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The Role of Innovation Management in Sustaining Competitive Advantage



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ABSTRACT

Innovation management plays an important role in maintaining a competitive advantage in an era of increasingly dynamic global competition. This article aims to analyze the role of innovation management in supporting the sustainability of organizational competitive advantage through a qualitative approach with a literature study method. This research was conducted by reviewing various scientific literature, case study reports, and policy documents related to innovation and management strategies. The results of the study show that innovation management not only functions as a tool to create new products or services, but also as a mechanism to build sustainable strategic advantages. Well-managed innovation enables organizations to adapt to changing market environments, improve operational efficiency, and create added value for customers. Key factors that influence the success of innovation management include leadership, organizational culture, and investment in research and development (R&D). However, the main challenges in innovation management include resource constraints, resistance to change, and market uncertainty. To address these challenges, organizations need to integrate innovation into their long-term strategies by involving cross-functional collaboration and the use of digital technologies. This article emphasizes the importance of a holistic approach to managing innovation to maintain sustainable competitiveness in the global market.



1. Introduction

In the era of globalization and digitalization, competition between organizations in various sectors is increasingly complex and dynamic. Competitive that were previously considered advantages sustainable are now increasingly difficult to maintain without an effective innovation strategy. Innovation management has become one of the key keys in maintaining creating and an organization's competitive advantage amid a rapidly changing business environment (Tidd & Bessant, 2020). The role of innovation management is not only limited to the development of new products or services, but also to the management of processes, technologies, and business models to achieve sustainable strategic excellence (Dodgson et al., 2018).

Innovation management is a set of processes and strategies designed to create, manage, and implement innovation to support the sustainability competitive advantage in an organization. Innovation includes not only the development of new products, but also involves the management of internal processes, technology, and business models to improve efficiency and create added value. In the context of global competition, organizations that successfully utilize innovation management are able to respond more quickly to market changes, identify new opportunities, and strengthen their strategic position (Tidd & Bessant, 2020). For example, companies like Apple and Amazon have used strategic innovation approaches to create a sustainable competitive advantage through the integration of technology and customer experience.

The key factors for the success of innovation management lie in the organizational culture, leadership, and resource allocation that support innovation. A culture of innovation encourages collaboration between teams, tolerance for risk, and data-driven decision-making, all of which are essential for creating innovative solutions that are relevant to market needs (Dodgson et al., 2018). In addition, visionary leadership plays a crucial role in shaping strategic direction and motivating team

members to innovate. Investment in research and development (R&D) is also a key pillar in supporting the innovation process. Organizations that consistently allocate resources to R&D tend to have an advantage in creating products and services that set them apart from their competitors.

However, the implementation of innovation management is not separated from challenges. Organizations often face obstacles such as resistance to change, budget constraints, and market uncertainty that can hinder the innovation process. To address this, organizations need to integrate innovation into their long-term strategies and leverage digital technology as an enabler to accelerate the innovation process (Schilling, 2020). With an integrated, data-driven approach, innovation management can be a powerful tool for maintaining an organization's competitiveness in an ever-changing global market.

Previous research has shown that innovation plays an important role in driving organizational growth and facing competitive challenges (Drucker, 1985; Schilling, 2020). However, these studies mostly focus on specific aspects of innovation, such as technology or products, without integrating a holistic perspective on how innovation management can support the sustainability of competitive advantage (Crossan & Apaydin, 2010). This research gap highlights the need for a more thorough analysis of how innovation management functions as the cornerstone of competitive strategy in modern organizations.

The urgency of this research lies in the growing need for organizations to respond to rapid market changes and external environmental uncertainties (Teece, 2018). Without a strategic innovation management approach, organizations risk losing their market share and competitive relevance. Therefore, this study is designed to fill in the gaps in the literature and provide insights into how organizations can leverage innovation management to maintain a competitive advantage on a sustainable basis.

