

# Resource Allocation Strategies for Maintaining Competitiveness and Achieving Innovation Success

Agnes B. Boadi-Sarpong, A. B., Prince A. Agyei, Emmanuel Mensah, Peter A. Boateng

*Valley View University, School of Graduate Studies, P. O. Box AF595, Adenta, Accra Ghana*

DOI: <https://doi.org/10.51244/IJRSI.2023.10724>

Received: 05 July 2023; Accepted: 18 July 2023; Published: 19 August 2023

**Abstract:** Resource allocation strategies are essential for maintaining competitiveness and achieving innovation success. They are interrelated, as maintaining competitiveness requires the ability to innovate, while innovation success is dependent on the availability of sufficient resources. This paper's methodology consists of a library search and literature review on resource allocation strategies for maintaining competitiveness and achieving innovation success. The key search terms included resource allocation, innovation success, and competition. An in-depth analysis of literature related to study constructs was conducted using the systematic review procedure. Empirical and theoretical studies that applied resource allocation, innovation, and competitiveness were preferred. A random bibliographic scan was performed on all the research studies to find out relevant study material. The main objective is to assess the effectiveness of resource allocation in maintaining organizational innovation and competitiveness. The resource base view theory was the underlying theory for the study. This study found that companies that allocate more resources towards research and development are more likely to launch new products and services, which can enhance their competitiveness in the market. Additionally, it has been found that resource allocation toward innovation can positively impact a company's financial performance. Additionally, effective resource allocation strategies are key to maintaining competitiveness and achieving innovation success. By investing in R&D, talent acquisition and development, and strategic partnerships, organizations can gain a competitive advantage and deliver innovative solutions that meet the evolving needs of customers.

**Keywords:** Resource allocation strategies, Competitiveness and Innovation success

## I. Introduction

The complexities of competition in today's fast-paced market, as well as the need for continuous innovation, resource management, processes, and methods, have created a need for organizations to develop strategies for reaching out to customers in novel ways to gain a competitive advantage (Anning-Dorson, 2021). The concept of resources has been used in a variety of fields of human endeavor, including medicine, economics, ecology, management, computer science, and human resources. It's also linked to concepts like sustainability, preservation, stewardship, and competition.

To achieve optimum productivity in economics and management in particular, factors of production require effective resource allocation through resource management or utilization (Davijani, Banihabib, Anvar, & Hashemi, 2016). Scarcity economic theory gave rise to resource management. Scarcity refers to the mismatch between finite scarce resources and the seemingly limitless client wants. People must make decisions about how to properly organize, manage, distribute, and regulate resources to meet basic needs and as many additional wants as possible in this situation. Scarcity necessitates regular economic decisions to plan, manage, and allocate available resources to meet human, organizational, and societal needs. Organizations are constantly besieged by the challenge of resource scarcity, which, when combined with the threat of rivalry and competition, means that decisions on resource planning, allocation, and control are beginning to determine market success and failure (Parniangtong, 2017). To meet the challenge of a world where resources are becoming increasingly scarce, businesses are becoming concerned with resource management, which includes efficient resource utilization, exploring alternatives to currently used resources (resource planning, allocation, scheduling, and control), supply security, and implementing new business models (enterprise modelling)(Bringezu, Potočnik, Schandl, Lu, Ramaswami, Swilling, & Suh, 2016).

The problem with competitive advantages is that they cannot be sustained indefinitely because rival firms tend to imitate the product or strategy. Even if attempts to simulate the product fails, changes in technology and technical know-how tend to shorten the lifespan of competitive advantages. As a result, to maintain a sustainable competitive advantage, organizations are turning inward to develop winning strategies that make creative use of their internal resources (Isaboke, 2018). The allocation of resources has a significant impact on an organization's performance. Companies must have a clearly defined strategic plan and methods for implementing it to remain competitive (Park, 2022). Resource allocation is thought to influence how a firm invests and even takes advantage of emerging opportunities; thus, for increased performance, an organization must aim to effectively allocate its resources in a cost-efficient and differentiated manner from its competitors (Gitau, Abayo, & Kibuine, 2020).

According to Atsmon (2016), companies that actively and consistently re-evaluate where resources are allocated create more value and provide higher returns to shareholders. The author then defined dynamic resource reallocation as the process of moving money, talent, and management attention to where they will add the most value. Human resources, technology, finance, and equipment, as well as materials and other supplies required for production and services, are all examples of resources. A management process that involves making decisions about how to best use limited resources in the creation of goods and services is known as resource allocation. A resource is any factor of production that is used in the production of goods or services. Sengul, Costa, & Gimeno (2019) defines resources as labour, financial resources such as money, real estate, tools and equipment, technology, natural resources, and machinery. The distribution of resources is critical to a system's operation. It is the careful selection of resources (Cortez, Bonde, Muzio, Russinovich, Fontoura, & Bianchini, 2017). This function will become increasingly important as systems become more flexible in their resource arrangement and utilization. Decisions about resource allocation are critical because they affect the value of a company (Silva & Oliveira, 2020).

Organizations experience resource constraints in implementing strategic plans. Costs are incurred at the strategy implementation stage where resources are allocated to activities for action. A good strategy that cannot be implemented creates no real value (Kerzner, 2019). Effective implementation begins during strategy formulation when questions such as “how do we do it” should be considered. Effective implementation takes place when organizations’ resources and actions are tied to strategic priorities, when key success factors are identified and when performance measures and reporting are aligned.

