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## Article

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## Innovation Activity - a Factor for Increasing Competitiveness

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ARTICLE INFO	<b>ABSTRACT</b> As globalisation processes evolve, there is increasing "pressure" and need for companies to enhance their innovation activity. The development and integration of an innovation strategy, taking into account all the chances and risks, in a new knowledge-based economic environment and dynamic market conditions, determines the scientific and practical interest in innovations capable of ensuring successful competitiveness. Competitiveness stems from building capabilities necessary to sustain growth in a regional, national and international competitive environment. Such capabilities are created primarily through innovation and its deployment, allowing multiple potential pathways to success.
Article History	<b>Purpose:</b> For the national economy of any country developing in the conditions of globalisation, one of the main problems is to ensure effective competitiveness, according to the dynamics of both national and global markets. Innovation is an important factor capable of ensuring successful economic and social development and strengthening economic potential, and its application depends on innovation activity at institutional, societal and business levels. The objective of this paper is the theoretical clarification of the nature of innovation activity and its relationship with competitiveness, as well as the analysis of innovation activity as a phenomenon with economic and socio-cultural dimensions, significantly affecting the sustainable development of countries.
Received 18/02/2025 Accepted 27/04/2025 <i>JEL Classifications</i> 030, 031, 033	<b>Design/methodology/approach:</b> The methodological basis of the study is the dialectical principle of knowledge, systematic and interdisciplinary approaches to research. To process the collected information methods of analysis and synthesis were used, content analysis, intuitive and systematic approaches were applied. An array of theoretical and factual information contained in the works of Bulgarian and foreign researchers was used to demystify the indeterminacy of innovation and innovation activity.
<b>Keywords:</b> Innovations, innovation activity, innovation environment, competitiveness, knowledge economy.	<b>Findings:</b> Innovation activity, which includes technological, scientific, financial, organisational and commercial steps leading to innovation, is a consequence of the state of the economic environment. But this activity can also change the economic environment, affecting competitiveness and bringing about dynamic changes in a short timeframe. It is crucial to overcome the 'contradictions' between research, in all its complexity and depth, and the requirements of the market for goods and services, in order to create a sustainable understanding of competitive policy with a long-term horizon.
	<b>Research limitations/implications:</b> The study is limited in terms of subject matter and purpose, which are defined in the context of the relationship between innovation activity and competitiveness. The paper provides synthesised information and analysis of innovation activity according to contemporary socio-economic and market attitudes, and the development of innovation strategies and development models goes beyond the stated objectives.
	<b>Originality/value:</b> The scientific novelty of the research results lies in deepening the understanding of the nature of innovation activity as an economic and social phenomenon. The significance of the research is manifested in the enrichment of knowledge with theoretical formulations of innovation activity, as well as in the possibility of their use in the process of professional

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training. At the same time, the results of the study highlight the need for business organisations to develop specific activities and managerial capacities conducive to the development and implementation of innovations, through which they can expand their innovation activity and gain a competitive advantage. It focuses on intellectual property, creative freedom and the rule of law as key elements of innovative growth and economic development.

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## 1. Introduction

In today's world of global information technology and communications explosion, of frequent scientific breakthroughs and discoveries, the economic environment is characterized by extreme dynamism and ever-changing market conditions, with increasing consumer demands and intensified competition. In this environment, there is a shift of business focus - the embodiment in a practical process of the theoretical scientific explosion and the transformation of science into an important element of the economy, i.e. a new type of economy is being created - the so-called knowledge economy. In this environment, a key condition for achieving economic growth, increasing competitiveness and improving the well-being of the population is the innovative activity of business entities - the dissemination and implementation of innovative products, technologies and services that determine the effectiveness of successful management. The development of processes oriented towards a new type of economy, where the centre of progress is knowledge, its improvement and growth, bringing the corresponding capitalisation, results in the view that innovation activity turns out to be a major investment area necessary for sustainable competitiveness.

This study provides an overview of the challenges facing innovations, innovation activity, innovation management and their relationship to competitiveness and the implications of this relationship - an "equation" with many unknowns, especially for so-called radical innovations. The development and active implementation of innovations requires business organisations to develop specific capacities, to adapt and reconfigure their management policies in order to be able to expand their innovation activity alongside the routine state of the organisation without disturbing the stability of the economic entity, but also to gain an advantage over their competitors, and the activity of seeking and implementing innovations is a clear indicator of effective management. Working in such a space requires a well-developed entrepreneurial culture and out-of-the-box (creative) thinking, which allows for higher levels of experimentation and exploration with insightful risk assessment.

Modern globalisation affects the conditions of competition in various aspects, creating significant sectoral differences. Particularly growing are the differences in consumer preferences resulting from technological developments, which have made it necessary for enterprises in the global arena to pursue very different competitive strategies than in the past. (DOĞAN, 2016) Accepting this assertion, it can be added that the pressures of domestic and international competition stimulate innovation activity as it forces entrepreneurs - large or small - to seek more efficient products or services in order to gain a market advantage. Successful innovation activity (some authors consider it as intensive innovation activity) leads to broadening the development prospects of the business entity and is one of the main factors for development in times of ever increasing competition.

