2015). The strategy execution process can be measured and monitored properly by designing a suitable knowledge management system and metrics (Okfalisa et al., 2009). Therefore, knowledge management can help the organization in optimizing the strategy execution process to give better outcomes for the organization.

Knowledge management may also support strategy execution in the long term. Knowledge management helps the company organize and distribute knowledge related to successes, failures, practices, and policies applied to previous strategy executions (Bell et al., 2010). With this knowledge, organizations can utilize it to form the basis for organizational development and sustainable strategy execution. In addition, the organization can also encourage learning and evaluation for organization members, especially for those who have been and will be part of the company's strategy execution. Therefore, knowledge management can encourage strategy execution by managing and distributing the knowledge that the organization has gained from strategy execution which has already been carried out. These arguments are empirically supported by Rofiaty (2019), who found that knowledge management positively impacts strategy execution in boarding schools. Therefore, this study proposes a proposition:

P2. Knowledge management has a significant influence on strategy execution.

### **Relationship Between Strategy Execution and Competitive Advantage**

In Resource-Based Theory, when a company can execute its strategies properly, it can help the company generate a competitive advantage. When other companies cannot imitate this strategy, they can maintain their competitive advantage (Barney, 1991; Barney & Mackey, 2005). Furthermore, for a company to achieve a competitive advantage, the ability to execute strategy must be tailored to each strategy being executed only by that company. If those skills are also owned by other companies, it is no longer unique and cannot provide a source of competitive advantage for any company (Barney & Zajac, 1994). Therefore, a company needs to formulate and execute strategies that take advantage of the company's unique strengths to gain a competitive advantage (Grant, 2016).

Today's dynamic business landscape brings many changes and challenges to companies. These changes might be driven by internal (e.g., organizational structure, routines, resources, or competencies) or external factors (e.g., changes in customer needs, rapid technological changes, globalization, market changes, and complexity) (Ferreira & Coelho, 2020; Teece, 2007). These conditions result in uncertainty with various levels and a shorter time for companies to capture available opportunities. Companies are forced to continuously adapt to these changes and challenges by adding new skills, technologies, and competencies to their pool of resources. Because

of these challenges, strategy execution has become a relevant and crucial source of value creation (Bigler, 2001).

If the companies can effectively execute their strategies, it will become a source of competitive advantage (Srivastava, 2014). Furthermore, by achieving greater levels of competence, commitment, and coordination in its strategy execution process, a company will increase its competitive edge over its rivals (Tawse & Tabesh, 2021). Strategy execution helps companies effectively exploit existing opportunities and give what their customers need. Therefore, it is important for companies to execute their strategies quickly and effectively with the increasing competition if they want to survive (Chen, 2005).

Good strategy execution can also increase customer satisfaction and contribution to the company and create synergies in allocating financial and human resources within the company. With this ability, the company can identify, attract, and retain valuable customers (Ho et al., 2014). This statement is in line with RBT, which states that companies need to exploit existing resources and capabilities to maximize their advantages (Grant, 2005). In addition, active development, good asset management (including knowledge management), and good strategy execution significantly impact the company's long-term success (Teece, 2014). Therefore, this study proposes a proposition:

P3. Strategy execution has a significant influence on competitive advantage.

### **Mediating Effect of Strategy Execution on the Relationship Between Knowledge Management and Competitive Advantage**

Effectively carried out knowledge management can support the coordination of critical resources needed for strategy execution and place the company to gain and maintain a competitive advantage (Velez, 2018). Knowledge management also creates a shared understanding regarding utilizing organizational knowledge in the value creation process and integrating existing activities to successful strategy execution (Wang et al., 2016). Furthermore, a company will gain a competitive advantage and higher profits for its shareholders if it can execute its strategy better than its competitors with its knowledge and capabilities (Hrebiniak, 2013). When a company has knowledge management capabilities, it can develop and execute strategies that meet organizational goals.