Resource allocation is a step by step process that ensures only activities that promote the organization’s strategic objectives are funded. Limitation of resources is a major constraint in the implementation of chosen strategies for organizational competitiveness and innovation success. Organizations are faced with challenges in allocating scarce resources to activities and thorough analysis is carried out to establish whether the plans are feasible undertakings that will guarantee returns that fulfil the organization’s objectives (Braganza, Brooks, Nepelski, Ali, & Moro, 2017). Al Shobaki & Abu-Naser (2017) noted that to survive in today’s global market, organizations must focus their efforts where they can achieve the best possible cost advantage relative to their competitors. This requires strategic analysis of different scenarios in order to establish the most cost-effective resource allocation plan for the organization. The paper, therefore, looks at resource allocation strategies for maintaining competitiveness and achieving innovation success. The main objective is to assess the effectiveness of resource allocation in maintaining organizational innovation and competitiveness. Specifically, the aim is to examine the effect of resource allocation in maintaining organizational innovation; and to examine the effect of resource allocation in maintaining organizational competitiveness.

## II. Literature Review

The literature looks at the concept of resource allocation, competitive advantage and innovation in an organization. It also looks at the theoretical review underpinning resource allocation.

*Concept of Resource Allocation.* Resource allocation is a resource management technique. Its goal is to balance the available resource stock, reducing both surplus inventories and shortages. Demand for various resources is forecast by a period as far into the future as is reasonable, as well as resource configurations required in those demands, and resource supply, is forecast by a period as far into the future as is reasonable (Guo, Zhang, Zhang, Wang, & Guo, 2019). The goal is to achieve 100% utilization, but this is extremely unlikely when key indicators are weighted and constraints are in place, such as meeting a minimum service level while limiting costs. According to Atsmon (2016), companies that actively and consistently re-evaluate where resources are allocated create more value and provide higher returns to shareholders. The author then defined dynamic resource reallocation as the process of directing money, talent, and management attention to where they will be most valuable. Human resources, technology, finance, and equipment, as well as materials and other supplies required for production and services, are all examples of resources.

Resource allocation is a management process that involves making decisions about how to best use limited resources in the creation of goods and services. A resource is any factor of production that is used in the production of goods or services (Alvarez & Barney, 2017). Tengblad (2018) defines resources as labour, financial resources such as money, real estate, tools and equipment, technology, natural resources, and machinery. The distribution of resources is critical to a system's operation. It is the careful selection of resources. This function will become increasingly important as systems become more flexible in their resource arrangement and utilization. Decisions about resource allocation are critical because they affect the value of a company (Wilton, 2019). Resource allocation refers to the selection of resources, their assignment, and the time required to complete activities while meeting client, processing, and capacity constraints. It has a broader scope because it meets both planning and scheduling needs. The former is the temporal ordering of operations and resources, whereas the latter is the selection and assignment of resources. The four types of resources are financial resources, physical resources, human resources, and technological resources (Afrin et al., 2021). Resources are efficiently allocated in an economist's ideal world, which, of course, does not exist, when they are used to produce goods and services that meet customers' needs and desires at the lowest possible cost of production. Output efficiency refers to the use of fewer

resources to produce goods and services, allowing those resources to be used more efficiently in other areas of the economy such as extra production, savings, and investment. Everything comes down to making what people want as cheaply and efficiently as possible.

According to Astmon (2016), to achieve actual value from resource allocation, executives should adhere to four key concepts: *Granulation*: Be wary of the tyranny of the averages. A single business unit may have multiple business lines or geographic pockets, each with its own set of returns. It is not uncommon to see one region decline by 10% while another grows by triple digits. The variability within granular market segments within a single business unit is sometimes far greater than the variability among large business units. Managers must drill down to the smallest meaningful business where a change in resources will have a significant impact on the overall performance of the company (likely more than one per cent of total revenues). *Focusing on value creation*: There are times when an investment has a clear business case and the net present value of all future cash flows can be calculated. That is how an investment in a new mine or the construction of a new car may appear. In other cases, a segment's overall economic profit (profit generated above the cost of capital) may be a reliable and consistent metric for assessing ongoing value creation. To determine which groups, deserve more or less money and attention, the proper criteria must be used. *Overcoming biases*: Bias has a significant impact on resource allocation decisions. Any resource allocation exercise must be based on hard data so that conclusions are founded on facts and reasoning. Some common approaches for overcoming biases are i) committing to a minimum annual reallocation and putting some funds aside for new allocations; ii) forcing the prioritization of options based on their value creation or return on investment; and iii) simulations that force CEOs to debate against their natural interests or allocate resources to unidentified business divisions that may or may not be their own.

*Agility*. In this volatile business environment, resource allocation should be changed regularly, especially when significant events occur, such as a dramatic drop in oil prices. Some businesses use a methodical stage-gating process for investments. When developing new products and services, it is common practice to postpone some of the investment until there is proof that it is working. External (demand growth, competitor launches, and regulation) and internal (new technology, talent changes) material risks must be identified in the strategic planning process, and clear threshold levels must be established at which resource allocation decisions must be reassessed.

*Concept of Competitive Advantage*. The ability of a firm to differentiate and improve the quality of its product through effective resource utilization is referred to as competitive advantage (Delery & Roumpi, 2017). Furthermore, it could be viewed as a firm's ability to maintain a long-term survival (unique) strategy that is difficult for rival firms to imitate. Previous competitive advantage studies have focused on profitability, productivity, and market share (Song & Wang, 2018). Competitive advantage is thought to be a requirement for high-level performance (Christian, 2020). A competitive advantage is a company's ability to improve product quality, reduce product costs, or increase market share or profit (Kharub, Mor, & Rana, 2022). Desyllas, Miozzo, Lee, & Miles (2018) defines competitive advantage at the firm level as productivity growth manifested in lower costs or differentiated products with higher pricing. According to Kotabe & Kothari (2016), competitive advantage refers to a company's ability to compete with companies in other regions. Safitri & Anggara (2019) defines competitive advantage as a company's ability to identify opportunities, minimize difficulties, and cut costs. However, Hannah & Eisenhardt (2018) contend that a firm's competitiveness is determined by its ability to identify opportunities, mitigate risks, and save money. As Pollack, Bittihn, & Golestanian (2022) pointed out, competitive advantage appears to be a relative term. A competitive advantage is a defined and measured scenario in comparison to a competitor.