Examining the notion of the "world economy" as a new reality, Peter Drucker specifies the main characteristics of this new reality, some of which are: the world economy ceased to be international and became global by the mid-1970s; the main phenomenon shaping the global economy is the flow of money rather than trade in goods and services; labour and natural resources, which are the traditional factors of production in the global economy, increasingly occupy a secondary status; the main goal in the global economy is not profit maximization, but market maximization. (DOĞAN, 2016) In this new reality, according to Drucker, companies need to build a distinctive strategy to stay afloat in an environment of intense competition. A company's strategy must enable it to offer different value than competitors and provide a broad range of advantages - to perform more different activities than its competitors or to perform similar activities in different forms - to establish a sustainable competitive advantage. (DOĞAN, 2016) Indeed, a well-functioning market and the level and quality of market competition are catalysts for innovation activity. But factors such as economic freedom, the supremacy of the rule of law, and the level of corruption, i.e. a conducive institutional environment and a strong legal framework, must also be added. The institutional environment, a set of underlying political, social and legal rules, forms the foundation for the production, exchange and distribution of wealth in society. (North, 1990) The maturity of the institutional environment is decisive in the process of innovation activity and building an innovation-based economy, i.e. a knowledge economy.

**2. Nature of Innovation. Innovation Theory** The continuous expansion and diversification of human activities is the result of the impact of scientific and technological development, with innovation being the driving force that not only leads to improved economic practices but also contributes to more favourable social effects. The potential of innovation has not yet been fully clarified by scholars and the attendant uncertainties prevent the identification of the most promising innovation activities that could contribute to the improvement of an economic system and to social sustainability and well-being.

By its nature and content, the concept of "innovation" is a complex and multi-layered notion, with specific features and spheres of application, which explains the difficulties in creating a universally acceptable definition. The genealogy of the term innovation can be traced back to the Middle Ages, but in the nineteenth century it began to be actively used in the studies of culturologists to mean the introduction/penetration of certain elements from one culture into another.

The term *innovation* has Latin origins and means introduction of novelty, but its exploitation by economic theory and practice and its transformation into an independent object of scientific study is due to the Austrian economist Joseph Schumpeter, who formulated in his work "*The Theory of Economic Development*" (1911) a scientific approach whose focus is innovation activity as a production function that influences qualitative changes in the factors of production and the production process itself, and the term "*innovation*" itself was introduced by him into scientific circulation in the 1930s. According to the Austrian researcher, the continuous drive to implement the flow of innovation opens up unlimited possibilities. In this regard, he writes: "Every step forward opens up enticing prospects. Every improvement expands the boundaries of seemingly absolute perfection. Consequently, the opportunities for profit, and hence the 'potential demand' for credit, are infinitely great at the outset." (Schumpeter, 2008, p. 300) „Initially, J. Schumpeter viewed the innovation process within the framework of medium-term dynamics, which means primarily investment in the development and creation of new products". (Shcherbakov, 2019) This understanding of the innovation process could only fit into the logic of achieving market advantages, but could in no way claim to be the driving force behind the long-term dynamics that form the basis of future innovation theory. (Shcherbakov, 2019) According to the economic theory of the Austrian economist and political scientist, economic development is due to innovation. Innovation in a dynamic environment where old markets are destroyed and replaced by new ones - the so-called process of "creative destruction" (What is innovation, 2014). The Austrian economist proposes a comprehensive conceptual scheme that reveals the essence of the process of economic development, the centre of which is the application of "new combinations". In Schumpeter's vision, innovation is at the very heart of economic evolution. This is briefly defined as "creating a new production function". It can be seen in different dimensions of the production process and Schumpeter described it with the famous term "new combinations".(Schumpeter, 2008, p. 300) Schumpeter thus established himself as a pioneer in the adoption of innovation as a foundation for economic development. A. Leonidov's assessment is impressive: Schumpeter "was the only economist in the early twentieth century who gave a central role to innovation in his theory of economic development." (Leonidov, 1993)

The development of the theory of innovation is associated with the names of many researchers, among whom the following play a special role: Schumpeter, as stated, introduced the category of innovation into scientific circulation to denote the changes that ensure the production of product, technological and organisational innovations, as well as introduced an interpretation of the innovation process; J. Bernal, S. Kuznets, R. Solow, who consider innovation in relation to economic growth issues and explore the applied aspect of this concept; G. Mensch, R. Nelson, C. Freeman, J. V. Jakovets, who propose an extended classification of innovation and justify the paradigm of national (regional) innovation systems; Robert Ayres, Henry Etzkowitz, Louis Leydesdorff, who consider innovation in the context of network processes, informatisation and globalisation of economic relations. Of course, the above stages of the evolution of ideas about innovation, highlighted in the work of J.V. Jakovets, do not reflect the entire diversity of research in this field, but allow them to be systematized in order to exploit the epistemological potential. (Marfina, Shevko, Khisamutdinova, 2020) However, in order to trace the evolution of theoretical approaches to innovation in the economic literature, as well as the development of different innovation theories, it is necessary to outline the historical stages in the formation of innovation theory. In the millennial civilisation history and the passage of mankind through various technological waves, innovation as a theoretical, practical and socially significant phenomenon and an object of special research in various scientific fields became current in the twentieth century, and a significant number of researchers working in this field of scientific knowledge present different scientific views, and this leads to the need to systematise the chronological approach of innovation theory, which for the purposes of this paper is proposed in *Table 1*.

