

## The EU's common digital market, an open door to the Fourth Industrial Revolution

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### Abstract

Standing on the verge of the Fourth Industrial Revolution that will challenge and radically change our everyday life and work, there is a need to review the organization of society in accordance with these developments of the time. The technology and the effect of digitalization, in its complexity, will make a transformation that will be different from everything that the human has previously experienced in its developmental phases.

The ambitious strategy, the European master plan to make a Single Digital Market of the EU, Europe has taken a step to embrace the new industrial revolution and has opened up digital opportunities for people and businesses. This strategy will make 28 national markets in a single market. This article shows the positive impact of the EU's digital internal market and at the same time emphasizes the need for state transformation in this new process. Research methods that will be used: historical and comparative through deductive theory. In this new world reality, one of the priorities for Europe is the connection of the single digital market. In this process of European integration, state transformation processes are also needed.

**Keywords:** Single Digital Market, EU, Fourth Industrial Revolution.

### Introduction

The world is experiencing the appearance of a new economic model, which is a reference point for the new industry 4.0. The European Union responded to this challenge and courageously accepted the new course of industry, the road towards Europe 4.0. The EU, with its strategy and intentions, has taken the initiative in particular to create a Digital Single Market<sup>1</sup> and it can be said that it is well prepared to create smart digital economies that will be based on sustainable development and high profitability for the benefit of society entirety.

Transformations, digital technology, digitalization and modernization, which is happening at the same time, will improve the living standards of different groups in society. Consequently, the EU must show continued leadership in achieving this goal. A leadership that comes from the efforts of different groups in society: citizens, government, industry, academy. The concept of a Single Digital Market that combines the single 28-1 EU market, a vision that has inspired 28 EU member states, where it is or may feel like an incentive to return to the EU the global market and the global agenda as a leading factor.

<sup>1</sup> European Union, Retrieved from <https://eeas.europa.eu/sites/eeas/files/ten-priorities-for-europe.pdf>.

## Industrial Revolution

It is obvious the change that is happening around us, from the supercomputers, the neuro-technology, the self-control machine of intelligent robots. Some call it the fourth industrial revolution, some are calling industry 4.0, but whatever the name is, it is a combination of: Cyber-Physical Systems, Internet sites, Internet, Services, and the smart factory (Cyber-physical systems, internet sites, internet services, smart factory (Herčko, J. Slamková, E. Hnát, J, 2015).

The industry concept 4.0 is based on six basic principles: interaction; virtualization; decentralization; real-time facilities; oriented so-called service; services companies; modularity and reconfiguration.<sup>2</sup> The fourth industrial revolution leads to a growing development of sophisticated digital technologies that directly affect the change in production, interaction between consumer consumption with manufacturers, and artificial intelligence, which complements human intelligence.

The term "Industry 4.0" originally came from a project of the High Technology Strategy of the Government of Germany, and it was first mentioned in 2011 at the Hannover Fair.

But all the changes brought by the new industrial revolution raise some questions: whether companies will be able to adapt, if governments fail to fix new technologies to use their benefits, new security issues that will emerging on the horizon, social changes, increasing inequality, etc.

Professor Klaus in his book highlights technologies that drive a new revolution that raises issues of great influence on governments, businesses, civil society and individuals, and the suggestions for response. His view is that the 4th Industrial Revolution is in our control, while we are able to cooperate by leaving aside geographic differences and in order to exploit the opportunities that are present.

Because of the need to form a common future, and knowing that new technologies are for the benefit of people, governments decide on the development steps that will bring the greatest benefits to the world.

The development of the fourth industrial revolution will increase global profit and will improve the quality of life of the people in the world. It can be distinguished in some aspects:

- For the economy: productivity growth, innovation and cooperation, new organizational forms and business models, security, productivity growth, better services and a big change in customer expectations. New technologies make products more competitive, there will be changes in the product life cycle, a new chain of industrial values, changing the way databases are kept with a special emphasis on their security.<sup>3</sup>
- For the Government: On one side, new technologies enable citizens to come closer to citizens, but at the same time it provide them with more tools through which governments can control citizens. The effects of new socio-economic factors

<sup>2</sup> Interoperability • Virtualization • Decentralization • Capacities in real time • Service-orientation - services companies, • Modularity and reconfigurability.

