The Digital Single Market, Social Media, the Digital Educational System, Romania, and the European Union: A Critical View

Monica Eliza Motorga, West University of Timişoara, monica.motorga96@e-uvt.ro

Abstract

The primary goal of this article is to analyze, investigate, and interpret some concepts related to digitalization and Romanian digital policy in the context of the European Union, especially in these pandemic times that highlight the exclusion of disadvantaged people such as the young, low-income, and elderly from various perspectives such as the educational state, social, economic, and cultural. This paper proposes a brief history, status, and future perspectives of the digital era, as well as an objective perspective on the discrepancies between Romania's system and those at the European Union level, as well as discrepancies between ambitions and practical results via analyses and official statistics. This article also contends that Romania has a large potential for digital growth, and that the use of technology may aid and enhance the lives of individuals from various vulnerable groups, such as the elderly and schoolchildren.

Keywords: digital era, indicators, goals, technology, digitalization

Introduction

Now, technology is what pushes humanity forward. The information era has brought undoubtedly with it many opportunities and many challenges. The pandemic also came up with a multitude of changes. Positive and negative impacts of COVID-19 have been felt event by Romania in the economic, health, educational and social sphere. An interesting point of discussion is if the crisis has found a Romania prepared (The EU Bank, 2020) in the real sense of the word to survive and to be ready to face the crisis. The Digital Economy Report has argued that the digital revolution has revolutionized our lives and society at an unparalleled rate and scale, bringing both enormous benefits and terrible problems (United Nations, 2019). Now, more than ever, the need for technology and the high demand for digitalization have spoken out in a challenging context. Digitization has become the focus of interest. An opportunity and at the same time a challenge quickly became the invocation of the solution to overcome such a crisis.

The paper's structure follows three main sections: the first one is the introduction into the topic, with currently and past statistics and actions taken by different actors involved in the process of digitalization for Romania. The answers to the research questions can be found in the second section, which is also the main body of the essay, and it includes analyses and pro and against arguments for a Digital Romania, what the Romanian system's shortcomings and strengths are, and what steps can be taken to achieve a higher level of digitalization, high-quality digital policy, and social inclusion. The last section contains the conclusions for a comprehensive and definitive perspective of Romania's digitalization progress and process. An important question we must focus on is posed as a hypothesis: has Romania prepared for digitalization in order to deal with a crisis such as the pandemic? If no, then what measures should be taken to make this digitalization process feasible in the country? The study's main purpose is to research and develop an objective viewpoint on the digitalization idea in Romania, as well as how digitalization may alleviate some of the biggest difficulties, particularly in the context of the pandemic crisis. The aim of this research is to measure the economical,

educational, and social benefits of digitalization in the context of the current pandemic and to analyze the weaknesses, the status of Romania's progress in the last years, the digital growth potential, and a theoretical future perspective of digitalization in Romania. Another particular and testable sub-hypothesis derived from the primary hypothesis is as follows: does Romania have the necessary digital growth potential?

An essential concept to consider is whether technology and digitalization improve or degrade our lives. Has Romania the necessary potential and resources to be a digitalized country in the economic, health, educational and socio-cultural sphere? Is Romania in need of digitalization? The red thread of this article is about how Romania could facilitate, increase, and improve the access to the digital sector for old people, for children with lowincome, for people from the rural area and for any other vulnerable and with no possibilities group. If all of these are accomplished, it will result in a decreased marginalization, a reduction of discrimination and exclusion of these venerable categories, especially throughout a crisis such the current pandemic leading to a homogeneous and harmonious society. An important question to consider is whether people over the age of 60, as well as all children in Romanian schools, would have complete access to technology and digital services such as the internet, specific devices, and other types of digital era resources, which would improve their lives and, in turn, improve more community-wide aspects. As numerous philosophers have stated, education is the key for a prosperous community. Increased productivity and jobs (digital skills are almost required everywhere), empowerment (technology will change our lives, our ways of shopping, travelling and learning) are just some of the desired goals to achieve and answers for problems such social exclusion, marginalization and poor education to make Romania a modern and European country.