Strategy execution is a factor that affects firm performance through competitive advantage obtained from internal resource management, including knowledge as a strategic resource (Kruasoma & Saenchaiyathon, 2015; Mahdi et al., 2019; Soebandrija et al., 2015). This becomes important, especially when a business faces uncertain economic situations or when there is market expansion. If companies have good knowledge management, they can easily utilize their relevant knowledge in the company's strategic planning and execution. Strategy execution process with solid and relevant information obtained from companies knowledge base will increase the effectiveness of strategy execution and give a superior position over their competitors.

Maximizing existing resources and capabilities is crucial for maximising the company's advantages (Robert Morris Grant, 2005). Strategy execution can be seen as a capability and hence, a source of competitive advantage (Barney & Mackey, 2005). The proper strategy execution creates a well-synchronised allocation of resources (Ho et al., 2014) and can benefit the company. In conclusion, knowledge management helps companies coordinate and communicate unique strategies and executions to all of their members, allowing them to have a competitive edge over their competitors. Therefore, this study proposes a proposition:

- P4. Strategy execution mediates the relationship between knowledge management and competitive advantage.

## CONCLUSION

Based on the four propositions proposed in the previous section, this study proposes that strategy execution is a mediating variable in the relationship between knowledge management and competitive advantage. The existing propositions can be described by a research model shown in Figure 1.

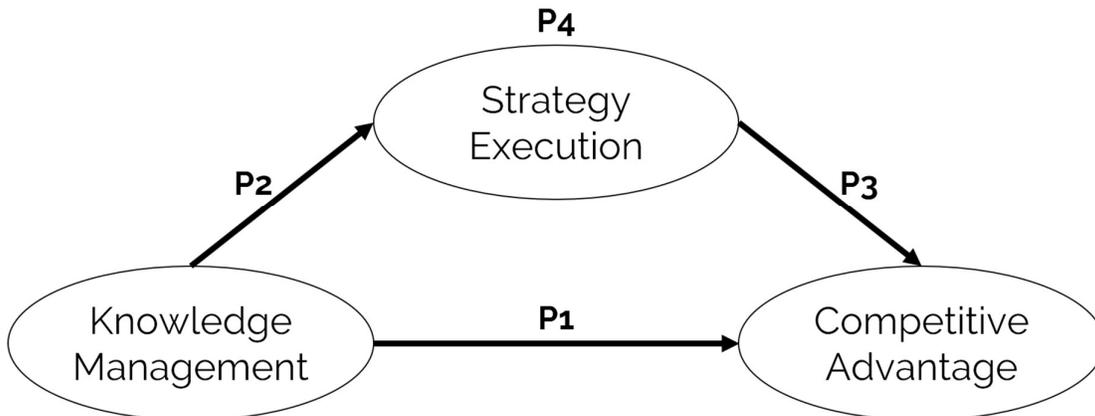


Figure 1 Results

Based on the proposed research model, this study views knowledge management as a critical component of a company's efforts to maintain a competitive edge in an increasingly hostile business climate. Additionally, knowledge management is critical to the decision-making and strategy processes of businesses. If the company's developed plan is correctly implemented, the strategy will yield positive results for the business, including a competitive edge. While some earlier research has examined the association between factors in part, no other study has examined the relationship between these three variables concurrently. Thus, this research can serve as a foundation for future work that will empirically and conceptually test the propositions.

Even though this study has provided hypotheses to test the relationship between knowledge management, strategy execution, and competitive advantage, it is still limited to the theoretical model. Future research can utilize the theoretical research model proposed in this study to empirically test the hypotheses in various contexts (industry, demographic characteristics, countries, etc.). Therefore, it will provide empirical supports for the development of a theoretical framework that attempt to understand the interactions among variables. Other variables (e.g., firm performance, leadership, strategy planning/formation, etc.) can be included in the model to provide deeper insights related to knowledge management and strategy management in general.

