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INNOVATION AS A PROCESS

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Abstract: The theme of this paper is innovation as a continuous process that drives the global economy of today. The goal of this paper is to theoretically and practically explore the definition of innovation as the basis of business for solving existing problems of the organizations and/or people in a radically different way that generates high utility for all stakeholders in the process of innovating and placing a particular innovation on the market. Relevant scientific and professional literature in the field of economics is used to cover the topic. The research is expanded with various publications, professional journals, scientific articles, and of course, the Internet. Also, various general scientific methods are used such as: methods of analysis and synthesis, induction and deduction, methods of abstraction and concretization, method of explication, methods of description and compilation and others. To survive in today's dynamic market environment, it is of the utmost importance for all organizations to keep up with economic trends and reexamine existing business postulates. The key to success in today's world is rapid development based on continuous innovation. Although the impact of digitalization is not new, the digital economy is entering a new era that presents unprecedented challenges for businesses in the EU and globally. Disruptive innovations and digital tools are rapidly entering the business environment, causing significant changes in our way of life. This has created new opportunities and challenges and triggered the digital transformation of the economy. Innovations have become the cornerstone of Industry 4.0. In summary, the relentless shift from simple innovation and digitization to disruptive innovations based on combinations of modern technologies is forcing organizations to rethink their business practices. The bottom line, however, is the same: business and political leaders must understand an ever-changing economic environment and support those who will relentlessly and continuously innovate.

Keywords: innovation; digital economy; digital transformation; industry 4.0; competitiveness.

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INTRODUCTION

The theme of this paper is innovation as a continuous process that drives the global economy of today. The goal of this paper is to theoretically and practically explore the definition of innovation as the basis of business for solving existing problems of the organizations and/or people in a radically different way that generates high utility for all stakeholders in the process of innovating and placing a particular innovation on the market. On the basis of the topic and purpose of this paper, a working hypothesis has been set - It is possible to prove that innovation is a continuous process that never stops and is necessary to drive the global economy of today.

We live in an ever-changing world fueled by constant innovations where science fiction often becomes science fact. The greatest changes in recent human history are happening in the last few decades. Innovations, technology and digitization have already altered society and continue impacting not just our lives but virtually all business functions and industries. It is partially what innovation is all about – exponentially changing the world we live in. It is important to emphasize that innovations are not about predicting future, but rather about shaping it. Innovations are profoundly changing the ways we do business, buy, work and live. And beyond that, it is a continuous process that drives the global economy of today.

Innovation is a broad and complex term and there are many definitions of innovation, but none of them is unique enough to define exactly what the process of innovation is. The word innovation comes from the Latin word innovatus which actually means something new, novelty, or a change in an existing thing. In the broadest sense, innovation means new products and services, but also new technologies, new production processes, new marketing methods, and new management models. What is common to all definitions is that innovation is a novelty, whether it is a novelty in the world, in the market or in a company, emphasizing that it must be economically profitable. In its core, innovation is actually the basis for solving existing problems of the organizations and/or people in a radically different way that generates high utility for all stakeholders in the process of innovating.

According to the OECD's Oslo Manual¹ definition "Innovation is the implementation of new or significantly improved products (goods or services) or processes, a new marketing method or a new organizational method in business, a new organization in the workplace or in external relations" (Grčić Fabić, 2015). The beginnings of the development of the concept of innovation in the field of economics are connected with the analysis of Joseph Schumpeter in the first half of the 20th century, which marked innovations as the basic factor of technological progress and economic development. The first significant use of the term innovation itself began in the field of sociology, and it meant a major change. Change has been intensively studied in economics, primarily as technological change, and as part of research about technology as a factor of economic growth. Joseph Schumpeter significantly influenced the theory of innovation. According to him innovation represents a dynamic process in which new technologies replace the old, a process that he calls "creative destruction", and it

¹ OECD Oslo Manual is a manual developed to make comparative analysis to compare manufacturing innovation between two different companies or even different countries. According to it, innovation can be divided into three categories: product innovation, process innovation, and organizational / managerial innovation.

becomes an important driver of economic growth and development. He emphasized the importance of technological innovation for the economic development. The economic system is characterized by constant changes and those who do not adapt cannot survive (Grčić Fabić, 2015). Almost a century later we can see the full impact of his definitions. Today, more than ever innovations are in deep correlation with technology, digitization, competitiveness and consequently further economic growth.