In the third and fourth industrial revolutions, after the first half of the 20th century and the last with the advent of the Internet in the years 2000, where no new form of energy or invention was found, but simply based on the Internet, the latest and most complex phenomenon of all times has

arisen: digitalization. Specialist people and even political decision-makers at national and international level have taken the view that the changes brought by the digital age cannot be controlled by public policies, representing only private innovations and ephemeral fighting according to the current specialty literature and statistics. However, over time, in the recent past, since Romania was also part of the European Union, it has been resulting that this phenomenon can be influenced and somehow directed to the desired results by public policy and measures taken by the country and EU. Therefore, why digitalization is needed, which is the political behavior of the actors involved in the digitalization process in Romania in the European context, or how Romania has acted to manage the transition to digital during the pandemic are just some of the main questions that are going to be analyzed. Even the EU itself made various references and changes in the detriment of improvements of the digitalization process in order to boost its progress in all spheres, especially in the economy, political, administrative, medical, educational, and social areas.

Methodology

I used the common secondary research method to describe, to combine, to compare, and to analyze the answers to all the questions and hypothesis mentioned at the beginning of the paper. That is to say, the entire process was collecting, analyzing, and interpreting all available data, such as books, articles, online data, government and non-government sources, agencies, journals, newspapers, data from institutions, websites, market research, and official records, in order to gain a critical understanding of the impact of the crisis. I have analyzed statistics from national and European reports, the information, and data available at national and international scale. Furthermore, and perhaps the most important aspect, I focused on the foreground on DESI statistics. Much of the research on this topic focused on data analysis of the DESI's digital indicators in order to generate a concise past, present, and future perspective on how Romania may become a digitalized country and how the crisis has influenced the digitalization process. The study's goal is

to explain and evaluate Romania's strengths and weaknesses, showing the previous stages from a few years ago, how the present seems, and what the country's future objectives is to become a digitalized country.

There may be some possible limitations in this study, such as the fluency in the language or regarding cultural aspects such as the difference between countries at EU level. The longitudinal effects could be seen as a limitation because it is difficult to follow the subject closely over the years, which is constantly changing, therefore the long-term consequences might be viewed as a constraint. Other possible limitations in the study could be insufficient resources and perhaps an unsatisfactory sample size.

An old new thing

Even though people could think digitalization is not a new subject, the entire phenomenon has recently evolved, more precise, in the last decade. We live in the century of speed where everything is making progress everyday especially the technology, from brain-controlled robots, humanoids to self-driving cars; the development of digital abilities is in great demand. At least, basic digital skills or having a smart device is the new requirement of our modern society to live a fulfillment life. We saw the main and pertinent question about the existence and the importance of digitalization in Romania, but is this for sure the right answer and solution to the existent problems? Therefore, summarizing, because of the pandemic's global effect on the economic, social, and educational spheres, there are many points of concern for studies and analyses: is digitalization an ideal approach for improving people's lives, and if so, what can Romania do to improve and invest in this direction? In the past, an average number of prior studies have researched the correlation between a strong level of digitization in the country and a high quality of life. However, these studies have been influenced since the beginning of the pandemic by the crisis itself.

It is well known that the digitalization of the world, both in Romania and throughout the entire European Union, has become a priority (Gouvernment of Romania, 2020), and in the context of the Covid-19 pandemic, the growing

need has only increased the weaknesses of the system which is intended to be a digital world in a digital age. The digital world has become, in a short period, indispensable for a smooth functioning. The European Union and Romania taking part in it, has set up a complex of multi-action strategies to work in the context of the global pandemic to help and become a priority even in the practical field, both at European level and within each Member States. Priorities for action include the use of data to promote innovation, the development of the potential of artificial intelligence and its use as a bridge to facilitate services for the whole population. For instance e-government, online health services, shopping or payment for services or document operations in digital information space, and last but not the least, improving all digital structures (education, culture, medical, trade and economy). There is no single set of digital policies at the European Union level, so as it cannot be a single, unified information technology for the entre EU level and for all the countries, so according to Juncker's (European Commission, 2014) statement, it can be said that EU digital policies are horizontal in nature and need coordination, guidance.