## REFERENCES

- Aktürk, B. K., & Kurt, M. (2016). An Empirical Study of the Relationship Between Knowledge Management Practices and Strategy Formulation Capabilities. *Procedia - Social and Behavioral Sciences*, 235, 739–745. <https://doi.org/10.1016/j.sbspro.2016.11.075>
- Akuku, B., Waema, T. M., Oboko, R., & Brown, I. (2021). Knowledge management strategies adopted in agricultural research organizations in East Africa. *Information Development*, 37(4), 671–688. <https://doi.org/10.1177/0266666920968165>
- Alaneme, G. C. (2017). *Knowledge Management Capabilities and Competitive Advantage in the*

- 
- Nigerian Food, Beverage and Tobacco Industry.*  
<https://ir.unilag.edu.ng/handle/123456789/3278>
- Andersen, M. A., & Lie, M. S. (2013). *The Theoretical Development of Strategy Implementation: From 1980 to 2013* [Copenhagen Business School].  
<https://research.cbs.dk/en/studentProjects/16e3f8d8-2c8a-49fb-aaf1-c02d4a522cb6>
- Anwar, M., Rehman, A. U., & Shah, S. Z. A. (2018). Networking and new venture's performance: mediating role of competitive advantage. *International Journal of Emerging Markets*, 13(5), 998–1025. <https://doi.org/10.1108/IJoEM-07-2017-0263>
- Ardyan, E., Nurtantiono, A., Istiyanto, B., & Rahmawan, G. (2017). Green innovation capability as driver of sustainable competitive advantages and SMEs marketing performance. *International Journal of Civil Engineering and Technology*, 8(8), 1114–1122.
- Arsawan, I. W. E., Koval, V., Rajiani, I., Rustiarini, N. W., Supartha, W. G., & Suryantini, N. P. S. (2020). Leveraging knowledge sharing and innovation culture into SMEs sustainable competitive advantage. *International Journal of Productivity and Performance Management*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/IJPPM-04-2020-0192>
- Aydin, S., & Dube, M. (2018). Knowledge management, innovation, and competitive advantage: is the relationship in the eye of the beholder? *Knowledge Management Research & Practice*, 16(3), 402–413. <https://doi.org/10.1080/14778238.2018.1496564>
- Barney, J. B. (1986). Strategic Factor Markets: Expectations, Luck, and Business Strategy. *Management Science*, 32(10), 1231–1241. <https://doi.org/10.1287/mnsc.32.10.1231>
- Barney, J. B. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Barney, J. B., & Clark, D. (2007). *Resource-Based Theory: Creating and Sustaining Competitive Advantage*. Oxford University Press. <https://doi.org/10.1362/026725708X382046>
- Barney, J. B., & Mackey, T. B. (2005). Testing Resource-Based Theory. In D. J. Ketchen Jr. & D. D. Bergh (Eds.), *Research Methodology in Strategy and Management, Volume 2* (pp. 1–13). Elsevier Ltd. [https://doi.org/10.1016/S1479-8387\(05\)02001-1](https://doi.org/10.1016/S1479-8387(05)02001-1)
- Barney, J. B., & Zajac, E. J. (1994). Competitive Organizational Behavior: Toward an Organizationally-Based Theory of Competitive Advantage. *Strategic Management Journal*, 15(S1), 5–9. <https://doi.org/10.1002/smj.4250150902>
- Barrick, M. R., Thurgood, G. R., Smith, T. A., & Courtright, S. H. (2015). Collective Organizational Engagement: Linking Motivational Antecedents, Strategic Implementation, and Firm Performance. *Academy of Management Journal*, 58(1), 111–135. <https://doi.org/10.5465/amj.2013.0227>
- Becerra-Fernandez, I., & Sabherwal, R. (2015). *Knowledge Management: Systems and Processes*. Taylor & Francis.
- Bell, P., Dean, G., & Gottschalk, P. (2010). Information management in law enforcement: The case of police intelligence strategy implementation. *International Journal of Information Management*, 30(4), 343–349. <https://doi.org/10.1016/j.ijinfomgt.2010.01.002>
- Bhimavarapu, S. R., Kim, S.-Y., & Xiong, J. (2019). Strategy execution in public sectors: empirical evidence from Belgium. *Journal of Business Strategy*, 41(6), 39–47. <https://doi.org/10.1108/JBS-01-2019-0025>
- Bigler, W. R. (2001). The new science of strategy execution: how incumbents become fast, sleek wealth creators. *Strategy & Leadership*, 29(3), 29–34. <https://doi.org/10.1108/10878570110695561>
- Bolisani, E., & Bratianu, C. (2018). The Elusive Definition of Knowledge. In *Emergent Knowledge Strategies* (pp. 1–22). Springer International Publishing. [https://doi.org/10.1007/978-3-319-60657-6\\_1](https://doi.org/10.1007/978-3-319-60657-6_1)
- Brill, P. K. (2011). *Innovation Through Social Networking in Communities of Practice*. <https://idun.augsburg.edu/etd/908>
- Carrasco-Hernández, A. J., & Jiménez-Jiménez, D. (2016). Knowledge management, flexibility and firm performance: The effects of family involvement. *European Journal of Family Business*, 6(2), 108–117. <https://doi.org/10.1016/j.ejfb.2017.06.001>
- Chen, C.-J. (2018). Developing a model for innovativeness to enhance firms' supply chain agility and competitive advantage. *Management Decision*. <https://doi.org/10.1108/MD-12-2017-1236>