The fact is that disruptive technology and innovative business models are forces behind digital economy of today. One of the changes that we see in recent years is the speed at innovations are happening. The doubling of computer processing speeds every 18 months, known as Moore's Law, is just one manifestation. Innovations and technology bring upon changes that are accelerating fast, displaying exponential growth – and consequences. While a range of technologies have accelerated disruption, business innovation and changes in human behavior, the exponential growth and pace of change is just a fraction of what is yet to come. That is why we need to ask ourselves a question: what will our lives and economy look like in 5 years? It is actually the question we must answer today, because these 5 years are going to happen in 2 years or even sooner, much quicker than we think (Tolić, Sabljić, & Tolić, 2018).

Therefore, to survive in today's dynamic market environment, it is of the utmost importance for all organizations to keep up with economic trends and reexamine existing business postulates. The key to success in today's world is rapid development based on continuous innovation. Disruptive innovations and digital tools are rapidly entering the business environment, causing significant changes in our way of working. They are solving existing problems of the organizations and/or people in a radically different way that generates high utility for all stakeholders in the process of innovating and placing a particular innovation on the market. This has created new opportunities and challenges and triggered the digital transformation of the business.

Innovations are generally considered to be a key aspect of competitive advantage, especially in an environment that is subject to a constant change. The research conducted in this paper is looking for opportunities to prove that continuous growth and further economic development of global economy is driven by continuous innovations and consequently increased competitiveness, having a root in unlimited human creativity. Theories of endogenous growth give a key role of economic growth to human creativity, R&D and, consequently, innovation.

INNOVATIONS AND INDUSTRY 4.0 – THE WHEEL THAT NEVER STOPS

The whole world is being digitized and economic development continues to accelerate. Digital companies and smart cities are new leverages of global development, both economic and social. The key to success in such world is rapid development based on constant innovations. We stand on the brink of a new industrial revolution, driven by new-generation information technologies. The possibilities of billions of people connected by mobile devices, with unprecedented processing power, storage capacity, and access to knowledge, are unlimited. And these possibilities will be multiplied by emerging technology breakthroughs in fields such as artificial intelligence, robotics, the Internet of Things, autonomous vehicles, 3-D printing, nanotechnology, biotechnology, materials science, energy storage, and quantum computing. All of this will open new horizons for industry to become more adven-

turous, more efficient, to improve processes and to develop innovative products and services (Schwab, 2016).

If we go way back through the human history, we can say that the First Industrial Revolution was based on the use of water and steam in the mechanization of production. The Second Industrial Revolution was based on the use of electricity in the creation of mass production, while the Third Industrial Revolution was based on electronics and information technology to automate production. Currently, the Fourth Industrial Revolution² is actually building on the Third Industrial Revolution. Fourth Industrial Revolution or Industry 4.0 is a digital revolution that began to emerge in the last few decades and is characterized by the fusion of different technologies. There are three reasons why today's transformations represent not merely a prolongation of the Third Industrial Revolution but rather the arrival of a Fourth and distinct one: velocity, scope, and systems impact. The speed of current breakthroughs has no historical precedent. When compared with previous industrial revolutions, the Fourth is evolving at an exponential rather than a linear pace. Moreover, it is disrupting almost every industry in every country. And the breadth and depth of these changes herald the transformation of entire systems of production, management, and governance (Schwab, 2016).

Like the revolutions that preceded it, Industry 4.0 has the potential to raise global income levels and improve the quality of life for the entire global population. To date, those who have gained the most from it have been consumers able to afford and access the digital world driven by constant and radical innovations; technology has made possible new products and services that increase the efficiency and pleasure of our personal lives. Ordering a cab, booking a flight, buying a product, making a payment, listening to music, watching a film, or playing a game - any of these can now be done remotely (Schwab, 2016). In the future, innovations will also lead to further digitization of all kinds of business areas and consequently our lives. Moreover, innovations are and will be one constant variable in the equation called competitiveness in digital economy. The role that innovations based on digital technologies are crucial in the Industry 4.0 – they represent an inexorable shift from being uncompetitive to being competitive in the digital age.