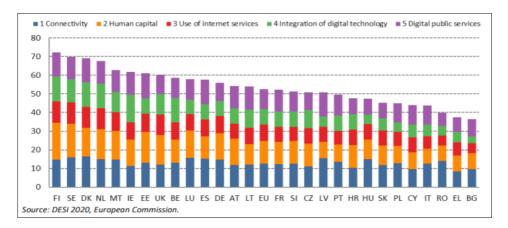
These measures should be accompanied by targeted efforts to boost digital skills and learning in society" (European Commission, 2014). JRC (The Joint Research Center) has developed some analyses, which focus on developing digital competences for innovative and creative learning and skilling. The influence of ICT on employment/employability, cultural diversity and socioeconomic inclusion, policies to promote use of ICT for active and healthy ageing, cross-border e-commerce, and copyright in digital media (European Commission, EU Science Hub, 2018), fact that show us the active interest for the topic and its development. We will discuss more broadly below. According to a Deloitte analysis, Romania would benefit from the digitization process in the following ways: Economic (increased GDP per capita), quality of life (eHealth, education, and public administration), environmental (for example, paper reduction), and inclusivity (investment in digital skills and technologies would result in more members of society being integrated into the community, for instance the elderly, citizens from the rural area, children with low-income) (Constantin, 2021). As opposed to other EU nations,

Romania has highly professional talent to benefit from digital transformation; there is no better time than now (The Romania Insider, 2020).

The gap between Romania and Europe has widened, and experts are observing rapid development year after year, which might signal a shift in the situation. Furthermore, the digital world, which was not considered as an option prior to the epidemic, has gained traction. According to experts in the industry, Romania has two significant weaknesses in the digitalization process that constitute key barriers to the growth of digital transformation: electronic identification or interoperability (for example interconnectivity between different databases, bureaucracy, high discrepancies in Internet access between the rural and urban areas, and low digital skills. According to the Digital Summit, November 2020, Romania must accelerate the digitization process via infrastructural development as well as educational reform in order to boost digital skills across the board. Regional inequalities are important factors to examine in national strategies addressing digital inequalities since they affect the other digital divides listed above: gender, age cohort, working status, and residence location (Ștefăniță, 2018).

It is important to state that younger folks outperform older folks in these skills and according to research on digital abilities; there are considerable disparities in performance across persons of various ages and education levels. People with a greater education outperform those with a lesser education in all skills (DIJK, 2017). As more services move online, the ability to rapidly explore the web's information becomes increasingly important for preserving a competitive edge and ensuring equitable access (Hargittai, 2006). The digitalization and how can people benefit and improve their life with the help with the progress of science and technology is since a long time on the priorities list of actors such as public institutions from national and international level, investors, private companies and so on. Industry is behind in terms of digitalization: According to the OECD, business usage of information and communications technology (ICT) has expanded slowly throughout the EU, with complex e-business applications being notably underutilized (Negreiro, 2019).

In the mid-1940s, Winston Churchill said "Never let a good crisis go to waste", so we can understand that nevertheless the Covid-19 pandemic has brought though times we can take the best future perspectives and actions to improve some aspects into the Romanian system. Therefore, which is the solution? Digital Economy and Society Index (DESI) is a composite index that summarizes significant metrics on Europe's digital performance and follows the growth of digital competitiveness across EU Member States. According to statistics from the DESI 2019, Romania was in the second-last place (27 out of 28) in the EU Member States. DESI is measured annually and it calculates the progress made by the EU Member States to create digital societies and economies. It helps countries to identify strengths and weaknesses, looking at all the factors that influence these issues. Compared to the pre-pandemic situation, today, Romania has remained on the same track in four of the five action areas. Since 2019, according to European Commission statistics, there has been a slow improvement in the country (it is recognized with good results for the connectivity category due to high internet speeds), however, there is one-fifth of Romanians who have not used the internet and less than a quarter who do not have basic skills. As stated by DES, a notably point, in the case of Romania is that it has not progressed much in the last five years. In the chart below, according to DESI 2020 statistics based on 2019 data, Romania has one of the lowest scores on the index, along with Greece and Bulgaria. Fig. 1:



Even though, in Romania the connectivity level is high, there is a lack in the other sectors, such as, the integration of the technology. According to these statistics, Romania lately begun a number of efforts in the many sectors monitored by the DESI, and the benefits may be seen in the coming year.

Measures implemented in Romania

Speaking of 2019, it can be said Romania is in third place using high-speed services on the band, but the digital public services remain low compared to the other Member States. In 2015, Romania adopted the national Strategy on the Digital Agenda (European Commission, 2020) for Romania 2020 (SNADR), but the level at which Romania has implemented all the commitments set out in the strategy is and it still remains uncommon so far. Therefore, nor is it clear of any plan by Romania, action measures and implementation of the points covered by the strategy, and no past, present, or planned reports are found for the future and this can be a huge inconvenient for future progress.