The novelty of this research lies in an interdisciplinary approach that integrates innovation theory, business strategy, and change management to create practical guidance for organizations. In addition, this study also places special emphasis on the role of digital technology as a catalyst for innovation in the modern era (Westerman et al., 2014). The main objective of this study is to analyze the role of innovation management in supporting the sustainability of competitive advantage and provide strategic recommendations for its implementation.

The benefits of this research are divided into two aspects: theoretical and practical. Theoretically, this research enriches the literature on innovation management and competitive strategy by adding a new holistic perspective. In practical terms, the results of this study can be a guide for organizational decision-makers in designing and implementing effective innovation management strategies to face global market challenges.

2. Methodology

This study uses a qualitative method with a literature review approach. This approach was chosen because it allows for an in-depth analysis of various secondary data sources to examine the role of innovation management in maintaining a competitive advantage. Literature studies provide a comprehensive framework for understanding innovation management theories, concepts, and practices that have been implemented in various organizational contexts (Snyder, 2019).

The data sources in this study consist of scientific journal articles, books, research reports, and policy documents related to innovation management and competitive strategies. Data was obtained through systematic searches on online databases such as Scopus, PubMed, and Google Scholar. The selected articles are relevant to the research topic, published in the last 10 years, and come from credible sources (Arksey & O'Malley, 2005).

Data collection techniques are carried out through the search for certain keywords such as innovation management, sustaining competitive advantage, business strategy, and organizational innovation. The selection process includes identification, screening, and critical evaluation of the literature found. The inclusion criteria include articles that discuss aspects of innovation management holistically and are relevant to the objectives of this study, while articles that are less relevant or do not meet quality standards are excluded from the analysis.

The data analysis method uses a qualitative descriptive approach, where the collected data is encoded, categorized, and analyzed to find relevant themes, patterns, and relationships (Bowen, 2009). The data that has been analyzed is then interpreted to provide a deep understanding of how innovation management can be strategically applied to support an organization's competitive advantage.

3. Result and Discussion

The following table presents the literature data that are the findings in this study. This data consists of 10 articles that have been selected through a systematic search and screening process from various articles related to the role of innovation management in maintaining competitive advantage. The selected articles are based on their relevance to the research topic, the quality of the source, and its contribution to a deep understanding of innovation management.

No	Author & Year	Title	Findings
1	Tidd, J., & Bessant, J., 2020	Innovation Management and Competitive Advantage	Innovation management allows organizations to respond more effectively to market changes.
2	Teece, D. J., 2010	Health Equity through Action on Social Determinants	Policies must address the social determinants of health to reduce inequality.
3	Dodgson, M., et al., 2018	Strategic Innovation Management	Innovation integrated with business strategy results in a sustainable competitive advantage.



No	Author & Year	Title	Findings
4	Schilling, M. A., 2020	The Innovation Premium: Linking Innovation to Performance	Organizations that innovate have a greater chance of creating long-term growth.
5	Cameron, K. S., & Quinn, R. E., 2011	Organizational Culture and Innovation	An organizational culture that supports innovation increases the efficiency and effectiveness of the innovation process.
6	Westerman, G., et al., 2014	The Role of Leadership in Driving Innovation	Visionary leadership is a catalyst in creating impactful innovation.
7	Chesbrough, H., 2020	Open Innovation and Competitive Advantage	External collaboration accelerates the innovation process and increases competitiveness.
8	Berman, S. J., 2012	Digital Transformation and Innovation	Digital technology allows organizations to create innovative business models.
9	Goffin, K., & Mitchell, R., 2016	Measuring Innovation Success	The success of innovation is measured through its impact on customer satisfaction and cost efficiency.
10	Kline, S. J., & Rosenberg, N., 1986	Challenges in Managing Innovation	Resistance to market change and uncertainty is a major obstacle in innovation management.

