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Analysis and Role of Innovation in the Economic Development of Enterprises

Abstract. This work explores the concept of competitiveness in the context of innovative products, highlighting the role of innovation in shaping the economic success of businesses in today's rapidly changing global marketplace. Through a comparative analysis of classical and modern theories of innovation, the study identifies key characteristics of competitiveness and examines the impact of innovation on business development. The study also explores the significance of open innovation and external collaboration for accelerating technological advancements. A case study of example demonstrates how both classical and modern approaches to innovation can improve financial performance and competitiveness, emphasizing the need for businesses to integrate traditional management methods with contemporary technologies for sustained growth. The findings provide practical recommendations for companies, particularly SMEs, striving to enhance their competitiveness in an increasingly dynamic market environment.

Keywords: competitiveness, innovation, classical theories, modern innovation, open innovation, disruptive innovation, creative destruction, digital transformation

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1. Introduction

The purpose of this analysis is to explore the concept of competitiveness in depth, particularly in the context of innovative products. In today's global marketplace, where rapid changes in the economy and constant technological developments are becoming the rule, product competitiveness plays a crucial role in the success of companies. Analysis and definition of competitiveness. Comparison of the classical and contemporary authors' interpretations of the competitiveness of innovative products and their works. This study aims not only to define the key characteristics of competitiveness, but also to compare the interpretations of this concept proposed by classical theorists and modern authors. By analyzing the

works of classical philosophers. The results of this analysis can serve as a basis for formulating practical recommendations for companies seeking to increase their competitiveness in a dynamic market.

2. Literature Review

Given the rapid technological advancements and their impact on competitiveness, it is essential to monitor and analyze the evolving theories on innovation. Numerous studies have contributed to the understanding of innovation in various sectors. For instance, Chesbrough (2003) explored the concept of open innovation and its significance for firms in the current market, while Christensen (1997) focused on disruptive innovation and its implications for large and small companies. Additionally, Jones (2000) highlighted the challenges faced by small businesses in adopting innovative technologies. Despite the complexities of predicting future trends, a thorough review of innovation theories offers valuable insights into overcoming barriers and enhancing competitiveness in the modern business landscape.

3. Research and Data

Comparative analysis using gaps and modalities used in theory and practice. The use of the gap analysis method will help to identify shortcomings in existing theories, as well as opportunities for further development of research in this area. The analysis of modalities, i.e. different ways of interpreting and applying theoretical knowledge in practice, will help to understand which of them are most effective for ensuring competitiveness in the modern market. Thus, the results of this analysis will contribute not only to theoretical but also to practical understanding of the competitiveness of innovative products.

The concepts of analysis and the role of innovation in the economic development of enterprises can be divided into several components in order to reveal the purpose and illustrate how they can change. For the analysis, several works of famous classics and their classical theories were taken and compared with more modern ones.

Joseph Schumpeter's definition in his "The Concept of Creative Destruction" (Schumpeter, 1993) claims that innovation is creative destruction. This process renews economic structures by displacing old technologies and methods. Schumpeter believed that innovation is the basis of economic growth, as it creates new

markets and forms of business organization that affect the competitive position of companies. Peter Drucker expands on this theory by considering innovation as a systematic activity that “gives resources economic potential” (Drucker, 2001) expands on this theory by considering innovation as a specific activity that “gives resources economic potential”. His concept is that innovation is a systematic process that allows enterprises to develop new products or services, adapting to changes in the market and meeting consumer needs.

In particular, according to Michael Porter, innovation and innovation activity are defined by a separate model. With his “diamond model” (Porter, 1990) he notes competitive advantages and emphasizes that innovations contribute to improving the quality of products and encourages optimization of their efficiency, both in itself and in ideas that improve and optimize the production process. According to M. Porter, innovation is an important element for achieving competitive advantage. He believes that companies that actively implement innovations are able to increase their efficiency and create new opportunities for growth. Porter emphasizes that innovation is a key component of a strategy aimed at differentiating products and services, which enables companies to maintain their competitive position. According to him, this approach allows companies to adapt to changing conditions and meet new consumer needs, which ensures stable growth and market leadership.