Among the measures taken by Romania, in the context of the pandemic crisis, we can analyze the application from the Ministry of Health that facilitates the centralization of medical information related to the Covid-19 virus. A website was created to help companies to submit documents for receiving technical unemployment and other sites such as for Romanians in diaspora for logistical and bureaucratic support for citizens, hospitals, and institutions. In 2020, the Ministry of National Education budget was supplemented for the purchase of electronic devices to facilitate access to education for 250.000 children. After all, however, Romania ranks lowest in terms of digital skills performance and has big gaps for the digitization of companies, schools, and care houses for old people, businesses, and even public services. See the chart from below for statistics-people with basic digital skills from 2018 versus 2020.

Because so many individuals in our nation do not have access to the Internet, there have been various disagreements and unpleasant situations. If investments had been made in health and education, the graph would have looked different, but unfortunately, it is like this:

asic digital skills	DESI 2018 57%	DESI 2020
asic digital skills	57%	
	2017	58% 2019
sic digital skills	31% 2017	33% 2019
asic software skills	60% 2017	61% 2019
	3.7% 2016	3.9% 2018
•	1.3% 2016	1.4% 2018
ates	3.5% 2015	3.6% 2017
9	pasic software skills alists ent CT specialists ment pates Commission.	2017 Pasic software skills 60% 2017 alists 3.7% 2016 CT specialists ment 2016 altes 3.5% 2019

Fig.2

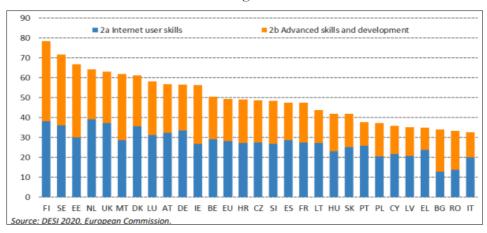


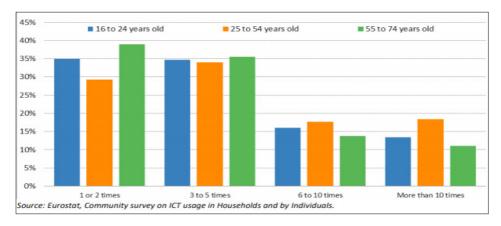
Fig.3

This only underscores the essential need for Romania to make digital investments in order to avoid becoming a domino that affects and stacks one problem on top of another.

Social and digital inclusion

The whole process of social inclusion is based on all measures and actions in areas such as social services, education, employment, the economy, and culture. All of these with the goal of combating social exclusion and

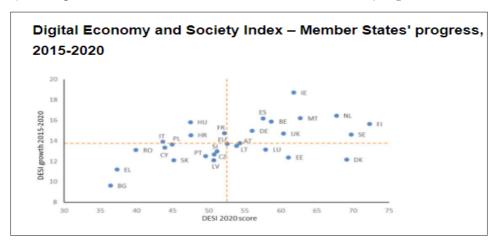
enabling active involvement of those who have had their path a little bit more obstructed in this process (children, young people, elderly, disabled, low income, vulnerable groups without access to education and resources etc.). The following graphic shows how difficult it is for the 55-74 age group to profit and have a better life by utilizing a digital instrument such as a smartphone, internet connection, or any other digital gadget.



Digital literacy, or, more accurately, its lack, is an issue on line with functional illiteracy. According to the European Commission, in Romania about 40% of the population has difficulties reading and writing even bigger problems in counting. Here can be added the results of PISA from 2018 (OECD's Program for International Student Assessment) where Romania is situated on the last places in the EU statistics. The main problem is that around half of all citizens have low digital abilities, which leads to social isolation, economic isolation, poor welfare, and life quality. Among other things, social inclusion is one of the European Union's custom for growth and development of the economy and educational attainment levels in all age groups, without any differences (discrimination on certain criteria such as age, gender, background, financial income), and of increasing employment, of the system and smooth the everyday activities of individuals. A set of formal and informal education tools and options for all citizens is intended to form a digital skills culture (European Commission, 2020). According to the European Digital Agenda (European Parliament, n.d.), investing in the growth of the digital sector is an

incredibly significant and critical step for improving living conditions, social inclusion, and online education. As a national context, we can recall certain disadvantaged and vulnerable groups in the community who are already having trouble in connecting and adapting to the needs and requirements of today's society. One of the targets in the Digital Agenda that Romania has undertaken for 2020 is to increase the percentage of the disadvantaged population accessing the weekly internet to 45 (in 2014 it was 28%), according to the EC. Some statistical DESI data:





The Digital Single Market and Social Media

Perhaps someone is asking what the link between the two notions from above is. The Digital Single Market (DSM) and Social Media mean connection. In addition, it means cooperation and communications. These needs have to be accomplished in one way or another. Without all of these, there are so many bugs in our real lives that at one point it becomes a bad chain for almost everybody from the society. The creation of DSM has been an important step taken by the European Union to improve all Member States' economies. The strategy to develop a digital single market has been starting (ECDL Romania, 2019) in 2015 and was originally planned for 2015-2020. What exactly did

this mean? In 2015, the priorities of DSM started from the digitalization of the European industry, the increase in investment and resources in digital networks, infrastructure, and above all, the digitalization of all new EU legislation (European Council, 2020). The European Commission has designated DSM compliance as one of its top political goals (Alberto, 2016). In 2017, ten years (European Union, 2017) have been since Romania joined the European Union, and for both the country and the EU, the priority of the policies of economic improvement and development has come to be the digitalization of the market throughout the European Community. The European Commission (EC) is pursuing the development of the digital industry, as this is a crucial step toward the development of the whole economy in all its aspects (European Commission, 2020).

The European Commission's political agenda says that within the market, the free movement of people, services, and money is guaranteed, as is open access to online activities for natural and legal persons under conditions of fair competition and high consumer and personal data protection (Official Journal of EUR-LEX, 2015). In addition, President Junker himself has named all the areas where EU policy regulations should intervene to facilitate the fully successful creation of a Digital Single Market, which are telecommunications, data protection, a consumer system in the online environment, and the digital world to extend as far as possible to all variations in the operating system in each country. Research has identified several patters about the desired plans of EC: "The Commission is determined to make this Europe's "Digital Decade". Europe must now strengthen its digital sovereignty and set standards, rather than following those of others – with a clear focus on data, technology, and infrastructure".

Two strategies with an important role in the creation of the Digital Single Market that has fostered economic and financial growth across the European Union, namely the "Cybersecurity Strategy" and the "National Strategy for Intellectual property". In line with this on 19 October 2017, the proposal for a Directive of the European Parliament and the Council on copyright in this digital single market was born.

An important point, which is worth mentioning, refers to the idea of copyright (EC, 2019). As it is well known, they can restrict or limit access for users of the Internet and materials, from individuals to companies, being subjective in terms of the legislative regulations in each country. Internet users have often been in a position to be unable to know the situation of content with certainty and to access it unlawful. This is why the aim was to regulate this area, to become a homogeneous world, a common universe, equity, communion, and collaboration. An incomplete DSM means that despite attempts and significant progress, the single market is still a dream. Many impediments remain in the way of services such as e-commerce, restricting full access to the goods and services supplied by EU enterprises. Other challenges would be the digital divide, lack of a digitally competent workforce and lack of investment.

On the other hand, Social Media is one of the most powerful tools in the current modern society. During this rough pandemic crisis, one of the most dangerous actions done by people were to trust fake news and to start propaganda of misinformation, having as consequences the misunderstandings between people, disagreements between the state and the civil society and decisions taken in ignorance. For staying safe in online, the European Commission highlighted important actions¹ to stop disinformation of Covid-19 situation.

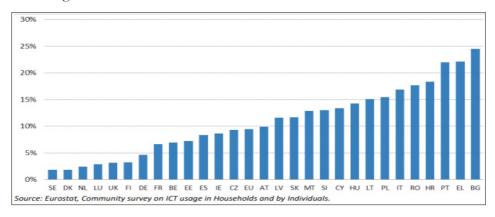
Google Search has given prominence to articles published by EU fact-checking organizations, which generated over 155 million impressions over the first half of 2020. Facebook and Instagram COVID-19 "Information Center" directed over 2 billion people globally to resources from the WHO and other health authorities. Over 160 million people have visited the Twitter's COVID-19 curated pages, over 2 billion times. Such pages bring together the latest Tweets from a number of authoritative and trustworthy government, media and civil society sources in local languages. You'Tube has displayed information panels linking to global and locally relevant health officials on its homepage, and in panels that appear on videos and searches about COVID-19. Overall, these panels have served over 300 billion impressions around the world. The TikTok informational page on COVID-19 has been visited over 52 million times across their five major European markets (UK, Germany, France, Italy and Spain), shorturl.at/mCJY2, accessed on 13.03.2021