The acceleration of innovation and the velocity of disruption are hard to comprehend or anticipate and these drivers constitute a source of constant surprise. Indeed, across all industries, there is clear evidence that the technologies that underpin the Industry 4.0 are having a major impact on businesses. It is safe to say that innovation has become the cornerstone and second name of the digital economy and Industry 4.0 (Schwab, 2016).

One of the key innovators and disruptors in digital economy are platform companies. Actually, Industry 4.0 has made it possible to develop platform-based companies. These are flexible, mobile and transformational organizational structures that, as such, may not necessarily be completely digital, they may have physical elements, but their essence is to use the Internet as a major tool through which they reach their users, anywhere, anytime. Platforms generally work in many ways, one of them being a transaction business that aims to facilitate transactions between different organizations and types of individuals who might not otherwise be able to cooperate. Some examples of such platforms are: Airbnb, Uber, eBay, etc. In addition to transactional, there are innovation companies that provide a platform for creating new products and services. One such example is the Application Programming Interface (API), a developer platform that allows users to create new applications that can later be downloaded from the App Store or Google Play and used by millions of users of mobile devices. This whole innovation process creates a single circle that constantly connects users and thus attracts new ones, which ultimately provides this platform with increasing growth. Finally, we can say that Google and Apple are an integration platform because on the one hand it has an App or Play Store that acts as a transaction platform, while on the other it has an "API" that acts as an innovation platform (Evans & Gawer, 2016).

The difference between platforms and conventional companies is that platforms are not based on buying raw materials from which they later create their products and do not make a living from selling them. Instead, they (platforms) recruit participants, and then sell to each group of participants, i.e. users, access to another group of users. In this case, users are the entry units used by the platforms to create the intermediary service they provide. Some of the richest companies are making profits by connecting different groups of users, such as developers and end users, as noted in the case of Apple and Google. The most important thing in a business like this is to connect customers who provide a service or product to that group of users who want to buy a particular product. Another important difference is that platform organizations often know how to sell their services below market price or provide them for free. There is no such practice in the classical business, because it is inconceivable that anything is given free of charge to customers. The platforms themselves are increasingly intertwined with each other, which we can see in the example of Android and Uber. Uber connects drivers and travelers, all through app available to travelers and drivers on the Google Play Store and the App Store. Therefore, we can conclude that platform-based companies will only grow as the number of companies operating on the same principle increases every day, thus creating an even stronger connection of companies in the market. Also, we must not neglect the fact that the number of Internet users and mobile devices user are constantly growing in the world. Ultimately, the constant development of platform companies creates various opportunities and challenges for regions, nations, industries, companies and individual innovators.

All of this is actually in the core of Industry 4.0 - digital economy is growing and evolving through the development of platform companies, thus creating numerous opportunities for new and further innovations that will improve our lives. It is the wheel that never stops. Moreover, further economic development will be based on boosting competitiveness through constant innovations, which proves that innovation as a continuous process is necessary to drive the global economy of today.

INNOVATIONS AS THE DRIVER BEHIND DIGITAL ECONOMY AND ECONOMIC GROWTH

Global economic growth appears to be losing momentum relative to last year. Productivity growth is at a record low. Trade battles are brewing. Economic uncertainty is high. To survive in today's dynamic digital economy, all organizations must follow trends and reexamine their existing business postulates. Despite this gloomy perspective, innovation is blossoming around the world. In developed and developing economies alike, formal innovation and less formal modes of innovation are thriving. Today, developed and developing economies of all types promote innovation to achieve economic and social development. It is now also better understood that innovation is taking place in all realms of the economy, not only in high-tech companies and technology sectors (Schwab, 2016). Disruptive innovations and digital tools are rapidly entering the business environment, causing significant changes in the way we live and work. Thanks to innovations, many new opportunities have emerged which triggered the digital transformation of business that consequently leads to global economy growth.