**Table 1. Periodisation of research on innovation**

Period	Highlights	Prominent representatives
1 <sup>st</sup> stage Development of the fundamentals and formation of innovation theory		
From the late 19th century to the late 1930s.	Developing the foundations of innovation theory; developing the basic ideas of cyclical theory	M. Tugan-Baranovsky <sup>1</sup> J. Schumpeter, N.D. Kondratiev, P.A. Sorokin, and others
2 <sup>nd</sup> stage Detailing innovation theory		
1940-1960	Complementing and detailing previously formed ideas in the field of innovation development; developing the applied aspect of the concept of innovation	Robert Solow, J. Bernal, Simon Kuznets
3 <sup>rd</sup> stage A new theoretical breakthrough in innovation theory		
1970 - until the end of the 20th century	Identifying new types of innovation, new approaches to their classification, proposing an expanded classification of innovation and justifying the paradigm of national (regional) innovation systems	Brian Twiss, Gerhard Mensch, Richard Nelson, B. A. Lundvall, C. Freeman, J. V. Jakovets, and others
4 <sup>th</sup> stage Contemporary development of innovation theory		
From the late 20th century to the present day	Development of topics related to public innovation policy; accelerated innovation processes; formation of innovation ecosystems; social innovations	Robert Ayres, Henry Etzkowitz, Louis Leidesdorff, Clayton Christensen, and others

Source: Adapted after MIR (Modernization. Innovation. Research), 2019,10

Many contemporary researchers pay particular attention to the stages of the development of innovation theory. The emergence of real preconditions for the formation of the theory of innovation is associated with the intensification of research on the cyclicity of the economy, during which, among other things, attempts were made to present technological implementation as a driving force of economic dynamics. (Shcherbakov, 2019)

There are various definitions of innovation in the economic literature, but the numerous authors' interpretations are not the subject of this study. However, according to the "Oslo Manual" international reference guide for the collection and use of data on innovation, **innovation** is the introduction of a new or significantly improved product (good or service) or process, a new marketing method or a new organizational method into business practice, workplace organization or external relationships. (Oslo Manual, 2005) A central thesis of this guide is that innovation can and should be measured, enabling the scale of innovation activities, the characteristics of innovative firms, and the internal and systemic factors that can influence innovation to be determined. All this is now a prerequisite for conducting and analysing policies aimed at promoting innovation and perceiving innovation activity as a continuous process. As innovation activity is linked to the market through the process of "implementation", the need to measure and understand the nature of innovation remains constant (Oslo Manual, 2005).

The definitions of innovation are diverse, and different scholars, in their research pursuits, start from different starting points, use various approaches, and develop different hypotheses regarding the economic nature of innovation. However, the unifying thread among them is the positive socio-economic impact of innovation. There is no single theory of the innovative economy that is widely accepted as the dominant trend in exploring the topic. A mix of orthodox and unorthodox research approaches is observed in the understanding of the phenomenon of innovation and innovative development, but a common theoretical trend has yet to emerge. Additionally, there is a lack of compromise that would satisfy researchers from different fields in structuring the theory of innovation as a group of research approaches. Attempts to classify the scientific schools using the different approaches would be misguided and even harmful, as discussions among scholars continue and each school has its place in shaping innovation theory. It is rational to synthesize the existing opinions, to point out the main points of discussion between

<sup>1</sup> One of the founders of the school of "Russian cyclicalism" was the Ukrainian scientist Mikhail Tugan-Baranovsky, but the role of innovation in the cyclical nature of changes in macroeconomics was developed by N. Kondratiev, who formulated the concept of long-term fluctuations in the economy. Kondratiev's ideas also attracted the attention of J. Schumpeter.

them, their strengths and weaknesses in the approaches to the interpretation of the definition of "innovation". (Kruglov and Paukov, 2016)

Unfortunately, to date there is no single global standard that provides a clear understanding of the term "innovation" and related concepts that describe the innovation economy as a new model for the development of a post-industrial society. This is due to the fact that, despite its wide practical application in various fields of activity, the concept of innovation remains multilayered.

Therefore, in order for an action to be defined as *innovation* or *innovative*, it is necessary that there is an element of novelty, that it contains social relevance, i.e. positive effects of the action for a wide range of people and that it makes economic sense. A common feature of innovation is that it should necessarily be implemented. A new or improved product is considered to have been introduced when it is launched on the market. The result is that innovation resists the status quo, the existing, innovation implies change. Innovation determines the behaviour and intentions of entrepreneurs in their decisions to retain and increase market share. The development of a specific innovation culture plays a role in the formation of lasting competitive advantages, which determines the behaviour of the participants in innovation activity - will they accept or reject change, what type of innovation will they introduce and at what pace, will they copy foreign models of behaviour without taking into account national specificities, etc. In the context of globalisation and the mixing of different cultures, in a dynamic market environment, often even too aggressive, businesses have to subordinate their activities, their views on innovation and their implementation, but taking into account the specificities of cultural and traditional values.

