

INNOVATION AND COMPETITIVE ADVANTAGE IN GLOBALIZATION

Dejan Gligović

Modern Business School, Belgrade, Serbia
dejan.gligovic@mbs.edu.rs

Dragan Vukasović

Independent University of Banja Luka,
Republic of Srpska, Bosnia and Herzegovina
vukasovicdragan@gmail.com

Andrijana Mrkaić Ateljević

College of Tourism and Hotel Management Trebinje, Republic of Srpska, Bosnia and Herzegovina
andrijanamrkaic@gmail.com

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Abstract: *Change is a pre-requisite for survival among individual human beings and even more so in the organizations which they create and in which they work. Put simply, if an organization does not change what it offers the world – its product or services- and the ways in which it creates and delivers these offerings, it may not survive. The pressure for a constant innovation means that creativity is a key resource. Innovation, technology advances and competitive advantage are connected by complex and multidimensional relationships. Demands for organizational innovation and technological advantage are increasingly crucial components of competitive strategy for many firms. Most firms face serious competitive challenges due to the rapid pace and unpredictability of technology change. Industries dependent on highly sophisticated technologies and firms engaged in multinational competition are particularly vulnerable to the need for continuous and rapid modification of their product features and the ways in which they conduct business*

Key words: *innovation, creativity, globalization, market, competitive advantage.*

INTRODUCTION

The beginnings of the development of innovation theory are connected with the analysis of J. Schumpeter in the first half of the last century, who marked innovation as a fundamental factor of technological progress and economic development,

in terms of replacing old technologies with new ones. The impulse that drives and keeps the capitalist system in motion comes from new consumer goods, new methods of production or transport, new markets, new forms of industrial organization created by capitalist enterprises. This process of industrial change constantly revolutionizes the economic structure of capitalism from within by continuously destroying the existing and creating the new ones (Schumpeter 1942, p.108). He is considered one of the first scientists to recognize the importance of new product development - product innovation for economic development, believing that the competitiveness achieved by introducing a new product is far more important than that based on marginal changes in existing product prices. Much later (Abernathy, Utterback, 1978) they developed an approach, according to which, at the stage of emergence of each economic sector, there is a radical product innovation followed by a radical innovation of the appropriate production process, followed by the spread of incremental innovation. Therefore, it was considered that innovations are primarily related to changes in technology, that is, that their key component is the field of technological innovation. In general, this approach has remained to this day, because technological innovation is the basis of the technological process, which is a key guideline for productivity growth, technological and economic development. In order to facilitate the monitoring of the innovation process, it is necessary to explain

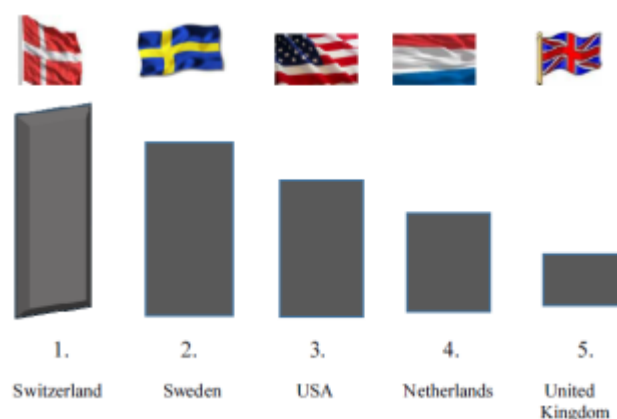
in more detail the difference between radical and incremental innovations. Radical innovations refer to the introduction of completely new products and services and / or new production and distribution systems and make existing products and services uncompetitive (e.g. wireless communications). On the other hand, incremental innovations involve the adaptation, improvement and refinement of existing products and services and / or existing production and distribution systems (e.g. different generations of computer microprocessors). To understand the role of innovation in achieving strategic competitive advantage, we must first see what competitive advantage is. Competitive advantage is a realistic basis or rational way in which a particular organization can appear or compete in a selected market in order to achieve some of its specifically defined goals. The changed logic of the world market has conditioned that the most important sources of competitive advantage (at the level of only one company but also at the level of one country) should be actively and permanently sought in contrast to the traditional paradigm recognizable in economic or business policies by favoring low costs based on cheap labor, strength or raw materials. Creating the competitive advantage is especially important on the changed logic of the world market that has conditioned that the most important sources of competitive advantage (at the level of only one company as well as at the level of one country) should be actively and permanently sought in contrast to the traditional paradigm recognizable in economic or business policies by favoring low costs strength or raw materials. Creating the competitive advantage is especially important