Innovation is the most important driver of national economic well-being. It is the cause of an increase in global competitiveness and a key in creating competitive organizations and overall economies. This is why a large number of nations are engaged in achieving innovation advantages (Božić, 2017). The digital economy is entering a new era that presents unprecedented challenges for organizations around the world, and innovation is the key to their competitive advantage.

Innovation is considered today to be a key factor in the growth and development of modern businesses and is the driving force behind today's economy in many countries. In the complex conditions of fierce competition in business, all businesses are forced to invest in development and innovate if they are to survive and succeed. Otherwise, if neglected, businesses are doomed to poor business results, lack of development and fight for survival (Dereli, 2015). Such businesses are ultimately destroyed by environment and competition that innovates effectively, constantly and relentlessly.

Globalization, rapid development of technology and frequent changes in the market create the need for continuous development of technological innovations, application of which strengthens competitiveness in the global market. Considering that organizations today face global competition, it is not enough to be competitive only on the domestic market. Organizations no matter where they do business have to compete with foreign competition in order to secure their market share and ultimately to survive in the global market. In order to do so, disruptive innovation is often the key to success. The key components of the successful innovation process that bring disruptive changes to the market are primarily focus on (digital) user experience, continuous innovation of the products/services and adequate regulatory framework to enable new business models. When innovation process is set up in such a way, then it becomes a major driver of development and economic growth. However, it is also important to understand innovation as one of the imperatives for survival in today's increasingly competitive world. Innovation as a process aims to boost productivity and, in addition to that, it brings a lot of other benefits to all stakeholders in that process.

Innovation is a continuous process that never stops. It is the wheel that just keeps on turning, an inexorable force to be reckoned with and it is driving the digital economy of today. The role and the impact of innovation in digital economy is crucial. Moreover, the changes we are witnessing and the changes it brings in the years to come will likely be the engine of the future economic growth. Consequently, the main resources in the digital economy are knowledge and innovation. Both of them are major drivers of economic development but also credible indicators of the competitiveness of countries. This is proven by the fact that today's most competitive economies are also the most innovative countries in the world, which will be further addressed in the next chapter.

INNOVATION IS THE KEY TO BOOST COMPETITIVENESS IN THE EU

Different indexes exist to determine the innovation potential and level of innovation of each country as well as its correlation with competitiveness. The most important of these are: The Global Innovation Index, The INSEAD Global Innovation Index and The INSEAD Innovation Efficacy Index. In this paper we will focus on the Global Innovation Index³ (GII) by the World Intellectual Property Organization (WIPO). It is the most reliable source to measure the innovation of countries in the world. It is created in collaboration of two business schools - Cornell - SC Johnson College of Business and INSEAD - The Business School for the World and the UN Intellectual Property Organization (WIPO).

The global reports say that innovation still remains concentrated in a few economies, while some others show potential to catch up. For years, there is a positive correlation between an economy's level of development (measured by GDP per capita) and innovation performance. In other words, wealthier economies perform better on innovation (Global Innovation Index, 2019).

But slowly, the geography of innovation is changing. In the top echelon, Switzerland, Sweden, and the United States of America lead the innovation rankings, with the latter two moving up in GII 2019. Switzerland remains the world's leader in innovation in 2019. It ranks first in the GII for the ninth consecutive year. Other European nations, such as the Netherlands and Germany, along with Singapore in Asia, remain consistent members of the GII top 10. This year, Israel moves up to the 10th position, marking the first time an economy from the Northern Africa and Western Asia region cracks the top 10 rankings. Croatian economy has a solid result in this year's report, placing it on 44. place in innovation performance among 129 countries (Global Innovation Index, 2019).