The theory of competition is constantly evolving. The operational definition of competitive advantage is a method of using current resources and engaging in additional specific activities to distinguish a company from its competitors while keeping it active and growing (Ballé, Jones, Chaize, & Fiume, 2017). Competitive advantage has three characteristics, according to the definition: long survival, difficulty to imitate, and difficulty to recognize (Sachitra, 2017). Competitive advantage is a business or economic concept that outperforms traditional economic indices such as profitability, productivity, and market share (Federici, Bracalenti, Meloni, & Luciano, 2017). Traditional indicators, on the other hand, can only reflect past quantitative facts. To provide customers with greater value and satisfaction than competitors, firms must be operationally efficient, cost-effective, and service quality-conscious (Vilani, 2016). In addition to financial and market-based metrics, other factors such as innovativeness, ethical standards, social responsibility, and employee working conditions must be considered (Tsai & Mutuc, 2020).

*Concept of Innovation*. Innovation is one of the most important tools that a company can use to expand its strategies into new markets, increase existing market share, and provide a firm with a sustainable competitive advantage (Caballero-Morales, 2021). Operators must provide more creative services that are primarily focused on meeting the needs of consumers, as well as establish a regulated minimum market pricing. As a result of these initiatives, operators will be able to generate new revenue streams, which will help to offset the decrease in traditional revenue. Globalization and technological advancement have prompted the need for

innovation in many industries to compete in an ever-increasing global market and adapt to changing customer needs and preferences (Prokop, Stejskal, & Hudec, 2019).

This necessitates that corporate organizations consider innovation to be an essential component of their strategy. In his definition of innovation, Ogunkoya, Onasanya, Hassan, & Adetayo (2020) identified five manifestations: 1) Creation of new products or improvements to existing ones; 2) Establishment of a novel industrial process; 3) New entrants into the market; 4) New raw materials or other inputs for research and development; and 5) New forms of industrial organizations. Innovation is a key factor for firm success and survival. According to Therrien, Doloreux, and Inigo & Albareda (2016), innovation is a complex phenomenon involving developments in technological processes and systems through which firms seek to acquire and build upon novel technical competence, defined as a firm's set of resources and how these are transformed by innovative capabilities. Product (good or service) improvement or process modification, new marketing strategies, or a new organizational style in business procedures are all defined as innovation in the third edition of the Oslo Manual (Cozzarin, 2017). The process of developing an idea for a new or existing successful product is known as innovation.

*Resource allocation and innovation success.* According to a study by Haneda & Ito (2018) found that strategic resource allocation is positively associated with innovation performance. Specifically, the study showed that firms that allocate resources to support innovation activities, such as R&D and new product development, tend to have higher levels of innovation success. However, resource allocation is not always easy. Another study Kundu & Gahlawat (2016) found that resource allocation decisions can be influenced by biases and heuristics, which can lead to inefficient allocation decisions. The study recommended that organizations should adopt decision-making processes that minimize these biases and heuristics. Another study by Azeem, Ahmed, Haider, & Sajjad (2021) found that innovation success is positively associated with a strong organizational culture that values innovation and encourages employees to generate and implement new ideas. Furthermore, the study found that effective communication and knowledge sharing among employees is critical for innovation success. Another study Anning-Dorson (2017) found that market conditions, such as industry competition and customer preferences, can significantly impact innovation success. The study suggests that organizations should conduct thorough market research to identify customer needs and preferences and to stay informed about changes in the competitive landscape.

*Resource allocation and competitiveness.* One approach to resource allocation is the resource-based view (RBV) of the firm, which suggests that a firm's resources and capabilities are the sources of its competitive advantage. According to this view, firms should allocate their resources strategically to maximize their potential for creating sustainable competitive advantages. This theory has been supported by empirical research indicating that resource allocation practices can have a significant impact on firm performance (Mikalef & Gupta, 2021).

Another perspective on resource allocation is the dynamic capabilities framework, which emphasizes the importance of a firm's ability to adapt and change its resource allocation strategies in response to changing market conditions. This framework argues that firms need to continuously scan their environment for new opportunities and threats and make strategic adjustments to their resource allocations to remain competitive over time (Khan, Xuehe, Atlas, & Khan, 2019). Competitiveness literature focuses on the factors that contribute to a firm's ability to compete successfully in the marketplace. One important factor is innovation, which enables firms to offer new or improved products and services that meet customer needs more effectively. Research has shown that firms that invest in innovation tend to be more successful over the long term (Dagnino, Picone, & Ferrigno, 2021). Other factors that contribute to competitiveness include cost efficiency, quality, and customer service. Firms that are able to produce high-quality products at a lower cost than their competitors and provide excellent customer service tend to be more successful in the long run (Kryscynski, Coff, & Campbell, 2021).