- Chen, H. (2005). A competence-based strategic management model factoring in key success factors and benchmarking. *Benchmarking: An International Journal*, 12(4), 364–382. <https://doi.org/10.1108/14635770510609033>
- Cho, M., Bonn, M. A., & Jung, H. S. (2021). What drives restaurant competitive productivity (CP): a comprehensive examination at meso-micro-levels. *International Journal of Contemporary Hospitality Management*, 33(9), 3065–3090. <https://doi.org/10.1108/IJCHM-09-2020-1040>
- Chopra, M., Saini, N., Kumar, S., Varma, A., Mangla, S. K., & Lim, W. M. (2021). Past, present, and future of knowledge management for business sustainability. *Journal of Cleaner Production*, 328, 129592. <https://doi.org/10.1016/j.jclepro.2021.129592>
- Chrisman, J. J., Chua, J. H., De Massis, A., Minola, T., & Vismara, S. (2016). Management processes and strategy execution in family firms: from “what” to “how.” *Small Business Economics*, 47(3), 719–734. <https://doi.org/10.1007/s11187-016-9772-3>
- Christensen, H. K. (2010). Defining customer value as the driver of competitive advantage. *Strategy and Leadership*, 38(5), 20–25. <https://doi.org/10.1108/10878571011072048>
- Chua, J. H., Chrisman, J. J., Steier, L. P., & Rau, S. B. (2012). Sources of Heterogeneity in Family Firms: An Introduction. *Entrepreneurship Theory and Practice*, 36(6), 1103–1113. <https://doi.org/10.1111/j.1540-6520.2012.00540.x>
- Chuah, F., Teoh, K., Ting, H., & Lau, E. (2016). A behavioral approach to modelling strategy execution: The role of organizational support and the moderated mediation effect of engagement and communication. *International Review of Management and Marketing*, 6(S8), 217–225.
- Curado, C. (2006). *The knowledge based view of the firm: from theoretical origins to future implications*. <https://www.repository.utl.pt/handle/10400.5/725?locale=en>
- Dalkir, K. (2011). *Knowledge Management in Theory and Practice* (2nd ed.). MIT Press.
- de Oliveira, C. A., Carneiro, J., & Esteves, F. (2019). Conceptualizing and measuring the “strategy execution” construct. *Journal of Business Research*, 105, 333–344. <https://doi.org/10.1016/j.jbusres.2018.03.012>
- Favaro, K. (2015, March). Defining Strategy, Implementation, and Execution. *Harvard Business Review*. <https://hbr.org/2015/03/defining-strategy-implementation-and-execution>
- Feldman, E. R. (2020). Corporate Strategy: Past, Present, and Future. *Strategic Management Review*, 1(1), 179–206. <https://doi.org/10.1561/111.00000002>
- Ferreira, J., & Coelho, A. (2020). Dynamic capabilities, innovation and branding capabilities and their impact on competitive advantage and SME’s performance in Portugal: the moderating effects of entrepreneurial orientation. *International Journal of Innovation Science*, 12(3), 255–286. <https://doi.org/10.1108/IJIS-10-2018-0108>
- Grant, R. (2018). Knowledge Management Theories. In *The Palgrave Encyclopedia of Strategic Management* (pp. 839–843). Palgrave Macmillan UK. [https://doi.org/10.1057/978-1-137-00772-8\\_492](https://doi.org/10.1057/978-1-137-00772-8_492)
- Grant, Robert M. (1991). The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation. *California Management Review*, 33(3), 114–135. <https://doi.org/10.2307/41166664>
- Grant, Robert M. (2016). *Contemporary Strategy Analysis: Text and Cases Edition* (9th ed.). Wiley.
- Grant, Robert Morris. (2005). *Contemporary Strategy Analysis: Concepts, Techniques, Applications*. Blackwell Publishing.
- Guerras-Martín, L. Á., Madhok, A., & Montoro-Sánchez, Á. (2014). The evolution of strategic management research: Recent trends and current directions. *BRQ Business Research Quarterly*, 17(2), 69–76. <https://doi.org/10.1016/j.brq.2014.03.001>
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). SAGE Publications.
- Hebibi, L., Raimi, N., & Milićević, R. (2019). Knowledge management and the importance of knowledge management for the organization’s performance. *Ekonomika*, 65(1), 117–126. <https://doi.org/10.5937/ekonomika1901117H>
- Ho, J. L. Y., Wu, A., & Wu, S. Y. C. (2014). Performance measures, consensus on strategy implementation, and performance: Evidence from the operational-level of organizations. *Accounting, Organizations and Society*, 39(1), 38–58.