But the pace of innovation activity of economic agents varies - there are ups and downs. Gerhard Mensch points out that the reason for the slowdown in innovation activity is not the exhaustion of scientific knowledge available for implementation. New scientific knowledge and inventions are constantly emerging. But the general economic environment, i.e. the possibility for existing entrepreneurs to obtain high profits from the use of already proven, albeit increasingly less profitable, technologies, is hampering the intensity of innovation activity. (Rumyantseva, Korostyshevskaya, Samylov, 2018)

### **3. Impact of Innovations on Competitiveness**

Competition is a prerequisite for the creation of new products and services, which implies rapid adaptation to the dynamic environment, investing in the search and implementation of new technologies and innovation models, i.e. innovation activity. The essence of innovation is manifested in its functions. The main function is the function of change. Among the mechanisms for stimulating innovation, market competition is the first. Under current conditions, producers are forced to continuously reduce costs and expand their business through new markets. Firms that are the first to adopt effective innovation gain a significant advantage over competitors. (Pantaleeva, I. 2013) Investment in technological and non-technological innovation depends on the existing link between business and science, between technology and scientific excellence, i.e. on the innovation environment and on innovation activity. But innovation activity and a fertile innovation environment require obedience to the rule of law and protection of intellectual property rights. It is the respect of intellectual property rights that ensures the return on investments made and increases the possibility of competitive advantages. Therefore, the creation of an innovation environment characterised by economic freedom and intellectual property protection is a favourable condition for successful competitiveness and economic sustainability.

The term "competitiveness" is one of the most commonly used concepts in the economic literature, but it is not precise enough, which means that there is no universally accepted definition of competitiveness. Moreover, competitiveness reveals itself as a confusing term that is often used almost interchangeably with other concepts such as productivity, innovation or market share. (Siudek and Zawajska, 2014) Currently, this term is often used in different contexts, meaning different things to different researchers. Competitiveness has been described by various authors as a theoretical, multidimensional and relative concept related to the market mechanism. Real market benefits require stable competitiveness of business entities and building competitive advantages with a long-term character. The concept of competitiveness is a fundamental concept in the market economy and is an expression of a more effective and efficient functioning of a business in relation to other business entities. (Raykova, 2016)

Nowadays, competitiveness theory is a modern economic theory with great practical relevance. It provides systematic knowledge on how to achieve lasting success in the competitive struggle and is related to raising the living standards and prosperity of people. In an economy based on a market mechanism between producers and consumers, the issue of the profitability of production and the competitiveness of the enterprise becomes vital. (Raykova, 2016) The concept of competitiveness itself is also subject to multiple definitions with different shades of interpretation due to its broad scope. The Global Competitiveness Report states that "a more competitive economy is one that is likely to grow faster over time". (The Global Competitiveness Report 2011-2012) According to Ivan Angelov competitiveness is a fundamental complex indicator and is always a comparative category. (Angelov, 2005) This comparative category requires business entities to build the ability to produce goods and services that respond to dynamic market conditions and changing consumer demands. Rapid adaptation to these demands leads to better competitiveness and, consequently, to expanding market share and increasing profitability. Daniela Ilieva points out that "at the microeconomic level, competitiveness concerns the capacity of firms to compete, to develop, to be profitable. The drive to maintain competitive goods is often linked to reducing production costs. This is applicable within certain limits and

not for all firms, which in turn necessitates the search for new opportunities to achieve competitiveness. Such are innovations that could achieve greater uniqueness and operational efficiency". (Ilieva, 2018) This statement can be complemented by the view that an important factor for effective competitiveness is the existence of a flexible and adequate strategic management system, capable of anticipating possible risks, threats and fluctuations and proposing the most adequate solutions to them.

In traditional economic theory, comparative costs of production determine relative competitiveness at the company level - the way to become more competitive is to produce more cheaply: for example, by finding ways to reduce labour costs. However, recent studies consistently point to non-price factors as important, if not more important, as the main determinants of competitiveness. (Clark and Guy, 1998) Based on what has been presented so far, it can be summarised that the competitiveness of the economy is determined by the degree of innovation activity and the effectiveness of the implemented technologies, but it also depends on the general economic atmosphere - the legal environment and external relations, the structure of the economy and its resilience to fluctuations in the global market, the ambitions of entrepreneurs to innovate without causing shocks.

Innovation, as a non-price factor, is linked to competitiveness and plays an increasingly important role in the process of market share expansion and has an important positive effect on competitiveness. It is crucial to overcome the 'contradictions' between research, in all its complexity and depth, and the requirements of the market for goods and services, in order to create a sustainable understanding of competitive policy for the long term. This requires an analysis, an evaluation of the effectiveness of innovation management. Understanding which types of innovation policies work in different settings requires an experimental approach and a careful and considered evaluation of the results of these experiments. Innovation, experimentation and evaluation are key words for the future. (Clark and Guy, 1998) And innovation management turns out to be an important element in the firm's strategy and policy by "identifying the determinants of the innovation management process and the consequences of these determinants". (Ferreira et al., 2015) Innovations are sometimes received with scepticism and caution, but once introduced, it is the mechanism of market competition that determines their success or failure. There is no recipe for a successful innovation policy, but a business that does not take the risk of innovating and implementing innovative products and services is doomed to drop out of the market. Therefore, the innovation activity of business entities is a determining factor for successful competitiveness and sustainability in aggressive market conditions.