It has to be seen as a support in the coexistence of people, to understand that it has enormous power, but also dangerous limits, which can sometimes be achieved. The concept of Social Media has connection as its main purpose. Connecting people, and through social connection derives a huge range of implications: people can have connections in all corners of the world, from Atlanta to Rome and from Shanghai to Sydney, trades and sales, education, or simply socialization are much easier accessible. Platforms, online stores of clothing, cosmetics, musical instruments, or food, and anything else may be commonplace, which people may need, can be found on the Internet. From online meetings with students, meetings with department directors at work and an online evening with friends or a Rummy game, obviously also digital, everything can be solved with a device and an internet connection. With the digital revolutions, namely the fourth and last revolution, as we also mentioned earlier, technology has experienced high levels of development such as artificial intelligence (robots, intelligent machines, even humanoids like Sophia²), autonomous vehicles, or even the Internet that has had many increases such as the possibilities of use, extended networks, and multiple benefits. However, the endpoint of this topic is not here.

Of course, improved technology and the access to digitalization is certainly not a panacea to all existing problems. Therefore, improvements can be made where interest exists. However, the non-use of technology brings even more losses and disadvantages, especially when there is an acute need for it, and yet it is completely lacking. As a perspective in the near and distant future – 2024-2050 – the European Commission is aiming to make Europe an Entire Digital Era (EC, 2019). Artificial intelligence, high-performance computing and data techniques, cyber security, and networking are examples of new generations of technology.

² Hanson Robotics' most advanced human-like robot, Sophia, personifies our dreams for the future of AI. As a unique combination of science, engineering, and artistry, Sophia is simultaneously a human-crafted science fiction character depicting the future of AI and robotics, and a platform for advanced robotics and AI research. Online source at https://www.youtube.com/results?search_query=sophia+robot, accessed on 25.02.2021

The European Commission's 2019-2024 policy priorities for European digitization are based on a number of key pillars, namely: technological solutions to support citizens (children, young people, elderly, entrepreneurs etc.), to achieve an economy that is intended to be transparent and to create a sustainable society. For example, it is clear to see, in the graphic chart below, the gaps for different age segments for using the internet so Romania has almost the last places in this ranking for people who never used the internet 2019. Fig.5:



As it can be seen up, it is a huge number of non-users among people who do not have a good education, or they have a low level of it or not at all (24%), among all of those aged between 55 and 74 (23%), the retired and the inactive (26%). All of this necessitates investments in order to achieve, as much as feasible, a slow, smooth, but meaningful transition of public services, and beyond, to an entirely digital society. The over bureaucratic, surveyed system had a hard say with the introduction of panic caused by the pandemic, showing once again that the local and central public administration in Romania needs great improvements to increase the quality of the digital system.

The power of digitalization

Although it can be said that Romania has a huge potential for digital growth, and is performing well in some areas, such as internet speed, IT experts, and

digital infrastructure, it nonetheless faces several challenges in the complicated digitalization process. Romania has the potential to boost its economic competitiveness in a reasonably short amount of time if it concentrates on increasing digitalization and transitioning to a technology-based economy (Frames Management & Consulting, 2020). According to eToro Digital Transformation Indicators, throughout CEBR statistics (The Centre for Economics and Business Research, 2020), despite Romania being now ranked on the next to last place for the digital transformation taking place in areas such as finance, health, trade, public administration and entertainment, our country is the leader when it comes to the potential increase. Romania ranks third in the digital expansion readiness index, indicating that it possesses the required capabilities as well as popular backing to pursue digitalization. Therefore, the country has the potential to catch up in the coming years. The future is digital, and Romania is prepared for quick growth, but it has to begin from the bottom.

Old people, old age, and the use of technology

Gerontology is a sensitive subject approached by specialists in various professional forms, such as medical, biological, or sociological. In practice, the period of old age is a stage of life that must be lived with dignity. Looking nostalgically at a few effigies of own youth or someone else for whom the aged may have brought challenges, anxieties, and a dreaded turbulence of financial, physical, and even mental deterioration does not benefit anybody. At both the European and global levels, the senior population is continually expanding. According to EESC (European Economic and Social Committee, 2016) in the digital era, older persons account for around 25% of the EU population, constituting a rising market of economic and social participants. The European Union is confronted with a new challenge: the simultaneous occurrence of longevity and pervasive digitalization. As a result, a shift in attitude to the silver economy is required. Therefore, this Silver Economy is an important detail for statistics.