- 
- <https://doi.org/10.1016/j.aos.2013.11.003>
- Hrebiniak, L. G. (2013). *Making Strategy Work: Leading Effective Execution and Change* (2nd ed.). Pearson Education.
- Huber, A. J. (2011). How Innovative Marketing Strategies Translate into Firm Performance: The Key Role of Firms' Strategy Implementation Capabilities. In *Effective Strategy Implementation* (pp. 91–131). Gabler. [https://doi.org/10.1007/978-3-8349-6595-0\\_3](https://doi.org/10.1007/978-3-8349-6595-0_3)
- Husain, S., & Ermine, J.-L. (2021). *Knowledge Management Systems: Concepts, Technologies and Practices*. Emerald Publishing Limited.
- Jelenic, D. (2011). The importance of knowledge management in organizations--with emphasis on the balanced scorecard learning and growth perspective. *Management, Knowledge and Learning International Conference*, 33–43.
- Jennex, M. E. (2015). Knowledge Management. In *Wiley Encyclopedia of Management* (pp. 1–6). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118785317.weom070035>
- Jyoti, J., Kotwal, S., & Rani, R. (2015). *Impact of Knowledge Management Practices on Competitive Advantage: Empirical Experiences from Telecommunication Sector in India* (pp. 111–128). [https://doi.org/10.1007/978-3-319-16098-6\\_7](https://doi.org/10.1007/978-3-319-16098-6_7)
- Kamya, M. T., Ntayi, J. M., & Ahiauzu, A. (2010). Knowledge management and competitive advantage: the interaction effect of market orientation. *African Journal of Business Management*, 4(14), 2971–2980.
- Keele, L. (2015). Causal Mediation Analysis. *American Journal of Evaluation*, 36(4), 500–513. <https://doi.org/10.1177/1098214015594689>
- Kruasoma, T., & Saenchaiyathon, K. (2015). Achievement a Sustainable Competitive Advantage on the Integration of Resource-Based View and Dynamic Capability. *International Business Management*, 9(1). <https://doi.org/10.36478/ibm.2015.79.85>
- Lee, V.-H., Foo, A. T.-L., Leong, L.-Y., & Ooi, K.-B. (2016). Can competitive advantage be achieved through knowledge management? A case study on SMEs. *Expert Systems with Applications*, 65, 136–151. <https://doi.org/10.1016/j.eswa.2016.08.042>
- Mahdi, O. R., Nassar, I. A., & Almsafir, M. K. (2019). Knowledge management processes and sustainable competitive advantage: An empirical examination in private universities. *Journal of Business Research*, 94, 320–334. <https://doi.org/10.1016/j.jbusres.2018.02.013>
- Mao, H., Liu, S., Zhang, J., & Deng, Z. (2016). Information technology resource, knowledge management capability, and competitive advantage: The moderating role of resource commitment. *International Journal of Information Management*, 36(6), 1062–1074. <https://doi.org/10.1016/j.ijinfomgt.2016.07.001>
- Maritan, C. A., & Peteraf, M. (2018). Competitive Advantage. In M. Augier & D. J. Teece (Eds.), *The Palgrave Encyclopedia of Strategic Management* (pp. 298–300). Palgrave Macmillan UK. <https://doi.org/10.1057/978-1-137-00772-8>
- Morgan, N. A., Katsikeas, C. S., & Vorhies, D. W. (2012). Export marketing strategy implementation, export marketing capabilities, and export venture performance. *Journal of the Academy of Marketing Science*, 40(2), 271–289. <https://doi.org/10.1007/s11747-011-0275-0>
- Murunga, E. S., & Karugu, J. E. (2019). Organizational culture and strategy execution at commission for university education, Kenya. *International Journal of Current Aspects*, 3(V), 76–90.
- Nag, R., & Gioia, D. A. (2012). From Common to Uncommon Knowledge: Foundations of Firm-Specific Use of Knowledge as a Resource. *Academy of Management Journal*, 55(2), 421–457. <https://doi.org/10.5465/amj.2008.0352>
- Nikolaou, I. E. (2019). A Framework to Explicate the Relationship Between CSER and Financial Performance: an Intellectual Capital-Based Approach and Knowledge-Based View of Firm. *Journal of the Knowledge Economy*, 10(4), 1427–1446. <https://doi.org/10.1007/s13132-017-0491-z>
- Nonaka, Ikujiro; Toyama, Ryoko; Nagata, A. (2000). A New Perspective on the Theory of the *Organization*, 1–20.
- Nothnagel, K. (2008). *Empirical Research within Resource-Based Theory: A Meta-Analysis of the Central Propositions*. Gabler Verlag. <https://doi.org/10.1007/978-3-8349-9830-9>
- Obeidat, B. Y., Al-Hadidi, A., Tarhini, A., & Masa'deh, R. (2017). Factors affecting strategy implementation. *Review of International Business and Strategy*, 27(3), 386–408. <https://doi.org/10.1108/RIBS-10-2016-0065>