The global innovation landscape is changing. Innovation expenditures and innovation efforts, including the number of researchers and entrepreneurs who actively drive innovation efforts, have been scaled up massively. The world witnessed an increase in innovation investments over recent years, as measured by the average investments of economies across all levels of development. Despite economic uncertainty, innovation expenditures have been growing and seem resilient in light of the current economic cycle (Global Innovation Index, 2019). The use of intellectual property (IP) reached record highs in 2017 and 2018. Yet innovation remains relatively "spiky", concentrated in a few countries and regions only. This is reflected in other key innovation indicators, such as R&D, researchers, and intellectual property (IP). From a historic perspective, the global landscape of science and technology investment, and investments in education and human capital, have undergone important shifts over the last three decades. Global R&D expenditures have continued to rise, more than doubling between 1996 and 2017. Today, it is not only high-income economies carrying out R&D in earnest. While in 1996 high-income economies accounted for 87% of global R&D, in 2017, they only represented 64% of total investments-the lowest share registered in the last 30 years (Global Innovation Index, 2019).

When it comes to competitiveness, it is a multidimensional category that can

³ The Global Innovation Index (GII) 2019 ranks and breaks down the innovation performance of 129 countries and economies around the world.

be viewed from the level of the whole economy, individual branches, industries, sectors or enterprises. The definitions of competitiveness itself are numerous, but there is no complete agreement on the definition at the microeconomic and macroeconomic levels. Competitiveness is the ability of a country to achieve success in the global economy which results in a better life standard for its citizens. It is the result of many factors, especially competitiveness at the company level and favorable business environment that encourages the investments, innovations and introduction of new products and processes. Interaction of all these factors lead to increased productivity, economic growth and development. Increasing competitiveness in the long run also involves increasing innovation and is only possible through the cooperation of the business community, government and society (Šokčević, Šlogar, & Rudančić, 2018), i.e. the Triple Helix model. The competitive advantages of a country are major factors in its involvement in international trade, and thereby increasing the export capacity of the entire economy. Today, the competitive advantages of certain countries are viewed by their innovation potential and the level of digital economy development. Different analysis of competitiveness and innovation tend to show that the most competitive countries are also the countries with the highest innovation impact. The competitiveness of a national economy can also increase as a result of a properly defined and implemented trade, technological and industrial strategies. Once achieved high level of competitiveness in the global economy is not a perpetual category, which emphasizes the need for continuous improvement, technical and technological innovations, as well as adaptation and high flexibility of the entire economic system.

There are also different indexes that determine competitiveness of certain economy, such as IMD World Competitiveness Ranking, KOF Globalization Index⁴ and the Global Competitiveness Index (GCI) issued by the World Economic Forum. The GCI issued by World Economic Forum is one of the most well-known indicators of a country's competitiveness. Globalization and the Fourth Industrial Revolution have created new opportunities but also disruption and polarization within and between economies and societies. In this context, the World Economic Forum introduced last year the new Global Competitiveness Index 4.0. (GCI 4.0). The GCI 4.0 puts the spotlight on the Fourth Industrial Revolution (Industry 4.0) and innovation that promotes new business models and accelerates economic growth. The Industry 4.0 captures and reflects the changes that have come under the influence of advanced information and communication technologies and have created a leap forward in the development of a new industrial paradigm. In order to prosper, economies need to be open to new ideas, effective in embracing change, determined to build an innovation ecosystem where innovation is present at all levels and invest in people as a key factor of their success. The GCI 4.0 index identifies the strengths and weaknesses of each individual economy and helps identify important areas for improvement and track progress (Schwab Klaus, 2019).

⁴ The KOF Globalization Index measures the economic, social and political dimensions of globalization.



Graph 1. Croatia's pillars of competitiveness

Source: (Schwab Klaus, 2019)

The GCI 4.0 is the product of an aggregation of 103 individual indicators, derived from a combination of data from international organizations as well as from the World Economic Forum's Executive Opinion Survey. Indicators are organized into 12 'pillars': Institutions; Infrastructure; ICT adoption; Macroeconomic stability; Health; Skills; Product market; Labor market; Financial system; Market size; Business dynamism; and Innovation capability (Schwab Klaus, 2019).

In this year's GCI Report, Singapore is the most competitive country in the world this year, followed by the United States, Hong Kong, the Netherlands, Switzerland, Japan, Germany Sweden, the United Kingdom and Denmark. Croatia is ranked 63rd among 141 economies in the world and has improved its position by 5 places compared to last year, which makes it the most improved country in the region (Graph 1).