Romania is also part of these statistics: according to Eurostat statistics (Eurostat, 2020), the numbers are relatively worrying. It is estimated that the

number of older people is constantly increasing, while the number of capable of working people is declining. In the coming decades, these things will lead to "an increase in the burden on the elderly in terms of covering the social costs needed for the elderly population for a range of services associated with it", resulting in social and economic disparities, possible effects on the sustainability of public finances, namely social security, social and medical services. Because of this, certain measures need to be taken before it is too late.

The substantial societal expenses associated with the aging population are a negative effect that spills over into labor standards for the elderly. The period of old age is not a period of tranquility, peace, relaxation. It is an unusual stage because no one knows what it is like until going through it; similarly, to a pregnant woman, each one manifests differently, with flaws, difficulties, limitations, and lower levels of endurance to various aspects such as physical, but also mental abilities limitations. No one wants a state of extreme decrepitude that is a vicious circle and a poisonous chain that spreads over all members of a community. Despite all the negative aspects, however, this period also has its pleasant aspects. For these, we just have to look in the right direction. Let us not forget that Et lux in tenebris lucet and there are always the positive parts of certain things that we can designate as winners in the adventurous paths of an individual path. To improve this field of knowledge, the digital world, more precisely social media and the elderly universe, it is imperative to bring understandings to how these networks work, what older people want, what possibilities they have, what skills they have, what desideratum they have and what they really need.

Older people need financial support, educational help and the most important detail, to look at them with more empathy, awareness, desire to help, and the hope it can be a better way of life for this kind of citizens. What if a huge number of helpless elderly people had access to a smart device and the expertise to make purchases, saving resources such as effort due to diminished mobility, financial, or even social economics because of the virus's spread? Moreover, what if these older people learned how to utilize

technology to communicate with their children, friends, and relatives, and what if they could communicate with doctors for their health, just a few clicks away? What would Romania look like if there was such a homogeneity of society, with no discrimination and prejudice based on age, socioeconomic or educational level, or stereotyped age considerations during old age?

Providing alternatives for educational and learning systems was a significant issue for nations from all across Europe. The Covid-19 pandemic has highlighted multiple vulnerabilities in the educational systems all around the world. Because of unpredictable future, it is certainly clearer for the moment that our societies need a resilient and developed digital educational and more than that systems. Official statistical systems were relied upon to serve government and society when societies were under lockdown and there was no knowledge of what the "new normal" will be (Linda Hantrais, 2021). Romania was highly proactive, closing all schools in less than one month from the beginning of this huge crisis, more exactly on March 2020. This was the best strategy for that moment by stopping the increasing number of infections. At the beginning there were a couple of "silent" protests, but consequently people understood why virtual alternative tools for education are the best ready to hand instruments for all the children, pupils and students.

This blended learning, as it was called, has also many weaknesses, but there were no other options to improve the digital system. Some schools opened, then closed again, there were policies such as only students in their final years to go to school, currently, these decisions are taken even at the county level depending on the incidence of the number of cases, at kindergartens, private or not, and up to the level of higher education institutions. The most essential thing to come out of all of these situations is that individuals must learn their lessons. Countries may learn from the pandemic's lessons: the digital divide must be bridged. We must actively participate in teachers' professional development and use technology to better their jobs, parents play a significant role in their children's education and must be supported in that role, and resilient systems require enhanced education settings at home, gadgets, connections, and literature (The World Bank, 2021). According to statistics

of "Learning Poverty" showed that with the spread of the Coronavirus illness (COVID-19), 180+ nations have required temporary school closures, resulting in the absence of 1.6 billion children and youth and around the world, 85 percent of children are impacted (The World Bank, 2020).

Conclusion

One year later into the COVID-19 pandemic, we have ended up somewhere no one could have predicted. Individuals, corporations, and even the government are being compelled to continuously rearrange their ways of functioning and reinvent their tactics in order to prepare for the "new normal" — the reality that will exist once the epidemic is ended (Company, 2021).