- Okfalisa, Alias, R. A., & Salim, N. (2009). The Design of Knowledge Management for Strategy Execution. *2009 Third Asia International Conference on Modelling & Simulation*, 375–380. <https://doi.org/10.1109/AMS.2009.57>
- Okumus, F. (2003). A framework to implement strategies in organizations. *Management Decision*, 41(9), 871–882. <https://doi.org/10.1108/00251740310499555>
- Oliva, F. L., Couto, M. H. G., Santos, R. F., & Bresciani, S. (2019). The integration between knowledge management and dynamic capabilities in agile organizations. *Management Decision*, 57(8), 1960–1979. <https://doi.org/10.1108/MD-06-2018-0670>
- Paisittanand, S., Digman, L. A., & Lee, S. M. (2007). Managing Knowledge Capabilities for Strategy Implementation Effectiveness. *International Journal of Knowledge Management*, 3(4), 84–110. <https://doi.org/10.4018/jkm.2007100105>
- Pellegrini, M. M., Ciampi, F., Marzi, G., & Orlando, B. (2020). The relationship between knowledge management and leadership: mapping the field and providing future research avenues. *Journal of Knowledge Management*, 24(6), 1445–1492. <https://doi.org/10.1108/JKM-01-2020-0034>
- Quartey, S. H. (2019). Knowledge and sustainable competitive advantage of the Eyre Peninsula's fishing industry in Australia. *Knowledge and Process Management*, 26(2), 86–97. <https://doi.org/10.1002/kpm.1592>
- Radomska, J., & Kozyra, C. (2020). Awareness of strategy execution barriers in decision-making process: moderated mediation analysis. *Decision*, 47(1), 61–78. <https://doi.org/10.1007/s40622-020-00234-w>
- Rofiaty, R. (2019). The relational model of entrepreneurship and knowledge management toward innovation, strategy implementation and improving Islamic boarding school performance. *Journal of Modelling in Management*, 14(3), 662–685. <https://doi.org/10.1108/JM2-05-2018-0068>
- Simon, H. A. (1990). Bounded Rationality. In *Utility and Probability* (pp. 15–18). Palgrave Macmillan UK. [https://doi.org/10.1007/978-1-349-20568-4\\_5](https://doi.org/10.1007/978-1-349-20568-4_5)
- Slater, S. F., Olson, E. M., & Hult, G. T. M. (2010). Worried about strategy implementation? Don't overlook marketing's role. *Business Horizons*, 53(5), 469–479. <https://doi.org/10.1016/j.bushor.2010.04.001>
- Smith, E. A. (2001). The role of tacit and explicit knowledge in the workplace. *Journal of Knowledge Management*, 5(4), 311–321. <https://doi.org/10.1108/13673270110411733>