on The changed logic of the world market has conditioned that the most important sources of competitive advantage (at the level of one company only and at the level of one country) should be actively and permanently sought in contrast to the traditional paradigm recognizable in economic or business policies by favoring low costs strength or raw material. Creating the competitive advantage is especially important on at the enterprise level, although the activities required for their creation and maintenance in international conditions are extremely complex.

1. Innovation and its role in creating a competitive advantage

Comparing the data of neighboring countries by the Global Innovation Index (GII), which presents an annual report ranking countries according to the mass of new technological and scientific inventions and innovations in 129 countries based on 79 criteria significant differences, and that in the report published in 2019, Slovenia is at 31, Hungary at 33, Bulgaria at 40, Croatia 44, Montenegro 45, Northern Macedonia 59, Serbia 57, BiH 76, and Albania at 83 place of the overall list made by WIPO (<https://www.wipo.int/portal/en/index.html>) The focus of this index was the role that people play in the innovation process, and the results showed that Switzerland and other countries from the top of the list, Great Britain, Sweden and the Netherlands, have strong innovation support systems that encourage creativity.

Graph 1. Top innovators by income group



Source: Global Innovation Index, WIPO, London, UK, 2019

Switzerland, Sweden, the United States, the Netherlands and the United Kingdom are the five most innovative nations in the world according to the Global Innovation Index for 2019. They are

followed by China, Malaysia, Bulgaria, Thailand and so on. For positioning, the authors of the report evaluate institutions, human capital and research, infrastructure, market, business,

knowledge / technology and creative performance of the observed countries. When the view is raised from the mirror to the macro level and the broader picture, the general conclusions from the report are that the world is affected by the economic slowdown of medium intensity due to weakened economic growth, record low productivity growth and economic uncertainty. The Secretary General of the Regional Cooperation Council (RCC), Majlinda Bregu, stated in an author's text on the RCC website that the Western Balkans invest less than one percent of GDP in innovation and research, and that only 30 to 40 percent of businesses are innovated. self-financed, without any public sector support. She states that investing in innovations would accelerate reforms and give a new impetus to the development of the region, and at the same time create good opportunities for citizens and stop the growing outflow of skilled labor (<https://www.danas.rs/svet/bregu-rcc-zapadni-balkan-ulaze-manje-od-jedan-odsto-bdp-a-za-inovacije-i-istrzivanja/>) Recognizing the role of innovation as a driver of economic growth of companies and public enterprises and thus strengthening the national economy, represents an opportunity to further develop competitive advantages and create a proactive national innovation environment. In that way, large and small companies are connected, which will give a new impetus to the national economy through trade and valorization of innovations. The most common semantic problem is the wrong equating of invention and innovation. The basic criterion for distinguishing between innovation and invention refers to the connection with the practical and commercial aspect - the application of the idea / invention /. This is the moment when science and technology play a key role - inventions require the involvement and knowledge of a large number of different people, in order to be transformed into products or services, ie, in processes that will increase company performance and thus the overall national economy. "Innovation therefore includes a range of scientific, technological, organizational, financial and commercial activities" (Kutlača, 2015, p. 72).