Country	2019 Ranking	Change from 2018 ranking
Czech Republic	32	-3
Slovenia	35	0
Poland	37	+1
Slovakia	42	-1
Hungary	47	+1
Bulgaria	49	0
Romania	52	+2
Greece	59	-2
Croatia	63	+5
Serbia	72	-7
Montenegro	73	-2
Albania	81	-5

Table 1. Croatia and other referent countries

Source: (Schwab Klaus, 2019)

When compared to similar transitional countries, Croatia still lags behind Czech Republic, Slovenia, Poland, Slovakia and Hungary, but is in front of its neighbors like Serbia, Montenegro and others (Table 1). Report also shows the correlation between innovation capacity and competitiveness. All of the most competitive countries had great results when it comes to innovation capacity. This goes to show the importance of innovation in driving global digital economy. Innovations and digital transformation are the next engine of growth, not just for this region, but for the whole EU and globally as well. When comparing different innovation, competitiveness and economic growth. The better the innovation performance of economy the greater its competitiveness and higher the economy growth.

By analyzing the data from these reports regarding the competitiveness and innovation of the observed countries, it is possible to find the clear correlation between these two terms. Most countries that have better ranking on the competitiveness ladder also have better positions on the innovation ladder.

The role and importance of innovation are also recognized at the level of the common European policy. Innovation policy is a key factor in the European Union (EU) 'Lisbon Strategy', which incorporates EU economic development and policy (European Commission, 2016). At European Union policy level, innovation has been recognized as a crucial factor in creating economic growth and employment in EU countries. The European Union seeks to strengthen competitiveness among other players in the global economy by enhancing the innovative activities of European businesses.

The aforementioned GCI 4.0 report also show that by abolishing administrative procedures, creating an atmosphere of legal certainty, governments can improve the business and investment climate. In order to strengthen the innovation ecosystem, policies must encourage the transfer of technology and knowledge in order to strengthen

the technological readiness of the economy to apply new knowledge to the creation of innovative products and services by developing a scientific and educational system (Schwab Klaus, 2019).

REGULATORY FRAMEWORK FOR INNOVATORS AND DIGITAL ECONOMY

Current systems of public policy and decision-making evolved alongside the Second Industrial Revolution, when decision-makers had time to study a specific issue and develop the necessary response or appropriate regulatory framework. The whole process was designed to be linear and mechanistic, following a strict "top down" approach. But such an approach is no longer feasible. Given the Fourth Industrial Revolution's rapid pace of change and broad impacts, legislators and regulators are being challenged to an unprecedented degree and for the most part are proving unable to cope (Schwab, 2016).

How, then, can they preserve the interest of the consumers and the public at large while continuing to support innovation and technological development? By embracing "agile" governance, just as the private sector has increasingly adopted agile responses to software development and business operations more generally. This means regulators must continuously adapt to a new, fast-changing environment, reinventing themselves so they can truly understand what it is they are regulating. To do so, governments and regulatory agencies will need to collaborate closely with business and civil society (Schwab, 2016).

Besides this, it is of the utmost importance for countries to improve the ecosystem for startups and innovators. This is an important part of reforms of public sector and making it suitable for digital age. Policy makers should strive to develop an entrepreneurial talent pool by embedding entrepreneurship firmly in formal education. Policy makers can also expand the entrepreneurial talent pool by attracting creative, entrepreneurial individuals from abroad. Furthermore, the ecosystem can be improved by strengthening major cities as startup hubs.

Creating testing grounds for new business models would also boost the attractiveness of EU countries for digital entrepreneurs. This could be done by means of "regulatory sandboxes", for example, enabling entrepreneurs to try out their innovations in real-life market conditions. Some CEE countries are already doing this; for example, the Bank of Lithuania is introducing a regulatory and technological sandbox platform for blockchain solutions (Digital McKinsey, 2018).