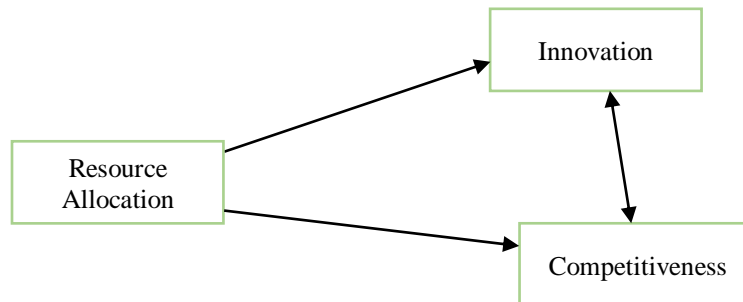
### III. Theoretical Framework

The Resource-Based View (RBV) was discovered to be the best theory for explaining organizational resource allocation. RBV examines and categorizes a company's strategic advantages based on a combination of capabilities, skills, assets, and intangible assets (Alvarez & Barney, 2017). The underlying premise of RBV theory is that each firm differs fundamentally because each firm possesses a "unique" bundle of resources, both tangible (visible) and intangible (not visible) assets, which the organizational capabilities then use (Odusote & Akpa, 2022). The organization's resources and capabilities enable it to gain a competitive advantage (Camisón, Puig-Denia, A., Forés, B., Fabra, M. E., Muñoz, A., & Munoz Martinez, 2016). According to this theory, a firm's resources influence its strategic implementation process and are critical for a firm to develop competencies from its resources, which form part of the firm's competitive advantage (Kabue & Kilika, 2016). According to RBV theory, an organization's competitive advantage, superior performance, and effectiveness explain the distinctiveness of the firm's capabilities (Mweru & Maina, 2016).



RBV theory specifies four resource characteristics. For starters, they are valuable and are thus used to capitalize on opportunities and/or mitigate threats in a firm's environment. Second, they are uncommon among a company's current and prospective competitors. Third, they are unique and cannot be imitated. Finally, they are non-substitutable and distinct, implying that another product or service could not have served the same purpose (Pestic, 2007). The premise of RBV theory is that an organization is a broader set of resources and that the growth of an organization involves the exploitation of existing resources as well as the development of new ones (Katuse, 2018). The RBV theory has been criticized for assuming that the relative superiority of resources determines the outcomes of competition, ignoring firms that go to great lengths to protect their source of sustainable competitive advantage by impeding their competitors' value creation, for example, through bribery (Katuse, 2018). This may lead to unethical practices, such as using employees to obtain confidential intellectual information or gain access to the competition's trade secrets. A firm can also prevent competitors from acquiring and retaining talent, preventing profit realization from resources and resulting in a competitive advantage (Sikora, Thompson, Russell, & Ferris, 2016). Another criticism of the RBV theory is that organizations have difficulty acquiring resources due to various types of constraints, such as regulation or transfer of human resources (Gerhart & Feng, 2021). RBV theory ignores the fact that a firm can have both a positive and negative impact on its surrounding business environment. If a firm already has access to a superior resource, it may use that advantage to push out any other competitors, resulting in monopolistic industries (Alexy, West, Klapper, & Reitzig, 2018).

Fig. 1: Conceptual Framework



Source: Researchers' Construct

The conceptual framework shows that resource allocation in every organization is very important, resource allocation is the process of assigning, scheduling, and utilizing resources in order to achieve a goal. Resource allocation is a complex process that requires careful consideration of the organization's goals, resources, and capabilities. It is important to ensure that resources are allocated in a way that maximizes efficiency and minimizes waste. This implies that for organizational innovation and competitiveness, resource allocation is very crucial. The relationship between resource allocation, innovation, and competitiveness are described as follows.

*Resource Allocation and Innovation.* Effective resource allocation plays a crucial role in fostering innovation within an organization. Allocating resources strategically to research and development (R&D), technology acquisition, employee training, and idea generation enables organizations to nurture innovative ideas and convert them into tangible outcomes. Adequate funding, skilled human capital, and access to necessary technologies are all essential components of successful innovation (Ayoub, 2020). One study found that organizations that allocate resources effectively to innovation initiatives are more likely to achieve a competitive advantage (Liu & Li, 2021). Furthermore, another research highlights the importance of resource allocation to drive innovation and create a culture that fosters innovative thinking within organizations (Yi, Guo, & Luo, 2021).

*Innovation and Competitiveness.* Innovation is a key driver of competitiveness in today's dynamic business environment. Organizations that continuously innovate and introduce novel products, services, or processes gain a competitive edge over their competitors (Karakaya & Calantone, 2016). Innovation enables organizations to differentiate themselves, capture new markets, respond to changing customer needs, improve operational efficiency, and create unique value propositions (Nambisan, 2017). According to a recent study, firms that prioritize innovation outperform their competitors in terms of market value and financial performance (Kafouros, Wang, & Hong, 2015). Additionally, innovation has been found to positively impact a firm's ability to compete and achieve sustainable growth (Wakkee, den Hertog, & Groen, 2020).

*Resource Allocation and Competitiveness.* The way resources are allocated within an organization can significantly impact its competitiveness. Effective resource allocation ensures that resources are directed towards areas that provide the most value and contribute to the organization's competitive advantage (Jaafar, Hussein, & Endut, 2018). Allocating resources to core competencies, market research, marketing and sales, talent acquisition and retention, and customer service can enhance competitiveness (Hitt et al., 2001). Studies show that organizations that adopt a strategic resource allocation approach achieve higher levels of

competitiveness and financial performance (Dubey & Gunasekaran, 2019). Moreover, resource allocation decisions should align with the organization's strategic priorities and objectives to maximize competitive outcomes (Jaafar, Hussein, & Endut, 2018). Resource allocation, innovation, and competitiveness are interrelated in organizations. Strategic allocation of resources towards innovation initiatives facilitates the generation of new ideas and the development of innovative products, services, or processes. These innovations, in turn, contribute to an organization's competitiveness by enabling it to differentiate itself, gain market share, and adapt to changing market dynamics. Therefore, organizations that effectively manage their resource allocation to foster innovation are more likely to achieve and sustain a competitive advantage in the marketplace.