Innovations can be classified in different ways: (Dobre, 2004, p. 159)

- by impact on productivity:
 - a) labor-intensive,
 - b) capital-intensive,
- by relative importance in the innovation process:
 - a) incremental,
 - b) radical.

- according to the result of innovation activity:
 - a) process,
 - b) product,
- according to the scope of changes they cause in the product:
 - a) component,
 - b) architectural,
- according to the overall impact on business activity:
 - a) sustainable
 - b) disruptive.

The company makes a greater or lesser profit by performing successfully or less successfully business activities in the value chain and support for these activities is assets, competencies and knowledge. I concluded that it takes 5-7 years for the company to start bearing fruit. "It is a process that is based on experience and I cannot give you any reason why this is so, but it is most often so" (Prash, 2007, p. 23) products or services demanded by consumers, where each of the activities of the value chain can take place differently by using new knowledge to offer new products and services. This means that every function, not just R&D (Research & Development) activities, can have an innovative character. The process of technological progress based on knowledge and invention has a certain autonomy, but the innovation itself is determined by the conditions prevailing in the environment of a particular business entity and which are in a high degree of interaction with economic decisions and procedures. Economic criteria are implicitly present in the minds of scientists and inventors and the goal is to create a quality, developmentally progressive and production-applicable technological process, tool, process, product or service. Namely, "most innovators are disobedient, do not fit into the prescribed rules, often work outside the prescribed standards. These are "lone wolves" who, when they unite, can make great innovative endeavors "(Grant, 2016, p. 8). The application of scientific research work is indirect, if not direct, the result of the interaction of supply pressure and increasing demand with users of innovation in the economic system. In addition to production capacity (ability to efficiently operate installed production systems and processes in unchanged environment and conditions), investment capacity (ability of production agent to, based on fully acquired production capacity, master the construction of new production systems or expansion of existing ones), of special importance becomes an

innovation ability (the ability to create, develop, apply and diffuse new or improve existing technological means, processes, methods and procedures). Innovative ability is manifested in changes and improvements of old and finding new products and services, new marketing achievements, new forms of distribution and sales channels and new potential economies of scale - either in size or in diversity. To see which ideas really have potential, and how to fix them, managers need a new evaluation criterion. The innovative ability of a production entity therefore includes two aspects: First, the ability to transform, adapt or improve production systems, methods, procedures and processes, the products themselves and the inputs of the production process. "The goal is to maintain and improve competitiveness in the domestic and foreign markets, in a dynamic context, which is increasingly difficult due to frequent and diverse changes in technology, demand, relative costs, inputs and outputs and their availability" (Kotlica, 2005). Second, the ability to create new technological solutions, innovation, development of new products, new technological procedures, methods, tools and processes. This ability encompasses the potentials of creating smaller (incremental) ones as well major (radical) technological innovations. A very suitable way of acquiring knowledge for the realization of the above are "learning by doing" and "learning by using" (Bobera, 2007, p. 217). In managing innovation and engaging people in general around technological innovation, there is a constant confrontation with a situation in which it is not entirely certain what needs to be done and in what way. The company was created in uncertainty and for uncertainty, but it must be completely ready for the risks that are in its environment, because the company is an organization that must constantly discover, analyze and evaluate numerous conditions in business uncertainty and therefore must constantly take into account the risk. From this realization, we can conclude that innovative work in a company consists of turning uncertainty into risk. Technological innovations include a large number of uncertainties of different types, so the innovator is never sure to what extent the problem is close to the limit of the existing state of scientific and technical knowledge. Furthermore, there is uncertainty about determining the degree of novelty, that is, about what others have already done or are doing now, all the way to the fact whether someone has already found the innovation they are looking for and that it has proved worthless or perhaps done. about the same innovation but the competition has moved further in the very finalization of the innovation. "Innovation is, by its very nature, an extremely risky activity, and the only risk greater than this is