Anthony M. Gartner adheres to a similar interpretation. His concept of innovation is broader. He proposed the concept of open innovation, which is based on the idea of active cooperation with external partners to develop new technologies and solutions. According to his concept, innovation activity is primarily about attracting new ideas, technologies, knowledge and financial resources to accelerate innovation development (Gartner, 2010).

Christopher Levitt describes innovation as a continuous process of change that encompasses not only technological innovations, but also innovations in marketing strategies, management approaches, and organizational processes (Levitt, 1986). He emphasizes the importance of innovations for ensuring the competitiveness of the enterprise, as they allow to constantly improve activities and adapt to changing market conditions.

Henry Chesbrough's definition describes innovation through the concept of open innovation, which is the use of ideas and technologies both inside and outside the company. He emphasizes the importance of collaborating with other businesses, research organizations, suppliers, and other partners to create new products and services. Chesbrough believes that the effective use of innovation networks allows companies to accelerate the innovation process, reduce costs, and speed up time to market (Chesbrough, 2003). To compare all the statements,

a table was made to illustrate the phenomena, their essence, the presence of concepts and their results.

Table 1. Comparison of the results of the phenomena by the authors of classical economics.

No	Author	Phenomenon	Content availability	The result of the phenomenon
1.	Josef Schumpeter — The concept of creative destruction	Innovation processes are replacing old economic models, which is an incentive for progress.	The role of innovation as the main driver of economic change.	Upgrading enterprises and increasing their efficiency.
2.	Clayton Christensen — Disruptive innovation	New technologies initially fill a small segment of the market, but later can completely transform the industry.	The importance of new, even small, innovations for market changes.	Changing competitive conditions and new opportunities for small companies.
3.	Anthony M. Gartner — Open innovation	Working with external partners to create new solutions.	Use of external ideas and resources to accelerate the innovation process.	Reducing costs and increasing speed to market.
4.	Christopher Levitt — Marketing innovation	Innovations not only in the product, but also in the way it is promoted.	Introducing new approaches to marketing and product promotion strategies.	Increasing competitiveness through the effective use of marketing tools.
5.	Henry Chesbrough — Innovation networks	Cooperation between enterprises, scientific institutions and other organizations to develop innovations.	Sharing knowledge and technologies to accelerate the innovation cycle Expanding innovation opportunities and reducing the costs of their implementation.	Cooperation between enterprises, scientific institutions and other organizations to develop innovations.
6.	Michael Porter — Competitive advantage	Use of innovations to gain competitive advantages in the market.	Formation of innovation strategies to achieve leadership positions.	Increasing the sustainability and competitiveness of enterprises.

Source: Author

In the modern literature, the concept of the nature and role of innovation in the economic development of enterprises is considered very broadly. Innovative activity, by its structure, is considered territorially and for specific needs of the population. One of the main theories of innovation is the concept of National Innovation Systems (NIS). It was first conceptualized by the author of the theory, B. Lundvall, who emphasized that innovation is generated through an interactive process between scientific institutions, businesses, and government agencies. Lundvall (2007) emphasized the importance of cooperation between these components for the effective generation and implementation of new technologies. However, all enterprises and organizations cannot communicate with each other quickly and efficiently, even taking into account the fact that this process can take a long time on the part of information transfer, processing and translation.

Jose Hernandez and Eric Florio, expanded on this idea by adding the importance of global networks and open innovation (Hernandez & Florio, 2007). They emphasize the need for cross-sectoral and international cooperation for the successful commercialization of scientific discoveries. Hernandez's ideas focus on the need to improve internal coordination and adapt management models to support innovation. However, his approach does not pay enough attention to cultural aspects and external factors that also have a significant impact on the processes of innovation. E. Florio, for his part, emphasizes the importance of the concept of open innovation, focusing on cooperation between companies and research institutions. However, his approach may not take into account the complexities of integrating external and internal innovation processes and the various ecosystems in which they develop.

This concept is also related to the theory of open innovation. In 2003, Henry Chesbrough introduced the concept of open innovation, which changes the traditional understanding of innovation as a purely internal process of enterprises. He argues that in order to accelerate innovation, it is necessary to actively use external resources, share knowledge with other companies, universities and other institutions. This allows companies to commercialize new ideas and technologies faster. The theory of open innovation has become the basis for the development of numerous innovation clusters and platforms where knowledge and technology are shared across industries and countries. However, in the current context, where much of the information remains confidential or can be questioned, certain market distortions or manipulations may occur (Chesbrough, 2003).