#### **IV. Methodology**

The methodology consisted of literature review on resource allocation strategies for maintaining competitiveness and achieving innovation success. The library search included online journal articles. The sources for the references were taken from online databases such as Science Direct and Google Scholar. The key search terms included resource allocation, innovation success, and competition. An in-depth analysis of literature related to study constructs was conducted using the systematic review procedure, and resource allocation, innovation success, and competitiveness were reviewed. The following criteria were used to select studies: The study material chosen ranged from 2016 to the present. Empirical and theoretical studies that applied resource allocation, innovation, and competitiveness were preferred. A random bibliographic scan was performed on all the research studies to find out relevant study material.

#### **V. Discussion of Findings**

##### **Effect of resource allocation in maintaining organizational innovation**

Resource allocation strategies play a crucial role in maintaining competitiveness and achieving innovation success in organizations. In this paper, the discussion explores the various resource allocation strategies that can be used to maintain competitiveness and achieve innovation success. One of the key resource allocation strategies is setting priorities. Organizations need to define their strategic objectives, identify the critical areas where resources are required, and prioritize them accordingly. This ensures that resources are allocated in a manner that supports the organization's overall goals and objectives. Prioritization also helps to ensure that resources are not spread too thin across various initiatives and that the most important projects receive adequate attention. A study by Waheed, Miao, Waheed, Ahmad, & Majeed (2019), found that a high level of resource allocation towards innovation was positively correlated with overall organizational innovation performance. However, this positive relationship only held true when the organization had a strong focus on innovation as part of its overall strategy.

Another study also highlighted the importance of balancing resource allocation between exploration of new ideas and exploitation of existing ones (Del Giudice, Scuotto, Papa, Tarba, Bresciani, & Warkentin, 2021). Organizations that focus too heavily on exploration may struggle to maintain operational efficiency and financial stability, while those that focus too heavily on exploitation may miss out on new opportunities and fail to adapt to changing market conditions. Also, the findings of another study also shown that resource allocation plays a critical role in maintaining organizational innovation in technology companies. According to research conducted by researchers at the University of Michigan, companies that allocate more resources towards research and development (R&D) tend to be more innovative compared to those that allocate less resources (Jin & Choi, 2019). This study also found that companies that allocate more resources towards R&D are more likely to launch new products and services, which can enhance their competitiveness in the market.

In addition, it has been found that resource allocation towards innovation can positively impact a company's financial performance. For example, research conducted by Deloitte Insights found that companies that invested more in R&D had higher revenue growth compared to those that did not invest as much (Deloitte Insights, 2018). However, it is important to note that the allocation of resources towards innovation needs to be balanced with other business priorities such as maintaining cash flow, meeting customer demands, and complying with regulations. Therefore, organizations need to carefully assess their resources and allocate them strategically to ensure that innovation efforts are aligned with broader business objectives.

##### **Effect of resource allocation in maintaining organizational competitiveness**

Financial resources are one of the key elements that organizations need to maintain their competitiveness. Studies have shown that firms that allocate their financial resources effectively are more likely to remain competitive in the long run. For instance, a study by Sukumar, Jafari-Sadeghi, Garcia-Perez, & Dutta (2020) found that companies that invest in research and development and marketing activities tend to perform better in terms of their overall competitiveness. Similarly, a study by Qiu, Jie, Wang, & Zhao (2020) found that effective resource allocation in terms of investments in technology, human resources, and marketing helps firms to achieve a sustainable competitive advantage. On the other hand, firms that fail to allocate their financial resources strategically are more likely to experience decline in their competitiveness.

Non-financial resources are equally important in maintaining organizational competitiveness. These include human resources, technological resources, and intangible resources such as brand reputation and goodwill. A study by Anwar & Li (2021) found that human resource practices such as employee training and development, compensation and benefits, and employee empowerment play a crucial role in maintaining competitiveness. Similarly, a study by Farhikhteh, Kazemi, Shahin, & Mohammad Shafiee (2020) found that investment in technology is an essential factor that contributes to organizational competitiveness. Firms that invest in advanced technologies are more likely to achieve a competitive edge over others.

Effective resource allocation can also help organizations to optimize their operations and improve efficiency, which, in turn, can lead to cost savings. Resource allocation decisions can help to identify areas where the organization can invest in automation, technology, or more efficient processes that reduce costs while increasing productivity. This can lead to reduced operating costs, improved profitability, and better pricing strategies, which ultimately contribute to the organization's competitiveness. Furthermore, resource allocation can also help organizations leverage their strengths and opportunities. Through proper evaluation of its strengths, weaknesses, opportunities and threats (SWOT), an organization can allocate its resources towards areas that align with their strengths and opportunities. This can help to build and reinforce those competencies, which can set the organization apart from its competitors.

## **VI. Conclusion**

*Summary of Findings.* Effective resource allocation strategies are crucial for maintaining competitiveness and achieving innovation success. Through careful planning, prioritization, and investment, organizations can ensure that resources are allocated to the most important and impactful projects. This may involve investing in research and development, cultivating a culture of innovation, and leveraging partnerships and collaborations to access external resources. Additionally, organizations must continually monitor and evaluate their resource allocation decisions to ensure that they are achieving desired outcomes and making necessary adjustments as needed. Ultimately, effective resource allocation strategies can help organizations stay competitive, respond to changing market conditions, and drive ongoing growth and success.