It is important to point out that in the 21st century, competitiveness is highly dynamic, in line with rapidly changing market conditions, and is of crucial importance. It underpins the building of a knowledge and innovation-based economy, requires smart growth by promoting greener and more efficient use of resources. This economy leads to sustainable growth and the stimulation of high levels of employment, it also leads to social cohesion and increased human well-being. Competitiveness must be seen as a guiding concept for development and the basis for the functioning of both individual economic organisations and entire sectors, industries and regions. Competitiveness also determines the positioning of national economies in the global economic space, their development and sustainability. The ability of companies to compete in foreign and domestic markets depends exclusively on innovative activity, on innovative products and services that can be produced, provided and sold at attractive prices. Short-term productivity and labour costs are important drivers of competitiveness. In the long term, however, the ability of companies to innovate and to invest in research and development and to innovate are crucial determinants of competitiveness. (Cleff et al., 2005) And overcoming the "contradictions" between research, with all its complexity and depth, and the interests of entrepreneurs, combined with the requirements of the market for goods and services, in order to implement a competitive policy with a long-term character, is a key factor for sustainable social and economic development. When introducing innovative products or services, businesses are exposed to a high degree of risk. The level of risk varies considerably and is directly related to the level and type of innovation. It is no secret that the more radical the innovation, the greater the uncertainty about how the product will be perceived by the market..

Innovation is an economic and social phenomenon, not a technical term. According to the summary of the American marketing expert, author of numerous books and blogger Seth Godin, innovation is an opposition to the status quo. The term, used only in the context of economic probabilities, prevents seeing the direct correlation between innovation and change, as change in this case refers to any understanding of *change management* (change theory) as a constructive improvement and opposition to the existing status quo. (What is innovation, 2014)

The foregoing provides grounds to conclude that the potential of an economy to create and implement innovations - technological and non-technological, to invest in new technologies and scientific discoveries, to be innovative, invariably leads to increased competitiveness, strong market presence and to an increase in its internal capacity to create and implement new innovations. An important role is played by the innovation culture that has been created, which must maintain a balance between conservative national traditions and values and the need for dynamic change leading to sustainable economic growth. The development of a culture of innovation is a much-needed environment for innovation activity, creating opportunities for competitive advantage and increased competitiveness, and this leads to the development of a successful business model capable of anticipating critical situations and options for their resolution.

#### 4. Innovation Activity. Factors of Innovation Activity

One of the most complex and risky systems in economic activity is innovation activity, an important characteristic of which is dynamism, especially in the age of information technology. This activity covers the areas of research, discovery and knowledge acquisition, development, deployment and commercialisation of innovations. (Sultanov, no date) Innovations can be seen as phenomena with a dual nature, viewed both as outcomes (static snapshot) and as processes (multi-stage action). (Sultanov, no date) But the design of innovative sustainable solutions must not only respond to, but be subordinate to, the local interests and traditional values of the communities involved.

Innovation activity is an ongoing process - fostering innovation in an organisation is an ongoing process, not a one-off event. It requires constant attention, maintenance, adaptation. The level, result and quality of innovation activity of a business entity determines its innovation potential and contributes to sustainable development in the face of changing economic trends and dynamic technological transformations. Considering that innovation activities are all scientific, technological, organisational, financial and commercial steps that are intended to lead to the implementation of innovations and that innovation activities include research and development that is not directly related to the development of a specific innovation, the more active the innovation activity, the more significant would be its results depending on the type and kind of innovation.

Innovation activity depends on the influence of external and internal factors. The specific influence of these factors may vary, but as a rule innovation activity determines the degree of innovation potential and is determined by the ability to seize opportunities in the external environment and remain resilient in the face of risk. According to Prof. Yuri Yakovets (President of the International Sorokin-Kondratiev Institute) the factors stimulating innovation are: the ever-increasing needs of the growing mass of people (increasing number of inhabitants of the planet Earth) and in order to satisfy the needs of this population the volume of production of goods and services must increase; the opportunities for innovative breakthrough are created by the progress of science, the periodic explosions of scientific creativity that take place in the avant-garde countries, leading to waves of scientific discoveries and significant inventions and significant inventions embodied in major innovations that are transforming the world (it is this wave that is rising at the beginning of the twenty-first century as the harbinger and foundation of the technological revolution); innovation is driven by the law of market competition. (Yakovets, 2015, pp.10-11)

In addition to the above-mentioned factors stimulating innovation activity, other methods and techniques leading to the desired result should be sought. Such a method is gaining more and more popularity around the world (poorly applied in Bulgaria) method TRIZ - Creative Inventive Problem Solving or *Theory of Inventive Problem Solving*. TRIZ is a theory developed by the Soviet inventor and science fiction writer Genrikh Altshuller<sup>2</sup> and his collaborators, which he began to develop as early as 1946 and experienced many years of struggle against the distrust of Soviet science and the Soviet political system. The TRIZ method is a problem-solving method based on logic and information rather than intuition, accelerating a work team's ability to solve problems creatively. TRIZ also provides repeatability, predictability and reliability due to its structure and algorithm." (Yankova and Panayotova, 2010, p. 58) TRIZ allows finding the best solution by overcoming contradictions, using free, readily available resources and the so-called "ideal end result". (Yankova and Panayotova, 2010, p. 62)

Some authors believe that modern theories of innovation have their origins in TRIZ and unite around three main theses defined by it:

- Problems and solutions repeat themselves;
- Innovation can be classified as a finite number of solutions;
- Any innovation can be applied outside the field in which it was created. (What is TRIZ? 2015)

The TRIZ algorithm that Altshuller uses to solve problems is, as follows:

- Problem formulation;
- Transforming the problem into a model;
- Model analysis;
- Discarding contradictions;
- Formulating an ideal solution;

The ideal solution means innovation. The problem is solved without conflicting with other components or elements in the product, service or process, and this solution has led to a qualitative change with real market benefits. (What is TRIZ? 2015)

Creating the right business climate for innovation activity is a key prerequisite for building a knowledge-based economy, where knowledge is a source of progress and capital. The knowledge economy can be defined as a set of production and services realised through the intensive use of knowledge as a key resource. (Aleksandrova, 2015, p. 21) It provides opportunities for the restructuring of the economy, for the development of industries with high value added and growth of the gross national product. It is an economy in which information and knowledge are the main

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<sup>2</sup> The author of TRIZ G. Altshuller even made an unconventional attempt to prove the rightness of his views - he wrote a letter to Stalin, for which he was sent to the GULAG. In the end, he outlived the system, created a worldwide movement of innovators, and laid the foundation for a series of theories based on a systematic approach to innovation. Shapiro is also credited with developing this method.



product and resource, but its development depends on the degree of willingness of the institutional environment to help promote it.