- Soebandrija, K. E. N., Wijaya, F., Hendra, & Agustin, V. (2015). Fast Moving Consumer Goods (FMCG) Industry: SAP R/3 Perspectives in Indonesia Stock Exchange. *International Business Management*, 9(4), 660–665. <https://doi.org/10.36478/ibm.2015.660.665>
- Spender, J.-C., & Grant, R. M. (1996). Knowledge and the firm: Overview. *Strategic Management Journal*, 17(S2), 5–9. <https://doi.org/10.1002/smj.4250171103>
- Srivastava, A. K. (2013). Modeling strategic performance factors for effective strategy execution. *International Journal of Productivity and Performance Management*, 62(6), 554–582. <https://doi.org/10.1108/IJPPM-11-2012-0121>
- Srivastava, A. K. (2014). Act for Effective Strategy Execution: Mediating Role of Adapt. *Global Journal of Flexible Systems Management*, 15(4), 305–312. <https://doi.org/10.1007/s40171-014-0075-8>
- Srivastava, A. K., & Sushil. (2015). Modeling organizational and information systems for effective strategy execution. *Journal of Enterprise Information Management*, 28(4), 556–578. <https://doi.org/10.1108/JEIM-09-2013-0071>
- Sveiby, K. (2001). A knowledge-based theory of the firm to guide in strategy formulation. *Journal of Intellectual Capital*, 2(4), 344–358. <https://doi.org/10.1108/14691930110409651>
- Tawse, A., & Tabesh, P. (2021). Strategy implementation: A review and an introductory framework. *European Management Journal*, 39(1), 22–33. <https://doi.org/10.1016/j.emj.2020.09.005>
- Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350. <https://doi.org/10.1002/smj.640>
- Teece, D. J. (2014). The Foundations of Enterprise Performance: Dynamic and Ordinary Capabilities in an (Economic) Theory of Firms. *Academy of Management Perspectives*, 28(4), 328–352.

- <https://doi.org/10.5465/amp.2013.0116>
- Velez, A. (2018). *Global Strategy and Its Relationship to Knowledge Management Maturity and Multinational Corporation Performance*. Keiser University.
- Venza, R. M. (2015). *Online banking strategies and competitive advantage of commercial banks in Kenya*. University of Nairobi.
- Wahyono, W. (2019). The mediating effects of product innovation in relation between knowledge management and competitive advantage. *Journal of Management Development*, 39(1), 18–30. <https://doi.org/10.1108/JMD-11-2018-0331>
- Wang, Z., Wang, N., Cao, J., & Ye, X. (2016). The impact of intellectual capital – knowledge management strategy fit on firm performance. *Management Decision*, 54(8), 1861–1885. <https://doi.org/10.1108/MD-06-2015-0231>
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180. <https://doi.org/10.1002/smj.4250050207>