<sup>3</sup> Г.Наумовски, Д.Рашковски (2017). Базис на податоци“, види повеќе во: Право и информатичка технологија, , стра.111-133.

are evident. What matters in this section is the cooperation of the authorities, particularly in the legal regulation, with the citizens, in order to adequately respond to the changes brought by the new time.

- For the people: the biggest challenge in this world change will be privacy, both in terms of ownership (which it owns) and in terms of its protection, customer relationships and various new schemes, the need for education and new skills among workers, and the need for engagement to develop new skills.

### **The EU's Single Digital Market in response to the Industrial Revolution 4.0**

The European Union created by the Maastricht Treaty is today a union, a community that connects 28 members under its umbrella. The European Commission works on a wide range of issues that affect them and are of interest to European citizens and the EU itself. The European Commission, in its 10 priorities, has a strategy for the creation of a single digital market, a single digital market policy in the EU.

Recognizing this, the European Commission, as one of its main tasks, defines the creation of a Single Digital Market. This means removing different regulations from 28 national markets to move at only one market. The European Commission established a strategy for the Single Digital Market, where the flow and exchange of goods, people, capital and services will be much better provided, and the efficiency of processes in general, regardless of nationality or place of residence in question within the EU.

The only digital market is supposed to be able to contribute to increasing employment, development, competitiveness, investment and innovation. Opening new opportunities in the market with over 500 million users, especially emphasizing the benefits that will be gained through electronic commerce.<sup>4</sup>

Realizing the Single Digital Market will also confirm the EU's position as world leader in the digital economy. Commissioner Juncker has stated that creating a common digital market will generate up to 250 billion euros in additional growth in Europe during the term of the next commission, which will create hundreds of new jobs, will have the opportunity of hiring young people and creating a society based on knowledge.

To achieve this, all this will have to make certain steps, such as harmonizing legislation in member states, establishing common rules for personal data protection, common telecom rules, altering and modernizing copyright in the digital revolution and to change customer behavior, simplify and modernize online shopping customers.

The usage of digital technology and online services should go as a horizontal policy, which should cover all sectors of the economy and the public sector. The European Commission as one of its top priorities in 2015 sets out the strategy for the single digital market in the way that the single market would be wider and more effective

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<sup>4</sup> Електронска трговија- пошироко значење- размена на информации, одржување на деловни односи и правење на деловни трансакции преку средствата на телекомуникациските мрежи; потесно значење: купување и продавање на стоки или услуги и информации преку овие мрежи. (Види повеќе во: Право и информатичка технологија, Г.Наумовски, Д.Рашковски, стр. 83-110, 2017 година).

from which companies and consummators would benefit.<sup>5</sup> Drafting initiatives as legislative proposals in accordance with the procedures are considered by the co-legislator, the European Parliament and the Council of Europe. The strategy for the single digital market is built on three pillars:

- Access: Better access for consumers and businesses to online products and services in Europe - this involves removing differences in online and offline worlds to remove barriers to cross-border online activities.
- Environment and conditions: creation of conditions for the development of digital networks and services - which means fast secure infrastructure and good secure services, backed by appropriate regulatory innovation conditions, investment and fair competition.
- Economy and Society: maximizing the potential for growth of the European digital economy - this includes investing in IT infrastructure and technologies such as Cloud computing and Big Data, and researches and innovation that will boost industrial competitiveness as well as better public services , inclusiveness and skill.

Since 2015, when the Strategy has been approved, the European Commission has created 35 legislative proposals and public policy initiatives, as currently published in the strategy itself. During this period, the focus is on securing a political agreement with the European Parliament and the European Council on all proposals.

It may be noted that this is one of the most difficult steps in the implementation of the strategy, given that the various national legislations in member states are in question. The key that will support the growth of high-speed and high-quality investments in networks is the EU telecom and proposal rules which are critical to the full implementation of the digital economy and society in general.

Except the draft laws in the field of telecommunications, there are draft laws: e-commerce growth, modernization of copyright, audiovisual, and private rules, bringing digital rights, ensuring affordable coverage, and harmonization of VAT - rules.