The knowledge economy, in which knowledge and innovation play a central role, also contributes to balancing ever-increasing consumption and limited resources. Therefore, for the development of a modern 'knowledge economy' and 'knowledge society', the stimulation of technological and non-technological innovation, innovative entrepreneurship, the creation of favourable conditions for the acquisition and dissemination of knowledge and its application are of key importance with a socio-economic and even political dimension.

The birth of a new type of knowledge-based economy means that at its centre is the individual with his knowledge as a valuable asset for its development. The dissemination of knowledge and information today is limitless, but without the knowledge holder - the individual - and his direct involvement in the process of putting knowledge into practice, it is impossible to achieve economic and social success.

The main function of innovation is change as a central component, and the main mechanism for stimulating it is the creation of market competitive advantage. Modern competitiveness is directly dependent on innovation activity, which is part of the overall innovation process and, due to its extreme dynamism, requires constant attention, maintenance and rapid adaptation.

The innovation process is not a homogeneous process, but a complex of interrelated activities aimed at creating new knowledge and its practical application. It is a complex set of relatively autonomous activities - from research and development to testing, implementation and deployment - carried out by different units that aim to create new products and services.

The innovation process is a creative process, but also a high-risk activity, notwithstanding the extensive tools for exploring, forecasting and measuring possible risks. At the current stage of economic development, characterised by globalisation and informatisation of production and services, the need for rapid adaptation to ever-changing market conditions, the increasing share and importance of intellectual, innovative industries and services - all of these are qualitatively changing the contemporary face of the economy and society.

Innovation activity depends on external and internal factors. The specific influence of these factors may vary, but as a rule innovation activity determines the degree of innovation potential and is conditioned by the ability to seize opportunities that arise in the existing environment and remain resilient in the face of risk, changing economic trends and dynamic technological transformations.

And although innovation is not always on the plus side, although there are innovations on the minus side, so-called pseudo-innovations, widespread, which seek to prolong the agony of outdated products and processes, or unrealistic changes and ideas for which the time has not yet come, despite all this innovation activity leads to the generation of long-term economic growth, to the creation and development of new economic sectors, to an increase in the competitiveness of business entities at all levels, and to an increase in the standard of living and well-being.

On the basis of the foregoing, we can conclude that the main factor for a successfully developing and sustainable economy is the innovation activity of economic entities and their ability to overcome the challenges in promoting innovation activity. This requires the formation of a modern entrepreneurial culture combined with the development of an innovation and corporate culture. Innovation therefore requires constant effort, commitment and a continuous drive to learn and put into practice new knowledge and discoveries, and the introduction of new ideas and methods. All this is the result of successful management. Building a culture of innovation means being able to purposefully seek, find, evaluate and implement ideas, to attract and retain innovative talent.

Innovation, as a non-price factor, is related to competitiveness and plays an increasingly important role in the process of expanding market share, influencing competitive advantages. The degree of interaction of innovators in search of effective competitiveness is a trend that has reached heights in modern times. The formulation of a strategy for innovative development is a complex task with many aspects, for the realisation of which the involvement of public institutions and all stakeholders is of particular importance.

## 5. Conclusion

For successful innovation activity and competitiveness, it is crucial to overcome the "contradictions" between research, with all its complexity and depth, and the requirements of the market for goods and services, in order to create a competitive policy with long-term character and sustainable development. The strategic focus of modern marketing must be clearly defined in terms of the management of the innovation process, the receptiveness and readiness of the market for new products and services, the cultural specificities and the financial dimensions for the business entity concerned. Achieving the defined strategic focus enables the desired sustainable growth trajectory to be realised.

The following conclusions can be drawn from the foregoing:

*First.* The innovation process, as a multi-layered risky phenomenon and a complex of interrelated activities aimed at the creation of new knowledge and its practical application and implementation requires strategic planning, state stimulation, constant efforts and significant investments. At the same time, respect for the rule of law and the protection of intellectual property rights are necessary to create a fruitful innovation environment. Therefore, the creation of an innovation environment characterised by creative, scientific and economic freedom combined with intellectual property protection, i.e. a demanding institutional and legal framework, is the favourable condition for innovation activity, successful competitiveness and economic sustainability. But each country and even each territory

expresses a particular political philosophy through its approach to innovation. The latter is the result of history and the different cultures and institutional contexts that are in place are likely to evolve over time. (Héraud and Lachmann, 2015)

*Second.* Innovation determines the behaviour and intentions of entrepreneurs in their ambition to retain and increase market share, and is critical to ensuring sustained economic growth. The development of a specific innovation culture, which in combination with the entrepreneurial culture determines the behaviour of the actors involved in the innovation process and requires a constant renewal of resources and knowledge in line with the dynamically changing market environment, plays a significant role in the formation of sustainable competitive advantages. The manifestation of innovation activity and the implementation of innovations also encounters resistance caused by political reasons, socio-cultural incompatibility, complemented by financial and technological problems. But overcoming obstacles is an element of successful management and an inevitability in the process of active participation in the knowledge economy. The intensity of innovation activity depends on the general economic environment and must be assumed to be a function of the dynamics of consumer demands and is the result of the accumulation of previous scientific knowledge.