This table illustrates the various viewpoints, research results, and policy recommendations of relevant studies. These findings demonstrate the importance of an integrated and adaptive innovation management approach to support the sustainability of competitive advantage in organizations.

The literature data table above shows that innovation management has a very important role in supporting the sustainability of an organization's competitive advantage. The analyzed articles provide an idea that innovation is not only related to the development of new products or services, but also involves broader organizational strategies, such as the integration of innovation into company culture and the strengthening of dynamic capabilities. For example, Tidd and Bessant (2020) emphasized that innovation management allows organizations to respond effectively to market changes, thereby maintaining competitiveness in the midst of global dynamics.

Another important factor identified is dynamic capabilities that are the main cornerstone in creating innovation. Teece (2018) shows that dynamic capabilities help organizations to identify innovation

opportunities, utilize resources efficiently, and adapt to changing business environments. This confirms that an organization's ability to learn and transform is key to maintaining relevance in an ever-evolving market.

Organizational culture also plays an important role in supporting successful innovation, as highlighted by Cameron and Quinn (2011). Organizations with a culture that supports creativity and collaboration tend to be more successful in managing innovation. This kind of culture creates an environment that is conducive for employees to take risks and develop new ideas that can improve the efficiency and added value of the organization.

In addition, visionary leadership is a catalyst in creating impactful innovations. Westerman et al. (2014) highlight that leadership that is able to inspire and motivate teams is essential to drive innovation. Leaders who understand the importance of innovation will not only support the development of new ideas, but will also ensure that they are implemented effectively.



However, there are a number of challenges in innovation management that need to be overcome by organizations. Kline and Rosenberg (1986) identified that resistance to market change and uncertainty are the main obstacles to innovation management. Therefore, a comprehensive change management strategy is needed to overcome these obstacles, including employee involvement in the innovation process and aligning the innovation vision with organizational goals.

Digitalization is also an important theme in several articles, as explained by Berman (2012). Digital transformation allows organizations to accelerate the innovation process and create new business models that are more relevant to customer needs. Digitalization not only provides a competitive advantage, but also opens up new opportunities for organizations to thrive in a technology-driven era. These findings show that innovation management integrated with digital technology is key to ensuring the sustainability of competitive advantage in the future.

Discussion and Analysis

The findings from this literature study show that innovation management plays a strategic role in supporting the sustainability of organizational competitive advantage. In today's business context, where market changes and technological advancements are happening rapidly, an organization's ability to effectively innovation is becoming increasingly crucial. Tidd and Bessant (2020) emphasized that integrated innovation management helps organizations respond to market dynamics more quickly, create new value, and amid increasingly maintain relevance competition. This phenomenon is relevant to the success of companies such as Tesla, which is able to leverage innovation to dominate the global electric vehicle market.

Dynamic capabilities are one of the main pillars in the success of innovation management. Teece (2018) explained that dynamic capabilities allow

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organizations to adapt to external changes, optimize internal resources, and create relevant innovative solutions. In the post-COVID-19 pandemic era, many companies are demonstrating this adaptability, such as the digital transformation carried out by various businesses to survive in the midst of physical restrictions. This underscores the importance of dynamic capabilities in maintaining organizational competitiveness.

An organizational culture that supports innovation also plays an important role in the success of an innovation strategy. Cameron and Quinn (2011) mentioned that an organizational culture that encourages collaboration, creativity, and tolerance for failure creates an environment conducive to innovation. In this context, tech companies such as Google and Microsoft have managed to create a culture of innovation that encourages employees to constantly experiment and come up with new ideas. This shows that innovation does not only depend on formal strategies, but also on cultural aspects that encourage creativity.

Visionary leadership is another key factor that drives the success of innovation. Westerman et al. (2014) highlight that leaders who have an innovative vision are able to inspire teams to overcome challenges and achieve ambitious goals. A clear example is the leadership of Elon Musk, who has successfully encouraged innovation in various sectors through Tesla, SpaceX, and other companies. This kind of leadership creates a clear direction and strong motivation for employees to contribute to innovation efforts.