Resource allocation strategies play a critical role in maintaining competitiveness and achieving innovation success. By carefully choosing where to invest resources such as time, money, and skills, organizations can stay ahead of the competition by creating new products and services that meet the needs of their customers. Examples of resource allocation strategies include investing in research and development, building a strong team with diverse skills and expertise, creating partnerships with other organizations, and investing in new technology. It is also important to regularly evaluate these strategies to ensure they are effective and adjust them accordingly. Ultimately, successful resource allocation requires a balance between short-term goals and long-term innovation objectives. With the right approach, organizations can remain competitive, drive growth, and achieve innovation success.

## **VII. Recommendations**

Recommendation on ensuring resource allocation strategies for maintaining competitiveness and achieving innovation success, it is important to prioritize innovation thus allocate a significant portion of your resources to innovation initiatives. This can include funding for R&D, hiring an innovation team, or investing in new technologies or processes. Secondly, investing in talent, hiring and developing talent that is creative, passionate, and innovative and provide opportunities for training and education to enhance their skills and knowledge. Thirdly, Foster a culture of innovation: Encourage an environment where employees feel safe to share ideas and collaborate with one another. Recognize and reward innovative thinking and risk-taking. Partnering and collaborating with external organizations such as universities, research institutions, or other businesses to access expertise, resources, and new perspectives. It is important to focus customer needs and understand the needs and preferences of your customers and use this information to develop products and services that meet their needs and also continually monitor the performance of your innovation initiatives and be prepared to make adjustments as necessary.

Finally, Innovation is a crucial aspect of any successful business. To ensure that your company stays ahead of the curve, it's important to cultivate a culture of innovation within your organization. This involves investing in research and development, fostering creativity among employees, and seeking out new perspectives from outside sources. It's also essential to focus on customer needs, as understanding their preferences is key to developing products and services that meet their expectations. Finally, monitoring and adapting your innovation initiatives is crucial to staying relevant in an ever-changing market. By following these guidelines, you can ensure that your company remains at the forefront of innovation and continues to thrive for years to come.

Resource allocation strategies play a crucial role in maintaining competitiveness and achieving innovation success in organizations. However, with the rapidly changing business environment and the emergence of new technologies, there is a need for ongoing research to identify effective resource allocation strategies that can help organizations achieve their goals. Here are some recommendations for future research: 1) The impact of digital transformation on resource allocation strategies: With the increasing

use of digital technologies, organizations are transforming their business processes, products and services. Future research can explore the impact of digital transformation on resource allocation strategies and identify effective approaches for allocating resources in digital environments. 2) The role of leadership in resource allocation: Effective leadership plays an important role in making allocation decisions that align with the organization's strategic goals. Future research can evaluate the impact of leadership style and decision-making processes on resource allocation outcomes.

## References

1. Afrin, M., Jin, J., Rahman, A., Rahman, A., Wan, J., & Hossain, E. (2021). Resource allocation and service provisioning in multi-agent cloud robotics: A comprehensive survey. *IEEE Communications Surveys & Tutorials*, 23(2), 842–870.
2. Al Shobaki, M. J., & Abu-Naser, S. S. (2017). The Role of the Practice of Excellence Strategies in Education to Achieve Sustainable Competitive Advantage to Institutions of Higher Education-Faculty of Engineering and Information Technology at Al-Azhar University in Gaza a Model.
3. Alexy, O., West, J., Klapper, H., & Reitzig, M. (2018). Surrendering control to gain advantage: Reconciling openness and the resource-based view of the firm. *Strategic Management Journal*, 39(6), 1704–1727.
4. Alvarez, S. A., & Barney, J. B. (2017). Resource-based theory and the entrepreneurial firm. *Strategic Entrepreneurship: Creating a New Mindset*, 87–105.
5. Anning-Dorson, T. (2017). How much and when to innovate: the nexus of environmental pressures, innovation and service firm performance. *European Journal of Innovation Management*.
6. Anning-Dorson, T. (2021). Organizational culture and leadership as antecedents to organizational flexibility: implications for SME competitiveness. *Journal of Entrepreneurship in Emerging Economies*, 13(5), 1309–1325.
7. Anwar, M., & Li, S. (2021). Spurring competitiveness, financial and environmental performance of SMEs through government financial and non-financial support. *Environment, Development and Sustainability*, 23, 7860–7882.
8. Ayoub, T. M. (2020). Resource allocation and innovation: A review of the literature. *International Journal of Innovation and Technology Management*, 17(2), 2050018. doi: 10.1142/S0219877020500185
9. Azeem, M., Ahmed, M., Haider, S., & Sajjad, M. (2021). Expanding competitive advantage through organizational culture, knowledge sharing and organizational innovation. *Technology in Society*, 66, 101635.
10. Ballé, M., Jones, D. T., Chaize, J., & Fiume, O. J. (2017). *Lean Strategy: Using Lean to Create Competitive Advantage, Unleash Innovation, and Deliver Sustainable Growth*. McGraw-Hill Education.
11. Braganza, A., Brooks, L., Nepelski, D., Ali, M., & Moro, R. (2017). Resource management in big data initiatives: Processes and dynamic capabilities. *Journal of Business Research*, 70, 328–337.
12. Bringezu, S., Potočník, J., Schandl, H., Lu, Y., Ramaswami, A., Swilling, M., & Suh, S. (2016). Multi-scale governance of sustainable natural resource use—challenges and opportunities for monitoring and institutional development at the national and global level. *Sustainability*, 8(8), 778.
13. Caballero-Morales, S.-O. (2021). Innovation as recovery strategy for SMEs in emerging economies during the COVID-19 pandemic. *Research in International Business and Finance*, 57, 101396.
14. Camisón, C., Puig-Denia, A., Forés, B., Fabra, M. E., Muñoz, A., & Muñoz Martínez, C. (2016). The importance of internal resources and capabilities and destination resources to explain firm competitive position in the Spanish tourism industry. *International Journal of Tourism Research*, 18(4), 341–356.
15. Christian, O. S. (2020). Competitive advantage and organisational performance in selected firms. *International Research Journal of Management, IT and Social Sciences*, 7(5), 1–12.
16. Cortez, E., Bonde, A., Muzio, A., Russinovich, M., Fontoura, M., & Bianchini, R. (2017). Resource central: Understanding and predicting workloads for improved resource management in large cloud platforms. In *Proceedings of the 26th Symposium on Operating Systems Principles* (pp. 153–167).
17. Cozzarin, B. P. (2017). Impact of organizational innovation on product and process innovation. *Economics of Innovation and New Technology*, 26(5), 405–417.
18. Dagnino, G. B., Picone, P. M., & Ferrigno, G. (2021). Temporary competitive advantage: a state-of-the-art literature review and research directions. *International Journal of Management Reviews*, 23(1), 85–115.
19. Davijani, M. H., Banihabib, M. E., Anvar, A. N., & Hashemi, S. R. (2016). Optimization model for the allocation of water resources based on the maximization of employment in the agriculture and industry sectors. *Journal of Hydrology*, 533, 430–438.
20. Del Giudice, M., Scuotto, V., Papa, A., Tarba, S. Y., Bresciani, S., & Warkentin, M. (2021). A self-tuning model for smart manufacturing SMEs: Effects on digital innovation. *Journal of Product Innovation Management*, 38(1), 68–89.
21. Delery, J. E., & Roumpi, D. (2017). Strategic human resource management, human capital and competitive advantage: is the field going in circles? *Human Resource Management Journal*, 27(1), 1–21.