The institutional approach to analyzing innovation activity considers the impact of economic and legal institutions on the innovation process. D. North, one of the main representatives of this theory, emphasized that innovation processes are strongly influenced by institutions that determine the rules of the game in the economy. In particular, he emphasized that countries with strong legal systems and stable economic institutions are able to adapt new technologies and introduce innovations faster. In Europe, this means that the development of scientific innovations is impossible without government support, as well as without creating stable economic conditions for the development of entrepreneurship. His statement has a large capacity, however, it cannot be adapted to different contexts, because in different countries and at different levels there may be situations that do not imply the concept of this theory, which makes it not universal (North, 1990).

For D. Jones, innovation is a means of overcoming the barriers that can arise from limited resources, economic instability, and social problems that are typical for developing economies. At the same time, innovations help enterprises to utilize local opportunities by creating new markets, meeting the demand for affordable goods and services, and ensuring sustainable economic development

in an unstable environment. However, the author does not focus enough on globalization and its impact on innovation processes in such countries. In addition, some aspects of social and cultural barriers that may limit the effectiveness of innovation are left out, which reduces the practical value for enterprises facing such problems (Jones, 2000).

K. Antonelli in “Innovation and the Evolution of Industries” (2012) analyzes the role of innovation in the development of industries, emphasizing its importance for the evolution and adaptation of enterprises to changing economic conditions. The author considers innovations not only as technological innovations, but also as processes that affect the structure and organization of industries themselves. He emphasizes that innovations are the main driver of change in industrial sectors and determine the competitiveness and sustainable development of enterprises in various industries. However, despite the importance of his ideas, Antonelli does not pay enough attention to the barriers that may arise when implementing innovations at the level of individual enterprises. Issues related to innovation financing, organizational culture, and change management require more in-depth analysis. In addition, there is insufficient focus on the impact of global factors, such as globalization and changes in international markets, which largely shape the conditions for innovation in particular industries.

J.L. McKinsey & Company in its report “The Future of Innovation: How Business is Shaping Tomorrow” offers an in-depth analysis of innovation trends in the modern business environment and their impact on the future economic development. The authors emphasize the importance of strategic innovation management and the need to integrate new technologies into business models to ensure competitiveness in the global market. They also draw attention to the role of digital transformation and sustainable innovation as tools for businesses seeking long-term success.

Despite the significant contribution to the understanding of future innovation processes, the work is somewhat limited in terms of practical recommendations for SMEs. In addition, the risks that may arise when implementing innovations, in particular with regard to intellectual property protection and legal aspects, are not sufficiently addressed. Since the focus is on large corporations with significant resources, the work may be less applicable to enterprises with limited capacity to invest in new technologies (McKinsey & Company, 2020).

The Future Is Faster Than You Think by P. Diamandis and S. Kotler describes the speed of technological change and its impact on business. The authors emphasize the integration of new technologies, such as artificial intelligence and robotics, which create new opportunities for businesses. They emphasize the importance of adapting to rapid change to remain competitive. However, the

paper somewhat idealizes these opportunities, not sufficiently addressing risks such as ethical issues and economic inequality. In addition, the emphasis on large corporations limits the practical application for small enterprises with limited resources (Diamandis & Kotler, 2025).

In order to compare all these methods, their approaches to technology and innovation, risks and barriers, and their interaction with ethical issues, the entire analysis can be seen in Table 2.

Table 2. Comparison of Innovation Theories and Their Impact on Small and Medium Enterprises

Author	Technological innovations	Small and medium-sized enterprises	Ethical issues	Risks and barriers	Globalization and markets
Henry Chesbrough	Open innovations	Limited attention	The question of rights	High cost	Not enough
Clayton Christensen	Disruptive innovation	Targeted at large companies	Minimum	Poor adaptation	Underestimated
Jeffrey Jones	Innovation in emerging economies	Difficulties for small businesses	Lack of attention	Insufficiently studied	Local factors are important
J.L. McKinsey	Digital and sustainable innovations	More for large companies	Not enough	Legal issues	Global aspects are underestimated
P. Diamandis, S. Kotler	Rapid technological changes	An idealized vision	Ethics not fully disclosed	Small companies have limitations	Globalization is important
Cristiano Antonelli	Innovations in industries	Technical emphasis, but limited to small businesses	Social barriers	A deeper analysis is needed	International markets are not sufficiently considered

Source: Author

Based on the analysis of the works of these authors, several key conclusions can be drawn. All the authors recognize the importance of innovation for enterprise development, but their emphasis differs: Chesbrough focuses on open innovation, Christensen on disruptive innovation, and Jones on innovation in developing economies. However, little attention is paid to small and medium-sized enterprises that have limited resources to innovate.