not performing an innovative activity." (Dobre, 2004, p.189) The company wants new products, new services, new work processes, but on the other hand there is a latent resistance to change in the company. Yet, modern enterprise, due to the action of the environment, and especially the market, must accept technological changes, and these changes, as a rule, destroy its stable state. Therefore, we can state that the company is ambivalent about innovations on the one hand and is only aware that they are necessary because they are important for its survival, and yet because of the great risk and uncertainty, it is afraid of innovation and tries in different ways to avoid or prevent. When we talk about innovation risks, we can mention the following most important risks: risks in the technical field, risks in marketing and risks related to time dynamics (the moment from the invention to the concrete application of the innovation). "It is the responsibility of management to clearly state the goals of innovation and the value of creating innovation, otherwise, strategic goals will not be aligned with the company's overall strategy "(Davila, Epstein, Shelton, 2007, p. 225).

2. Globalization and the innovation aspect of a competitive advantage

Globalization is the transformation of economy, culture, innovation and trade into a new global synthesis - a new approach to the progress of our civilization. At the same time, it implies strong cooperation between the peoples of the world, which refers to free trade and common global concern for climate change, energy, economy, technology, security and democracy. "Globalization is a global process of connecting and uniting national economies (states) into one global system. Globalization seeks to build a modern society that should provide: long-term stability, security, sustainability, development, world peace, optimal use of natural resources, unique environmental protection, poverty reduction, etc." (Starčević, Subotić, 2014, p. 68). . The growth of trade directly leads to faster progress and the growth of living standards, thus contributing to the encouragement of democratic reforms and the reduction of wars and terrorism, which is the real and desirable essence of the globalization process. Certainly, the future of globalization is created by developed countries, and the fear and concern of countries that feel powerless in relation to the available resources of rich economies is completely justified. Countries that fear globalization are most concerned about the inability of their own industrial capacities to fight and survive in the face of increasingly global competition, because multinational companies, which invest in innovation and have access to huge

capital and labor, put underdeveloped countries in a subordinate position. This results in an increase in global tensions, not a reduction in poverty and an increase in living standards, which should be its primary goal. However, concerns about globalization are felt not only by underdeveloped countries, but increasingly by small and medium-sized enterprises from the United States and Europe, which are no longer able to provide an adequate response to the challenges of international competition. Setting and achieving a sustainable strategic advantage is a key lever of international integration based on a specific corpus of competitive advantage (observed at both macro and micro levels). The national has the advantage if it is rational in a broader context where the regional and global approach acquires a special dimension that goes beyond social or economic criteria. Competition or market competition is the basic regulator of the market. Competitiveness is competition, rivalry or competition process in order to achieve the best possible results. It contributes to innovation, better business and overall economic growth. However, if the competitiveness on the market is weak, then the national economy also suffers. This usually leads to protectionism, non-transparent government grants and barriers to entry into the world market. Therefore, strengthening productivity and general competitiveness must be the guiding idea in the implementation of the economic policy of each country (Starčević Subotić, 2014, p. 17). Competitive advantage is a realistic basis or rational way in which a particular organization can appear or compete in a selected market in order to achieve some of its specifically defined goals. The changed logic of the world market has conditioned that the most important sources of competitive advantage (at the level of only one company but also at the level of one country) should be actively and permanently sought in contrast to the traditional paradigm recognizable in economic or business policies by favoring low costs based on cheap labor, strength or raw material. Creating competitive advantages is especially important at the enterprise level, although the activities required to create and maintain them in an international environment are extremely complex. This is especially pronounced in certain branches that have largely globalized or are on the path of globalization. Therefore, the strategic framework of competitive advantage is extremely important for both effective and efficient or profitable business. In the practice of companies, there are other (bypass) ways to achieve profitability such as seeking state protection (exchange rate, incentives), making a profit and profit on the market through insufficient investment (resource or current monopoly position) or general