At a time when digital technologies are developing at high speed, the more the legal framework needs to be constantly monitored in order to be compatible with technological developments. The fast development and widespread use of technologies will require new changes and modernization of the current regulatory framework. To ensure confidence and legal certainty, it is necessary to constantly modernize and adapt the legal framework to reality in the EU industry. This issue is being addressed by the Better Regulation REFIT Platform.<sup>6</sup> The REFIT platform was created in May 2015 with the purpose of improving the regulations and advising the Commission on how to create more effective and effective EU regulations. In order to achieve better results of legal regulation being created, the Commission observes the effects they have on people's daily lives. Good regulation is based on a transparent process that involves all actors, citizens and stakeholders. By better combining national systems,

<sup>5</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions "Upgrading the Single Market: more opportunities for people and business".

<sup>6</sup> European Commission (2015) REFIT Platform. Retrieved from [https://ec.europa.eu/info/sites/info/files/refit\\_platform\\_brochure.pdf](https://ec.europa.eu/info/sites/info/files/refit_platform_brochure.pdf).

it will enable a better flow of EU data and will stimulate the development of new technologies. Through an assessment of the diversity of legal and technical barriers that are a feature of the various national EU systems, the Commission will determine the measures for their removal.

On April 19, 2016, the European Commission launched the first initiative of a package of initiatives within the Single Digital Market.<sup>7</sup> The initiative aims the industry, the work and adding more national initiatives for industry digitalization such as industry 4.0., Smart Industry, and the industry of the future, the Commission through the use of policy instruments, financial support, co-ordination and legislative power will encourage future public and private investments in all sectors of industry aimed at creating a framework precondition for the digital industrial revolution.

In May 2017, the European Commission publishes the Report on the Implementation of the Strategy for a Single Digital Market, showing progress, and all that remains to be realized. Three key areas that can be identified as places where additional work is required in order to achieve an open, fair and secure digital environment are:

- European electronic economy - to develop into its full potential;
- Responding to cyber security challenges - in order to protect European funds;
- Promoting online platforms, as responsible persons, for a right online ecosystem.

Moreover, the Commission is planning to propose: the numerous non-legal areas in digital craftsmanship, digitalization of industry and services, artificial intelligence, modernization of public services, health and care, and the global dimension of the Digital Single Market. Encouraging and complementing investments in computer technologies, super-performance, digital health, collaboration, connectivity and mobility in the area of cross-border investments. One of the main issues is the focus of investments in the field of infrastructure and digital services in the EU, Member States, the private sector, and the part of the global dimension of the Single Digital Market.

### Consideration

The 4th Industrial Revolution concept refers to the new technologies and chain concepts associated with the value of the companies. For this reason, by introducing the only digital market, the Commission paves the way for the digitization of European industry by supporting efforts to achieve competitiveness, innovation, growth and sustainable development.

#### *Different degrees of digitization*

Many companies in the business sector are struggling to survive in the 3rd Industrial Revolution, and while the challenges that new technologies bring; they are too big for them. The impact is especially small and medium-sized companies that don't have developed technology and they need to be supported and motivated to accept new opportunities that are on the horizon. DESI, the Digital and Social Commission's

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<sup>7</sup> Communication from the commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on Digitizing European Industry Reaping the full benefits of a Digital Single Market. Retrieved from <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52016DC0180>.

Economic Index shows diversity in the degree of digitization in EU member states with a good result, while in some others, the progress is too small.<sup>8</sup> Example: The most developed digital economies in the EU are: Sweden, the Netherlands, Denmark and Finland, followed by Belgium, Luxembourg, the United Kingdom and Ireland. The countries with the lowest DESI index are: Italy, Bulgaria, Greece and Romania. It's good to be noted that positive results from the implementation of the Single Digital Market Strategy can still be identified and in 2016 year, most of EU members have improved the DESI index. The lowest growth in 2016 is recorded in Portugal, Latvia and Germany - 0.02, while the largest index growth and above the EU average of 0.028, is registered in Slovenia and Slovakia by even more than 0.04. The conclusion is that digital transformation in different national systems isn't developed at the same speed.

#### *Overcoming resistance to digitalization*

The economy is aware of the importance of digitalization, but it has to considerate that the most of the companies don't have the strategies that they would've achieved and started. Support will be given to the business sector in finding the right solutions for their transformation towards digitization where they will be drawn to overcome the resistance they may be present for digitization. Support should include not only the business sector, but also the government and academia, the triple helix.