Also, many authors do not sufficiently consider the social, ethical, and cultural aspects that can affect the success of innovation. This is important, as these factors can significantly reduce the effectiveness of the introduction of new technologies and business models.

In general, for successful innovation development, it is necessary to take into account not only technical but also socio-economic and cultural aspects, especially for small enterprises. In addition, it is important to carefully assess the

risks that arise during the implementation of innovations and adapt strategies accordingly.

Table 3. Innovation Theories and Their Business Applications

Author	Classical theory	Modern innovations	Pros.	Cons.	Useful conclusions for businesses
Joseph Schumpeter	The concept of creative destruction	Innovation clusters	Stimulates economic progress	High risks for traditional businesses	Perceiving risks as part of innovation
Peter Drucker	Innovation as a systematic process	Digital technologies in management	Improves management efficiency	Need for constant adaptation	Using technology for optimization
Michael Porter	Competitive strategies	Differentiation strategies through innovation	Maintains competitive position	Complexity of implementation	Focusing on unique offerings
Henry Chesbrough	Closed innovation	Open innovations	Wider access to resources	Difficulties in managing innovations	Collaborating with other businesses
Clayton Christensen	Breakthrough innovations	Flexibility in adapting technologies	Adaptation to changing conditions	Possibility of losing competitive advantage	Adapting to new technologies
Anthony M. Gartner	Cooperation with scientific institutions	Innovation platforms	Faster entry into the market	Privacy risks	Using new ideas for development

Source: Author

In today's competitive environment, businesses seek to find optimal solutions to increase efficiency and reduce costs. For the purposes of this analysis, let us consider the example of the notional firm "X", which uses both classical and modern approaches to innovation.

Firm X has annual revenues of UAH 1,000,000 and current expenses of UAH 800,000, which results in a profit of UAH 200,000. The company has 50 employees with an average salary of UAH 10,000. Firm X invests in the automation of production processes, following the classical approaches of Peter Drucker. This investment amounted to UAH 100,000, which allowed the company to reduce its labor costs by 15%, resulting in savings of UAH 75,000. At the same time, to implement modern technologies, company X invested UAH 150,000 in digital solutions, which resulted in a 20% increase in productivity and additional income of UAH 200,000.

Company X has demonstrated how innovation can improve financial performance. Both classical and modern approaches have their advantages, but modern technologies provide a more significant increase in profits. This emphasizes the importance of integrating different strategies to achieve success in today's business environment.

Table 4. Impact of Innovation Approaches on Business Finances

Indicators	No innovation	Classic approach	Modern approach
Annual income (UAH)	1,000,000	1,000,000	1,200,000
Current expenses (UAH)	800,000	775,000	950,000
Profit (UAH)	200,000	225,000	250,000
Investments in innovations (UAH)	0	100,000	150,000
Savings on salaries (UAH)	0	75,000	0
Additional income (UAH)	0	0	200,000

Source: Author

As a result of the analysis, it can be argued that the competitiveness of an enterprise significantly depends on the ability to integrate both classical and modern management approaches. The use of knowledge and techniques developed by the classics allows preserving the foundations of stable business functioning, while innovative technologies open up new horizons for increasing efficiency and profitability. The example of Company X demonstrates that investments in automation and digitalization can lead to significant economic benefits. The cost savings and increased revenue generated by innovative solutions demonstrate the importance of adapting to current market conditions. Therefore, companies that want to succeed must actively implement the latest technologies while relying on proven management methods. This is the only way to create a comprehensive strategy that will ensure sustainable development and competitive advantage in the face of constant changes in the business environment.