Innovations based on digital technologies are developing so fast that the legal framework needs to be monitored constantly to make sure it remains in line with the technological development. The fast development and wider use of digital technologies may require further modernization of the current regulatory framework. Clarifying and possibly adjusting the legislative framework is important to establish the necessary trust and legal certainty for industry in Europe and will be taken forward as part of the European Commission's Better Regulation REFIT program (European Commission, 2019). Also, unnecessary restrictions should be removed and national systems should be better aligned to allow a smoother flow of data within the EU, as well as to stimulate the development of new technologies such as cloud computing and platform companies like Uber, Airbnb and others. EU Commission and national

governments across Europe need to assess the different legal and technical obstacles and then define measures to address them. One of the plans of the EU is to set the regulatory framework to attract, maintain and encourage new innovators and business models. Great number of platform companies are already launched in the Europe and they represent more than 4% of the total market capital (European Commission, 2019). This fact certainly serves as an incentive for the creation of the mentioned regulatory framework. In order to achieve this, it is necessary to create a functional, digital single market that will bring down the barriers to enable these companies to enter the market and to enable their rapid growth. The European Commission has identified the completion of the Digital Single Market (DSM) strategy as one of its 10 political priorities (European Commission, 2019), thus it was adopted back in 2015. In the forthcoming period we can expect that EU Commission will provide further assistance and recommendations to Member States in order to support the balanced development of digital economy. There is already a large number of initiatives and specific actions of aid that are trying to support the creation of an innovative regulatory environment based on platform companies. Because these platform companies are promoting innovations and digital transformation that will generate economic growth across Europe. Creating and establishing these platform companies that will be based in the EU is set to become economical and strategical imperative for Europe. Another, very important plan for the EU is the creation of a balanced regulatory framework for platform companies in the single digital market. A proper regulatory framework for the digital economy should be conducive for the improvement of sustainable development for digital companies and innovative business models in Europe (European Commission, 2016).

Reforms in the public sector, i.e. national and sectoral policies, regulations and economic development play a key role in shaping the digital age economy. For example, China, which has the largest population of Internet users in the world at 721 million, is constantly adapting its regulatory framework quickly and effectively. India, with 462 million Internet users, is the digital economy with probably the greatest potential which seeks to boost its economic competitiveness. Last but not least, and still the most developed economy in the world, USA - in collaboration with its leading corporations, is constantly improving administrative procedures and regulations. Unfortunately, the European Union is adapting to the digital age in a slower pace and is not sufficiently exploiting the market of its 412 million internet users. Although it is in the process of creating a "digital single market", the European Union's economic development strategy is based on digitization and the development and application of new business models. The European Union is currently in the period of the EU eGovernment Action Plan, which as a result have more and more EU-co-financed projects with a strong component of digitalization to drive the digital transformation of the economy and economic adaptation to the digital age (Antoliak, 2018).

The rise of digital companies worldwide is triggering reactions from governments both at the international and national level. In many cases, governments see these companies as vehicles for positive change and innovations, driving greater productivity captured through better asset utilization and the overall idea of the "sharing economy" (Tolić, Sabljić, & Tolić, 2018). However, in other cases, namely Europe (Croatia as well) they are creating challenges across a range of policy issues including labor rights, tax legislations, competition and disparities in insurance coverage. These global economic trends are inevitable, innovation is an ongoing process and we need to adapt in the new digital economy. In order to embrace changes and opportunities that lie ahead, governments need to create good public policies and strategies that enable improvement of the regulatory and business environment for the adoption of these innovative business models as part of digital transformation of economy.