22. Desyllas, P., Miozzo, M., Lee, H., & Miles, I. (2018). Capturing value from innovation in knowledge-intensive business service firms: the role of competitive strategy. *British Journal of Management*, 29(4), 769–795.
23. Dubey, R., & Gunasekaran, A. (2019). Innovations in supply chain and resources management: Bridging sustainable supply chain and industry 4.0. *International Journal of Production Research*, 57(7), 2179-2196. doi: 10.1080/00207543.2018.1503227
24. Farhikhteh, S., Kazemi, A., Shahin, A., & Mohammad Shafiee, M. (2020). How competitiveness factors propel SMEs to achieve competitive advantage? *Competitiveness Review: An International Business Journal*, 30(3), 315–338.
25. Federici, S., Bracalenti, M., Meloni, F., & Luciano, J. V. (2017). World Health Organization disability assessment schedule 2.0: An international systematic review. *Disability and Rehabilitation*, 39(23), 2347–2380.
26. Gerhart, B., & Feng, J. (2021). The resource-based view of the firm, human resources, and human capital: Progress and prospects. *Journal of Management*, 47(7), 1796–1819.
27. Gitau, P. W., Abayo, R., & Kibuine, M. (2020). Influence of organizational resource allocation and strategy communication on organizational performance of selected supermarkets in Nairobi County. *International Journal of Research and Innovation in Social Science*, 4(8), 300–331.
28. Guo, S., Zhang, F., Zhang, C., Wang, Y., & Guo, P. (2019). An improved intuitionistic fuzzy interval two-stage stochastic programming for resources planning management integrating recourse penalty from resources scarcity and surplus. *Journal of Cleaner Production*, 234, 185–199.
29. Haneda, S., & Ito, K. (2018). Organizational and human resource management and innovation: which management practices are linked to product and/or process innovation? *Research Policy*, 47(1), 194–208.
30. Hannah, D. P., & Eisenhardt, K. M. (2018). How firms navigate cooperation and competition in nascent ecosystems. *Strategic Management Journal*, 39(12), 3163–3192.
31. Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2001). *Strategic management: Competitiveness and globalization (Concepts & cases)*. South-Western College Publishing.
32. Inigo, E. A., & Albareda, L. (2016). Understanding sustainable innovation as a complex adaptive system: a systemic approach to the firm. *Journal of Cleaner Production*, 126, 1–20.
33. Isaboke, S. N. (2018). *Competitive strategies and performance of micro and small enterprises in Nairobi county, Kenya*. Unpublished Master Degree in Business Administration (Strategic Management) Thesis: Kenyatta University.
34. Jaafar, Z., Hussein, N., & Endut, I. R. (2018). Resource allocation and competitiveness: A literature review. *International Journal of Supply Chain Management*, 7(5), 83-90.
35. Jin, S. H., & Choi, S. O. (2019). The effect of innovation capability on business performance: A focus on IT and business service companies. *Sustainability*, 11(19), 5246.
36. Kabue, L. W., & Kilika, J. M. (2016). Firm resources, core competencies and sustainable competitive advantage: An integrative theoretical framework. *Journal of Management and Strategy*, 7(1), 98–108.
37. Kafouros, M. I., Wang, C., & Hong, J. (2015). Technology acquisitions: A review and future research agenda. *Journal of Business Research*, 68(12), 2635-2667. doi: 10.1016/j.jbusres.2015.03.005
38. Karakaya, F., & Calantone, R. J. (2016). Innovativeness and competitiveness: Does institutional environment make a difference? *Journal of Business Research*, 69(11), 5078-5086. doi: 10.1016/j.jbusres.2016.04.181
39. Katuse, P. (2018). Influence of organizational resources on organizational effectiveness. *American Journal of Industrial and Business Management*, 8(06), 1634–1656.
40. Kerzner, H. (2019). *Using the project management maturity model: strategic planning for project management*. John Wiley & Sons.
41. Khan, K. U., Xuehe, Z., Atlas, F., & Khan, F. (2019). The impact of dominant logic and competitive intensity on SMEs performance: A case from China. *Journal of Innovation & Knowledge*, 4(1), 1–11.
42. Kharub, M., Mor, R. S., & Rana, S. (2022). Mediating role of manufacturing strategy in the competitive strategy and firm performance: evidence from SMEs. *Benchmarking: An International Journal*.
43. Kotabe, M., & Kothari, T. (2016). Emerging market multinational companies' evolutionary paths to building a competitive advantage from emerging markets to developed countries. *Journal of World Business*, 51(5), 729–743.
44. Kryscynski, D., Coff, R., & Campbell, B. (2021). Charting a path between firm-specific incentives and human capital-based competitive advantage. *Strategic Management Journal*, 42(2), 386–412.
45. Kundu, S. C., & Gahlawat, N. (2016). Effects of employee retention practices on perceived firm and innovation performance. *International Journal of Innovation and Learning*, 19(1), 25–43.
46. Liu, Y., & Li, Y. (2021). Resource allocation for innovation and firms' competitive advantage: The mediation role of absorptive capacity. *Journal of Business Research*, 137, 12-23. doi: 10.1016/j.jbusres.2021.03.051
47. Mikalef, P., & Gupta, M. (2021). Artificial intelligence capability: Conceptualization, measurement calibration, and empirical study on its impact on organizational creativity and firm performance. *Information & Management*, 58(3),