avoidance of global industries. dimensions) but these are solutions for which, as a rule, pays a high price when the time comes. In the world market, competitive advantage means relatively greater power or strength of one company, one product or one economy in relation to another. The basis of the strategic advantages of each participant in modern economic flows is not forever given geopolitical coordinates, but much more achieved competitive advantages that arise in the process of specific unification of efforts in the process of their integral creation - at the macro and micro level. "Oligopolistic competition among large, high-tech firms, where innovation is primarily a competitive weapon that provides lasting innovative activities and, most likely, their growth. In a market like this, where a few giant firms dominate a particular market, In this approach, the danger lies in the fact that companies that opt for this strategic framework must rely on risk exposure from competitors who build their advantage on the basis of a global strategy. Competitive advantage through a global strategy would mean concentrating total activities on one market segment and serving it on that basis through an integrally defined offer. Such a competitor does not have to be a large firm but can also be a smaller internationally oriented firm that has this global approach. Globalization brings lower transportation costs, better information technology, and a conscious policy of reducing barriers between countries to achieve efficiency based on large scale and specialization. "Multinational companies sell in many countries at the same time, but they may or may not produce in many countries" (Begg et al., 2010, p.176). Strategic commitments therefore start from respecting the currently valid global criteria by individual industries or businesses (electronics, mechanical engineering, agro-industry, etc.). At the national level, the goals of achieving comparative advantages on another modern basis are set - they are not measured on the basis of achieving better economic or business results, the so-called transactional way (price, export, quality, supply) in comparison with similar or other companies or branches in individual countries, but from the aspect of economic contribution of individual industries to the overall development of the country, living standards, employment, inclusion in the world reproductive cycle, etc. sets, traces and creates in the national economic or global markets from that perspective. Practice has shown that there is a direct relationship between the achieved marketing power and the total strength of the company, looking at marketing strength as a composite index consisting of several factors. The new role of the state as a catalyst is crucial in this.

CONCLUSION

The management of innovations and creations takes place in a dynamic, ie. technological environment, which has changed dramatically and is still changing rapidly, so that the changes that occur in the context of globalization are difficult to monitor, but also to adapt permanently. In this way, the interdependence that exists between the idea and the innovation is explained, ie. that there is no innovation if there is no idea, and that an idea can exist without innovation. Therefore, a new logical conclusion is drawn that the relationship between idea and innovation should be viewed as a relationship between the whole and the work in which the whole can exist without the work, or parts, but that the part cannot exist without the whole. Technology and innovation policy must get their rightful place in economies such as the countries of the region. This does not only mean declarative support for company projects, institutes, scientific institutions and the concrete operationalization of the adopted development strategies in the coming period. The state should have an integrative role in knowledge management on a broad economic basis by creating technological and innovation policies as an integral part of the overall economic policy. In this context, it is necessary to refocus specific subjects and adapt the instruments of technological and innovation policy in the conditions brought by the challenges of globalization. The inevitability of globalization does not exclude the opposition and protests of certain organizations that believe that globalization is one of the main causes of widening the gap between rich and poor. This gives new policy importance for the promotion of research cooperation, acceleration of business networking and clustering, by improving institutional ties, diffusion of technology and increasing employee mobility. The next important step that public authorities must take is to ensure the framework conditions for innovation management. These include competitiveness policies to increase competitiveness through innovation, but also to accelerate scientific research, education and training policies to develop the necessary human capital, regulatory reform policies to reduce administrative burdens and institutional rigidity, financial and fiscal policies to increase employee mobility and strengthen knowledge flows, foreign investment and trade policy towards strengthening technological diffusion and regional policy to improve complementarity between different levels of government initiatives. The benefits of modern development will be available to countries around the world if they are willing to innovate and work together to create a free business environment

(focusing on integrity and the rule of law, increased investment in information and communication infrastructure) and to invest in education to create the best trained and equipped staff to work in a global economy.