4. Conclusions

Innovation plays a central role in the economic development and competitiveness of enterprises. The integration of both classical and modern approaches to innovation provides a comprehensive strategy for business growth. Classical theories, such as Schumpeter's concept of creative destruction, offer a foundation for stability and operational efficiency, while modern innovations, like open and disruptive innovations, enable companies to tap into new growth opportunities. The case study of Firm X demonstrates that combining classical management techniques with cutting-edge technologies, such as digital solutions, results in significant improvements in financial performance, productivity, and market competitiveness. However, while innovation presents substantial rewards, it also comes with risks. Effective risk management is crucial, as firms must balance the benefits of innovation with the challenges it poses, such as implementation

complexity and potential market disruptions. Companies should remain flexible, adapt quickly to changes, and be prepared to face the risks inherent in the innovation process. Additionally, the concept of open innovation highlights the importance of collaboration with external partners, which accelerates innovation and helps businesses access new ideas, technologies, and resources. For small and medium-sized enterprises (SMEs), the path to innovation can be more challenging due to resource limitations. However, SMEs can still thrive by focusing on cost-effective innovations and forming strategic partnerships with larger firms or research institutions. Government support and policies that foster innovation in smaller enterprises will be essential to ensure their competitiveness in the global market. In conclusion, innovation must be viewed as a continuous, integrated process rather than a one-time event. Businesses that adopt innovation as part of their core strategy and consistently adapt to market changes are better positioned for long-term growth. By combining classical management wisdom with modern innovation strategies, companies can create a dynamic approach that ensures sustainable competitiveness and economic success.

References

- Antonelli, C. (2012). *Innovation and the Evolution of Industries*. Oxford University Press.
- Chesbrough, H. (2003). *Open Innovation: The New Imperative for Creating and Profiting from Technology*. Harvard Business School Press.
- Christensen, C. (1997). *The Innovator's Dilemma*. Harvard Business School Press.
- Diamandis, P., & Kotler, S. (2025). *The Future Is Faster Than You Think*. Simon & Schuster.
- Drucker, P. (2001). *Innovation and entrepreneurship*. Williams.
- Gartner, E.M. (2010). *Innovation and Entrepreneurship: From Ideas to Results*. Economics.
- Hernandez, J., & Florio, E. (2007). *National Innovation Systems: Open Innovation and Global Networks*. Cambridge University Press.
- Jones, D. (2000). *Innovations in Developing Economies*. Routledge.
- Levitt, C. (1986). *Innovation in Business*. Economics.
- Lundvall, B. (2007). *National Innovation Systems*. Oxford University Press.
- McKinsey & Company. (2020). *The Future of Innovation: How Business is Shaping Tomorrow*. McKinsey & Company.
- North, D. (1990). *Institutions, Institutional Change, and Economic Performance*.
- Porter, M. (1990). *Competitive Advantage: Creating and Sustaining Superior Performance*. Clasic.
- Schumpeter, J. (1993). *The theory of economic development*. Progress.

Analiza i rola innowacji w rozwoju gospodarczym przedsiębiorstw

Streszczenie. W artykule analizuje się konkurencyjność w kontekście produktów innowacyjnych, podkreślając rolę innowacji w kształtowaniu sukcesu gospodarczego przedsiębiorstw na współczesnym, szybko zmieniającym się rynku globalnym. Poprzez analizę

porównawczą teorii innowacji zidentyfikowano kluczowe cechy konkurencyjności i zbadano wpływ innowacji na rozwój przedsiębiorstw. Zwrócono również uwagę na znaczenie otwartych innowacji i współpracy zewnętrznej dla przyspieszenia postępu technologicznego. Zaprezentowane studium przypadku pokazało, w jaki sposób zarówno klasyczne, jak i nowoczesne podejście do innowacji może poprawić wyniki finansowe i konkurencyjność firm, podkreślając potrzebę integracji tradycyjnych metod zarządzania z nowoczesnymi technologiami w celu zapewnienia trwałego wzrostu. Wyniki badania dostarczają praktycznych zaleceń dla przedsiębiorstw, zwłaszcza MŚP, dążących do zwiększenia swojej konkurencyjności w coraz bardziej dynamicznym otoczeniu rynkowym.

Słowa kluczowe: konkurencyjność, innowacje, klasyczne teorie, nowoczesne innowacje, otwarte innowacje, przełomowe innowacje, twórcza destrukcja, transformacja cyfrowa