*Third.* The competitiveness of the economy is determined by the degree of innovation activity and the effectiveness of innovations implemented, but it also depends on the legal environment and external relations, the structure of the economy and its resilience to fluctuations in the global market. Innovation activity is the driving force of the modern market economy and underestimating it leads to market failure, while stimulating it leads to economic growth, effective competitiveness and sustainable development.

*Fourth.* The creation of business incubators to work in a university environment is a good way to obtain a synergistic effect between business, science and education - a factor that helps to expand innovation activity and successful competitiveness. This should be complemented by the possibility of forming both an innovative and entrepreneurial culture - important elements for the development of innovative activity and affecting the sustainability of socio-economic development.

## References

- Aleksandrova, M. (2015). Knowledge economy: drivers and indicators: *Dialog* 9 (3), p. 21 (in Bulgarian). **Александрова, М.** October (2015). Икономика, базирана на знанието: движещи сили и индикатори. *Dialog* 9(3), с. 21.
- Angelov, I. (2005). Competitiveness - Bulgaria's biggest economic challenge in the European Union (Macroeconomic view), BAS Economic Institute, Sofia. // *Scientific and Practical Conference "Bulgaria's Integration into the European Union - Challenges of Competitiveness"*, Sofia. <http://www.iki.bas.bg/english/CVita/angelov/No058.htm> (in Bulgarian). **Ангелов, И.** (2005). Конкурентоспособността – най-голямото икономическо предизвикателство пред България в Европейския съюз (Макроикономически поглед), БАН Икономически институт, София. // *Научно практическа конференция „Интеграцията на България в Европейския съюз – предизвикателства на конкурентоспособността“*, София. <http://www.iki.bas.bg/english/CVita/angelov/No058.htm>
- Cleff, T., Licht, G., Spielkamp, A., Urban, W. (2005). Innovation and Competitiveness. In: Heneric, O., Licht, G., Sofka, W. (eds) Europe's Automotive Industry on the Move. *ZEW Economic Studies*, vol 32. Physica-Verlag HD. [https://doi.org/10.1007/3-7908-1644-2\\_4](https://doi.org/10.1007/3-7908-1644-2_4)
- Clark J., Guy K. (1998). Innovation and Competitiveness: *A Review. Technology Analysis & Strategic Management*, Vol. 10, No. 3, p. 364.
- Defining Innovation:** Compiled By: Rajnish Tiwari Feb. 2008 Hamburg University of Technology (TUHH) Defining Innovation (Based on "Oslo Manual", 3rd edition, 2005) [http://www.global-innovation.net/innovation/Innovation\\_Definitions.pdf](http://www.global-innovation.net/innovation/Innovation_Definitions.pdf)
- Doğan E. (2016). The Effect of Innovation on Competitiveness: *Ekonometri ve İstatistik Sayı*, 24, 60-81 <https://dergipark.org.tr/en/download/article-file/268727>
- Ferreira J. et al. (2015). Drivers of innovation strategies: Testing the Tidd and Bessant (2009) model, *Journal of Business Research*, <http://dx.doi.org/10.1016/j.jbusres.2015.01.021>
- Héraud J.-A., Lachmann J. (2015) L'évolution du système de recherche et d'innovation : ce que révèle la problématique du financement dans le cas français: *Innovations*, 1(46), pp. 9-10, <https://www.cairn.info/revue-innovations-2015-1-page-9.htm>.
- Ilieva, D. (2018). *Increasing regional competitiveness based on the knowledge economy*. „D. A. Tsenov“ Economic Academy – Svishtov, <https://dlib.uni-svishtov.bg/handle/10610/4008>, p. 66 (in Bulgarian). **Илиева, Д.** (2018). *Повишаване на регионалната конкурентоспособност, основана на икономиката на знанието*. Стопанска академия „Д. А. Ценов“ – Свищов, <https://dlib.uni-svishtov.bg/handle/10610/4008>, с. 66.
- Kruglov V., Paukov S. (2016). Evolution of the theory of innovations in foreign and domestic science. *Regional economy: theory and practice*. (In Russ.) <https://cyberleninka.ru/article/n/evolyutsiya-teorii-innovatsiy-v-zarubezhnoy-i-otechestvennoy-nauke>
- Круглов В., Пауков С.** (2016). Эволюция теории инноваций в зарубежной и отечественной науке. *Региональная экономика: теория и практика*. 5 4–22, <https://cyberleninka.ru/article/n/evolyutsiya-teorii-innovatsiy-v-zarubezhnoy-i-otechestvennoy-nauke>
- Leonidov, A. (1993) J. A. Schumpeter and the revival of his ideas. (50 years since the publication of Capitalism, Socialism and Democracy). „*Novo Vreme Magazine*“, 2, p. 38 (in Bulgarian) **Леонидов, А.** (1993) Й. А. Шумпетер и възвръщането на неговите идеи. (50 години от издаването на „Капитализъм, социализъм и демокрация“). Сп. „*Ново време*“, №2, с. 38.
- Marfina L., Shevko N., Khisamutdinova E. (2020). Particularities of innovation processes in the post-industrial economy: microeconomic approach]. *Kreativnaya ekonomika*. (In Russ.) 14. (11). — 2747-2756. doi:10.18334/ce.14.11.111078.