The Commission in the direction of the Single Digital Market has the transparency in the issue of territorial boundaries (which means different cultures, languages and security level) and is distancing itself from the digitalization objective of the EU by creating a single digital market. It focuses on creating a large market to be competitive and will be a global factor, and focus on ways to overcome the differences in the digitization level among EU members. The Commission brings together EU member states about the same common key opportunities and challenges, and to be better together and more effectively to respond to them.

#### *Harmonization of different national legislation*

In general, given the diversity of national systems that are part of the EU, there are many legal challenges that remain in the Commission for the realization of the Single Digital Market. General principles in the area of telecommunications, intimacy and intellectual property where there is a need for a certain harmonization between them, major challenges in achieving pan-European principles at the national level, as well as certain laws that will be difficult to adapt to new technologies.

Implementing outdated legal solutions to the new digital world can be a source of frustration for citizens and the business sector as well as their treatment as blockers. Though they were the basis for understanding the value and importance of personal data, for example, they still have to match modern trends.

#### *Focus on data sharing and privacy*

The discussions about the opportunities and difficulties faced by the EU at a time when the profits of the 4th Industrial Revolution will inevitably gain momentum and focus on sharing and privacy data in light of the Commission's proposal for free movement of information which is, free-flow of data.

<sup>8</sup> Desi 2017, Retrieved from <https://ec.europa.eu/digital-single-market/sites/digital-agenda/files/un-titled.png>.

## Conclusions

With the creation of the EU, a single market is being created, but only in the physical sense. For more than 20 years, physical barriers between different EU member states have been unable to collapse. In the 21st century, the EU faces the challenge of everyday life becoming increasingly digitized and the access to a single market and overcoming the fragmented market is more than necessary.

The players in the global market are interested in good and large markets, not for small fragments as part of the EU market. On 15 June 2017, the Commission presented a free, free market without payment of roaming services, with a market previously prepared through the approved strategy and the implementation of the legal framework at the level of all EU Member States. Consequently, transferability and data flow across the EU will be simpler and faster and it will be difficult to transfer digital databases from one side of the EU to another.

Through the Lisbon Agenda 2011, where an industrial story is present, with the dominance of software in the telephone, a reduction in the importance of equipment, till now, manufacturers face challenges in their work. But the strategic position for a single digital market of the EU brings great opportunities for the economy, for every other aspect of living in the EU. The challenge is how to create a strategy and implement an order at the level of 28 countries, characterized by diversity in their legal or statutory legal regulation at the state level.

In 2017, other successes and progress have been achieved, such as: the flow of people - a benefit to the large percentage of people who are mobile and spend more time in different countries; different standards are offered: for example: 4G and 5G.

The EU Commission through the strategy for the introduction of the Single Digital Market is on the road to a very difficult process. What is important is that the focus is on legislation, the legal framework: what to propose, what changes we have to plan, we plan to do everything

Issues to be constantly asked to the Commission are: If the proposed changes and plans are aimed at improving and supporting the transition towards a single digital market; Are the basic strategic objectives set out in the documents that are respected throughout the process? Does it take into account the whole process and is it based on the latest technological advances? Are all the proposed measures leading to the integration into a digitized EU market? Is there any excuse for all this in the focus of the future? How will growth and development in external co-operation be achieved? The question that arises logically and requires good observation and is if the EU is using its defined digital single market goals, will it fail to seize the opportunity to become a global leader in the use of innovation digital for growth?

## References

- European Union, Retrieved from <https://eeas.europa.eu/sites/eeas/files/ten-priorities-for-europe.pdf>.
- Herčko, J. Slamková, E. Hnát, J. (2015). Industry 4.0 – new era of manufacturing. New concept of online education for students in the field of Digital Factory).

Schwab, K. (2016). The Fourth Industrial Revolution.

Г.Наумовски, Д.Рашковски (2017) Базис на податоци“, види повеќе во: Право и информатичка технологија, , стр.111-133.

EUR-LEX. Retrieved from: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=urisrv%3Axy0026>

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions “Upgrading the Single Market: more opportunities for people and business”.

A Digital Single Market Strategy for Europe, retrieved from <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52015DC0192>

European Commission (2015) REFIT Platform. Retrieved from [https://ec.europa.eu/info/sites/info/files/refit\\_platform\\_brochure.pdf](https://ec.europa.eu/info/sites/info/files/refit_platform_brochure.pdf).

Desi 2017, Retrieved from <https://ec.europa.eu/digital-single-market/sites/digital-agenda/files/untitled.png>