CONCLUSION

Innovation and digital transformation are poised to become the new engine of economic growth. The key to success in today's world is rapid development based on continuous innovation. Business and political leaders need to understand the ever-changing economic environment and support those who will relentlessly and continuously innovate. Empirical research has shown that to achieve long-term economic growth it is crucial to have a stable and stimulating regulatory framework. Hence, governments need to create a socio-economic-legal environment suitable for innovations and further business development based on digital technology. Innovation is the most important driver of national economic well-being. It is the cause of an increase in global competitiveness and a key in creating competitive organizations and overall economies. This is why a large number of nations are engaged in achieving innovation advantages. The global reports say that innovation still remains concentrated in a few economies, while some others show potential to catch up. For years, there is a positive correlation between an economy's level of development (measured by GDP per capita) and innovation performance. In other words, wealthier economies perform better on innovation. According to GII, Switzerland is the world's most innovative country followed by Sweden, the United States of America, the Netherlands and the United Kingdom (Global Innovation Index, 2019). Croatian economy has a solid result in this year's report, placing it on 44. place in innovation performance among 129 countries. By analyzing the data from global reports on competitiveness and innovation of the observed countries, it is possible to find the correlation between these two terms. Most countries that are more ranked on the competitiveness ladder also have better positions on the innovation ladder. The results and information obtained from the theoretical research and conducted analysis provide a great insight about the impact of continuous innovations as a driver of economic growth in digital economy. Therefore, it is clear that the hypothesis of this paper can be accepted as follows: it is possible to prove that innovation is a continuous process that never stops and is necessary to drive the global economy of today. The research conducted in this paper has shown us the possibility of continuous growth and development, precisely thanks to innovation and global competitiveness. They have found a foothold in unlimited human creativity, which is one of the key factors of bringing innovations to life. Different analysis of competitiveness and innovation conducted in this paper tend to show that the most competitive countries are also the countries with the highest innovation impact. The competitiveness of a national economy depends largely on its innovation performance. Also, when a country once achieves the high level of competitiveness, it is important to know that it is not a perpetual category. That clearly emphasizes the need for continuous innovation process, to boost further economic growth and thus keep the high level of competitiveness. In conclusion, to increase competitiveness, accelerate GDP and economic growth, countries have to focus on few variables. Namely, increase innovation performance through investments in R&D, in human capital and through direct foreign investments, all of which will contribute to more innovative and a more technologically intensive structure of their economy. Also, they need to improve their regulatory framework and business environment to be more in line with digital economy, i.e. to improve the ecosystem for startups and innovators, for platform companies and other, which will directly contribute to a better competitiveness of their economy.

LITERATURE

- Antoljak, V. (2018). *www.apsolon.com*. Retrieved from Digitalnom transformacijom javnog sektora do veće konkurentnosti: https://apsolon.com/digitalnom-transformacijom-javnog-sektora-do-vece-konkurentnosti/
- Božić, I. (2017). Inovativnost i konkurentnost. Sveučilište Jurja Dobrile u Puli.
- Dereli, D. D. (2015). Innovation Management in Global Competition and Competitive Advantage. *Procedia Social and Behavioral Sciences*, 1365-1370.
- Digital McKinsey. (2018). https://digitalchallengers.mckinsey.com/. Retrieved from The rise of Digital Challengers: https://digitalchallengers.mckinsey.com/
- European Commission. (2016). *https://eur-lex.europa.eu*. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52016DC0288
- European Commission. (2019). https://ec.europa.eu. Retrieved from eGovernment Benchmark 2019: https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=62298
- Evans, P. C., & Gawer, A. (2016). *www.thecge.net*. Retrieved from The Rise of the Platform Enterprise - A Global Survey: https://www.thecge.net/app/uploads/2016/01/PDF-WEB-Platform-Survey_01_12.pdf
- Global Innovation Index, T. (2019). *www.wipo.int*. Retrieved from https://www.wipo.int/ edocs/pubdocs/en/wipo_pub_gii_2019-intro3.pdf
- Grčić Fabić, M. (2015). Menadžerske inovacije u funkciji razvoja učinkovitosti lokalne samouprave u Republici Hrvatskoj.
- Schwab Klaus, W. E. (2019). www.konkurentnost.hr. Retrieved from The Global Competitiveness Report: http://konkurentnost.hr/wp-content/uploads/2019/10/WEF_ TheGlobalCompetitivenessReport2019.pdf
- Schwab, K. (2016). *www.weforum.org*. Retrieved from The Fourth Industrial Revolution: what it means, how to respond: https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/
- Šokčević, S., Šlogar, H., & Rudančić, A. (2018). Značaj inovacija i konkurentnosti za gospodarski rast i razvoj hrvatskog gospodarstva. *7.PAR International Leadership Conference (PILC)*, 207-229.
- Tolić, I., Sabljić, D., & Tolić, T. (2018). Digital Transformation challenges and changes ahead. Economic Integrations, Theory, Cooperation and Perspectives - Integration reforms and business challenges (pp. 261-271). Mostar: Libertas international University.

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