- 103434.
48. Mweru, M. C., & Maina, T. M. (2016). Features of resource based view theory: An effective strategy in outsourcing.
  49. Nambisan, S. (2017). Digital entrepreneurship: Toward a digital technology perspective of entrepreneurship. *Entrepreneurship Theory and Practice*, 41(6), 1029-1055. doi: 10.1111/etap.12294
  50. Odusote, O. Y., & Akpa, V. O. (2022). Resource Allocation and Innovativeness of Selected SMEs in Lagos State, Nigeria. *Journal of Strategic Management*, 7(2), 1–13.
  51. Ogunkoya, O. A., Onasanya, A. O., Hassan, B. A., & Adetayo, A. E. (2020). Marketing innovation and the development of small and medium enterprise in Ago-Iwoye, Ogun State. *Sokoto Journal of the Social Sciences*, 10(3), 220–232.
  52. Park, S. (2022). Organizational Performance and Government Resource Allocation: Panel Evidence from Washington State’s Public Programs. *Public Performance & Management Review*, 1–26.
  53. Parniangtong, S. (2017). Competitive advantage of customer centricity. Springer.
  54. Pollack, Y. G., Bittihn, P., & Golestanian, R. (2022). A competitive advantage through fast dead matter elimination in confined cellular aggregates. *New Journal of Physics*, 24(7), 73003.
  55. Prokop, V., Stejskal, J., & Hudec, O. (2019). Collaboration for innovation in small CEE countries.
  56. Qiu, L., Jie, X., Wang, Y., & Zhao, M. (2020). Green product innovation, green dynamic capability, and competitive advantage: Evidence from Chinese manufacturing enterprises. *Corporate Social Responsibility and Environmental Management*, 27(1), 146–165.
  57. Sachitra, K. M. V. (2017). Review of competitive advantage measurements: reference on agribusiness sector.
  58. Safitri, V. A. D., & Anggara, B. (2019). Factors That Affect The Company Innovation. In II. In Traders Uluslararası Ticaret Kongresi Kongre Kitabı The Second In Traders International Conference on International Trade Conference Book (Vol. 230).
  59. Sengul, M., Costa, A. A., & Gimeno, J. (2019). The allocation of capital within firms. *Academy of Management Annals*, 13(1), 43–83.
  60. Sikora, D. M., Thompson, K. W., Russell, Z. A., & Ferris, G. R. (2016). Reimagining overqualified human resources to promote organizational effectiveness and competitive advantage. *Journal of Organizational Effectiveness: People and Performance*.
  61. Silva, R., & Oliveira, C. (2020). The influence of innovation in tangible and intangible resource allocation: A qualitative multi case study. *Sustainability*, 12(12), 4989.
  62. Song, M., & Wang, S. (2018). Market competition, green technology progress and comparative advantages in China. *Management Decision*, 56(1), 188–203.
  63. Sukumar, A., Jafari-Sadeghi, V., Garcia-Perez, A., & Dutta, D. K. (2020). The potential link between corporate innovations and corporate competitiveness: evidence from IT firms in the UK. *Journal of Knowledge Management*, 24(5), 965–983.
  64. Tengblad, S. (2018). A resource-based model of organizational resilience. *The Resilience Framework: Organizing for Sustained Viability*, 39–54.
  65. Tsai, C.-H., & Mutuc, E. B. (2020). Evidence in Asian food industry: intellectual capital, corporate financial performance, and corporate social responsibility. *International Journal of Environmental Research and Public Health*, 17(2), 663.
  66. Wakkee, I., den Hertog, P., & Groen, A. J. (2020). Innovation and competitiveness: Evidence from financial statements. *Technological Forecasting and Social Change*, 153, 119987. doi: 10.1016/j.techfore.2020.119987
  67. Waheed, A., Miao, X., Waheed, S., Ahmad, N., & Majeed, A. (2019). How new HRM practices, organizational innovation, and innovative climate affect the innovation performance in the IT industry: A moderated-mediation analysis. *Sustainability*, 11(3), 621.
  68. Wilton, N. (2019). An introduction to human resource management. *An Introduction to Human Resource Management*, 1–632.
  69. Yi, Y., Guo, H., & Luo, J. (2021). The influence of resource allocation on innovation and innovation performance. *Journal of Innovation & Knowledge*, 6(3), 109-123. doi: 10.1016/j.jik.2021.04.007