- Марфина Л., Шевко Н., Хисамутдинова Э. (2020). Особенности инновационных процессов в постиндустриальной экономике: микроэкономический подход // *Креативная экономика*. Том 14. № 11. с. 2747–2756. doi: 10.18334/ce.14.11.111078
- North, D. (1990). *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press.
- Oslo Manual: (2005). *Guidelines for Collecting and Interpreting OECD/European Communities*, p.46 <https://typeset.io/papers/the-oslo-manual-199s261hth>
- Pantaleeva, I. (2013). *Innovation management in the industrial enterprise*. Monograph, “Tsenov” Academic Publishing House, Svishtov, pp. 28–29 (in Bulgarian) Панталеева, И. (2013). *Управление на иновациите в индустриалното предприятие*. Монография, Академично издателство „Ценов“ Свищов, с. 28–29.
- Raykova, E. (2016). Achieving competitiveness in business organisations. *Almanac of PhD Students, D. A. Tsenov Academy of Economics*, Svishtov, Bulgaria, vol. 11 (11 Year 2), pages 640–649. <https://ideas.repec.org/a/dat/almphd/v11y2016i11p640-649>, p. 643 (in Bulgarian) Райкова, Елена. (2016). Постигане на конкурентоспособност в бизнес организацията. *Almanac of PhD Students, D. A. Tsenov Academy of Economics*, Svishtov, Bulgaria, vol. 11 (11 Year 2), pages 640–649.
- Rumyantseva S., Korostyshevskaya E., Samylov I. (2018). Stages of formation and development of the concept of „innovation“ // *Innovations*. №3 (233) (In Russ.) URL: <https://pureportal.spbu.ru/files/18306446/rumyantseva03.pdf>
- Румянцева С., Коростышевская Е., Самылов И. (2018). Этапы становления и развития понятия „инновации“ // *Инновации*. №3 (233). <https://pureportal.spbu.ru/files/18306446/rumyantseva03.pdf>
- Schumpeter J. (2008). *Theory of economic development. Capitalism, Socialism and Democracy*. Moscow, p. 861. (In Russ.) Шумпетер Й. (2008). *Теория экономического развития. Капитализм, социализм и демократия*. М., Изд. Эксмо, 861 с.
- Shcherbakov G. (2019) Genesis and Development of the Scientific Ideas about the Role of Innovation in the Economic Process. *MIR (Modernization. Innovation. Research)*. 10 (4): pp. 470–486. <https://doi.org/10.18184/2079-4665.2019.10.4.470-486> (In Russ.) Щербаков Г. (2019) Генезис и развитие научных представлений о роли инноваций в экономическом процессе. *МИР (Модернизация. Инновации. Развитие)*. 10 (4): pp. 470–486. <https://doi.org/10.18184/2079-4665.2019.10.4.470-486>
- Siudek T., Zawajska A. (2014) Competitiveness in the Economic Concepts, *Theories and Empirical Research. Oeconomia* 13 (1), 91–108.
- Sultanov I. (no date) *Classification system of innovations*. (In Russ.) <http://projectimo.ru/innovatika/klassifikaciya-innovacij.html>
- Султанов И. *Классификационная система инноваций*. <http://projectimo.ru/innovatika/klassifikaciya-innovacij.html>
- The Global Competitiveness Report 2011–2012, *World Economic Forum* 2011, p. 4 [http://www3.weforum.org/docs/WEF\\_GCR\\_Report\\_2011-12.pdf](http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf)
- What is innovation, 2014, <https://innovationstarter.bg/blog/kakvo-e-inovacia/> (In Bulg.) Какво е иновация, 2014. <https://innovationstarter.bg/blog/kakvo-e-inovacia/>
- What is TRIZ? (2015) <https://innovationstarter.bg/resources/kakvo-e-triz/> (In Bulg.) Какво е ТРИЗ? (2015) , <https://innovationstarter.bg/resources/kakvo-e-triz/>
- Yakovets Yu. (2015). *Grammar innovation and strategy of innovation and technological breakthrough*. Moscow pp. 10–11, <https://maginnov.ru/assets/files/books/grammatika-innovacij-i-strategiya-innovacionno-tehnologicheskogo-proryva/grammatika-innovacij.pdf> (In Russ.) Яковец Ю. (2015). *Грамматика инноваций и стратегия инновационно-технологического прорыва*. Пособие для молодых инноваторов, М., МИСК, с. 10–11, <https://maginnov.ru/assets/files/books/grammatika-innovacij-i-strategiya-innovacionno-tehnologicheskogo-proryva/grammatika-innovacij.pdf>
- Yankova V., Panayotova T. (2010). Stimulating innovation through the TRIZ method. *Scientific Works of the University of Ruse*, vol. 49, series 5.1, p. 58 (in Bulgarian) Янкова В., Панайотова Т. (2010). Стимулиране на иновативността чрез метода ТРИЗ. *Научни трудове на Русенския университет*, т. 49, серия 5.1, с. 58.