LITERATURE

- [1] Abernathy W. J., Utterback, J. M. (1978): *Patterns of industrial innovation*, Technology Review, Vol. 80 (June-July).
- [2] Begg, D., Ficher, S., Dornbusch, R. (2010). *Ekonomija*. Beograd: Datastatus.
- [3] Bobera, D. (2007). *Projektni menadžment*. Subotica: Ekonomski Fakultet Subotica.
- [4] Bomol, V. (2006) . *Inovativna mašinerija slobodnog tržišta*. Podgorica: CID Podgorica.
- [5] Davila, T., Epstein, M., Shelton, R. (2007). *Making Innovation Work*. Wharton School SAD.
- [6] Dobre, R. (2004). *Inovacije i tehnološke strategije*. Šibenik: VŠTM Šibenik.
- [7] Prash G (2007). *Optimistisch aus Prinzip*. Harvard Business Manager, CEO, 10.
- [8] Grant, A, (2016) . *How to Build a Culture of originality*. HBR.
- [9] Kotlica, S.2005). *Osnovi tehnološkog menadžmenta*. Beograd: Megatrend univerzitet Beograd.
- [10] Kutlača, Đ. Semenčenko, D. (2015). *Nacionalni inovacioni sistem u Srbiji: prošlost, sadašnjost, budućnost*. Beograd: Institut Mihajlo Pupin.
- [11] Schumpeter J (1942). : *Capitalism, Socialism and Democracy*, Harper & Brothers, USA
- [12] Starčević, V., Subotić, S., (2014). *Uticaj globalnih promjena na upravljanje poslovanjem zavisnih preduzeća MH Elektroprivrede Republike Srpske*. Bijeljina: Fakultet poslovne ekonomije Bijeljina. Novi Ekonomist, broj 16., jul-decembar 2014., str. 67-73
- [13] Starčević, V., Subotić, S. (2015). *Competitive Advantages of the Economy of Bosnia and Herzegovina as Precondition for Attracting Foreign Direct*. Strategic Management International Journal of Strategic Management and Decision Support Systems in Strategic Manegement, Vol. 20, No. 1. University of Novi Sad, Faculty of Economics in Subotica.

- [14] Verganti, R. (2016). *The Innovative Power of Criticism*. HBR, Januar.

Internet Sources

- [1] <https://www.danas.rs/svet/bregu-rcc-zapadni-balkan-ulaze-manje-od-jedan-odsto-bdp-a-za-inovacije-i-istrazivanja/> (pristup internetu 2.03.2020.)
- [2] https://www.researchgate.net/publication/334561423_Inovativnost_kao_kljucni_faktor_ko_nkurentnosti_drustva (pristup internetu 20.02.2020.)
- [3] <http://www.vps.ns.ac.rs/SB/2009/3.15.pdf> (pristup internetu 11.03.2020.)
- [4] <https://www.slideshare.net/SLDProject/inovacije-i-konkurentnost-preduzeca-28035611>
- [5] <http://kako.prodati.biz/inovacije-konkurentnost-preduzeca-kako-ostvariti-veci-profit-od-konkurencije/>
- [6] <https://www.danas.rs/svet/bregu-rcc-zapadni-balkan-ulaze-manje-od-jedan-odsto-bdp-a-za-inovacije-i-istrazivanja/> (pristup internetu 12.03.2020.)
- [7] <https://www.wipo.int/portal/en/index.html> (pristup internetu 16.03.2020.)

SUMMARY

Management of innovation and creation takes place in a dynamic, i.e. technological environment, which has changed dramatically and continues to change rapidly, so that the changes that take place in the conditions of globalization are difficult to keep track of, but also to adapt to them permanently. In this way, the interdependence that exists between an idea and an innovation is explained, that is, that there is no innovation if there is no idea, and that the idea can exist without innovation. Therefore, a new logical conclusion is drawn that the relation between idea and innovation should be seen as the relation of the whole and the part in which the whole can exist without the part or parts, but that the part cannot exist without the whole.