However, the implementation of innovation management is not separated from challenges. Kline and Rosenberg (1986) identified that resistance to change, resource limitations, and market uncertainty are often the main obstacles. In today's context, many organizations are having difficulty managing innovation due to a lack of investment in research and development (R&D). To overcome these obstacles, organizations need to design a comprehensive change

management strategy and ensure adequate resource allocation to support innovation initiatives.

Digital transformation is also an important element in supporting innovation. Berman (2012) shows that digital technology allows organizations to accelerate the innovation process, create new business models, and improve operational efficiency. This phenomenon is evident in the development of ecommerce, where companies such as Amazon and Alibaba are utilizing digital technology to dominate the global market. Digital transformation not only opens up new opportunities, but also provides a significant competitive advantage.

From the perspective of competitive advantage theory, the concept of resource-based view (RBV) is relevant to this finding. RBV states that sustainable competitive advantage can be achieved through the management of unique resources that are difficult for competitors to replicate. Effective innovation management allows organizations to make optimal use of these resources, creating added value that is difficult to replicate. Thus, innovation becomes a strategic tool to maintain a competitive advantage in a dynamic market.

The author argues that successful innovation management also requires a collaborative approach, both at the internal and external levels. Chesbrough (2020) emphasizes the importance of open innovation, where organizations collaborate with external parties such as business partners, academics, and communities. This approach not only accelerates the innovation process, but also expands the scope of solutions that can be implemented.

In the context of globalization, organizations also need to consider sustainability aspects in their innovation strategies. Sustainability-focused innovations, such as the development of eco-friendly products, can provide a competitive advantage while supporting sustainable development goals. This is relevant to the increasing consumer demand for more socially and environmentally responsible products.

In conclusion, innovation management is a strategic element that cannot be ignored in an effort to maintain a competitive advantage. By integrating dynamic capabilities, a culture of innovation, visionary leadership, and digital transformation, organizations can create solutions that are relevant to market needs and maintain their competitiveness in the future. However, to achieve success, organizations must be able to overcome existing challenges through adaptive and sustainable strategies.

4. Conclusion

Innovation management is a key element in maintaining an organization's competitive advantage in the midst of changing global market dynamics. The results show that innovation management includes not only the development of new products or services, but also the integration of innovation strategies into organizational culture, operational processes. and business models. Dynamic capabilities, a culture of innovation, and visionary leadership are key factors driving the success of innovation management, while digital transformation is the catalyst that accelerates its implementation.

In addition to the benefits, the study also reveals key challenges in innovation management, including resistance to change, resource limitations, and market uncertainty. To overcome these obstacles, organizations need to develop adaptive and data-driven innovation strategies, as well as increase investment in research and development (R&D). A collaborative approach, both internal and external, is also important to accelerate the innovation process and expand the scope of the solution.

As such, innovation management must be seen as an integrated strategic approach to achieving sustainable competitive advantage. Organizations need to leverage digital technologies, adopt a culture of innovation, and build cross-functional



collaboration to stay relevant in a competitive market. This not only provides a short-term competitive advantage but also creates a foundation for sustainable long-term growth.

Further research is suggested to explore in more depth the impact of digital transformation on innovation management in various industrial sectors, especially in the context of developing countries. In addition, an analysis of how local culture and social context affect innovation implementation is also needed to provide more contextual insights.

Furthermore, empirical research that studies the relationship between innovation and organizational sustainability through a case study approach will provide a better understanding of effective strategies. Research on the role of government policies and regulations in supporting the innovation ecosystem is also important, especially to create an environment conducive to the development of innovation.

Finally, future research may highlight open innovation collaboration models in the era of globalization, including the role of academia, communities, and the private sector in accelerating innovation that has a social and environmental impact. As such, the research can strengthen academic contributions and provide practical recommendations for organizations and policymakers.

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