To conclude based on the above, we can say that over time, many objectives have been achieved about the digitalization in the European Union and of course in Romania, recalling several successes such as lower international tariffs for electronic communication, more developed connectivity, improved consumer protection, copyright, processing of personal data and increasing the level of the digital economy. However, not all of these are enough. Vulnerable groups as the group of elderly people, the group that makes the majority interest for our study has more needs than just food and a poor house with low conditions of living and the use of technology undeniably might help much more than its absence. Among the expectations and prospects that remain to be met, we can mention the three pillars on which EU digital strategies are now based, namely the European Commission supports investment in the development and training of the competences of all European citizens, increased artificial intelligence and increased cybersecurity. Legislative Regulation has legal rules governing the activities of all actors involved in these processes, an open society with democratic and sustainable values, aiming for Europe to lead the way globally and to develop well in terms of the digitization of economies and systems. The European Union will enhance its support for digital transformation in the future years, as evidenced by the recent proposal for the Digital Europe project (for 2021-2027), which would be the EU's first financial program dedicated only to digital transformation.

According to the Commission, the benefits of the industrial internet are predicted to skyrocket, with 5G deployment enabling a slew of new innovative services that will alter industries such as manufacturing, energy, automobile manufacture, and health (Negreiro, 2019). The EU's digital strategy will: invest money on digital skills for all Europeans, protect people from cyber threats, support developing economies in going digital, make sure that EU rules are fit for the digital economy, provide individuals more control over and protection for their data (European Commission, 2020). This might be beneficial in furthering the trend of faster digitalization.

An important goal was to provide readers with an overview of the main and most important ideas discovered during the research process, with the goal of bringing a new perspective about Romania's digitalization and how the economic, health, educational, and social spheres could be improved by using and implementing digitalization. There were many discrepancies between goals and results for the Digital world. Vulnerable people, such as elderly, children from low-income groups or parents with no help for educating their kids, people left behind from various reasons and so on, all of these with a large number of actions and costs are just some of the many points involved in the development of a powerful digital system in Romania. Future studies might look at how things are changing and how the measures that nations and the EU plan to take is proceeding. The study has demonstrated that Romania has a huge potential for digital growth and the digitalization is the answer to solve one of the few existing problems.

Acknowledgements

This paper represents a subset of the author's ongoing research.

References

Alberto, F., (2016). EUROPEAN CONTRACT LAW, The implications of the Digital Revolution. Munich: British Library.

Company, M. &., (2021). A time for reinvention—Challenges and solutions for the Romanian banking system, s.l.: s.n.

- Constantin, A., (2021). Business Review, New report reveals embracing digital could increase Romania's GDP by 16.48 percent. [Online] Available at: https://business-review.eu/tech/it/new-report-reveals-embracing-digital-could-increase-romanias-gdp-by-16-48-percent-217549 [Accessed 24 05 2021].
- DIJK, J. A. G. M. V., (2017). *Digital Divide: Impact of Access*, Netherlands: University of Twente.
- EC, (2014). Partnership agreement with Romania 2014-20. [Online] Available at: https://ec.europa.eu/info/publications/partnership-agreement-romania-2014-20_en [Accessed 26 10 2020].
- EC, (2019). *Modernisation of the EU copyright rules*. [Online] Available at: https://ec.europa.eu/digital-single-market/en/modernisation-eu-copyright-rules [Accessed 26 10 2020].
- ECDL Romania, (2019). [Online] Available at: https://www.ecdl.ro/en [Accessed 12 11 2020].
- European Commission, EU Science Hub, (2018). *Information Society*. [Online] Available at: digital competences for innovative and creative learning and skilling, influence of ICT on employment/employability, cultural diversity and socio-economic inclusion, policies to promote use of ICT for active and healthy ageing, cross-border e-commerce, an [Accessed 24 05 2021].
- European Commission, (2014). *President-elect*. [Online] Available at: https://ec.europa.eu/archives/juncker-commission/ [Accessed 09 11 2020].
- European Commission, (2014). Un nou început pentru Europa: Agenda mea pentru locuri de muncă, creștere, echitate și schimbări democratice, Orientări politice pentru viitoarea Comisie Europeană. [Online] Available at: https://ec.europa.eu/commission/presscorner/detail/ro/SPEECH_14_546 [Accessed 09 11 2020].
- European Commission, (2020). *Creating a digital society.* [Online] Available at: https://ec.europa.eu/digital-single-market/en/creating-digital-society [Accessed 12 11 2020].
- European Commission, (2020). Shaping Europe's digital future, Policy, Country information Romania. [Online] Available at: https://gov.ro/en/government/cabinet-meeting/national-strategy-on-the-digital-agenda-for-romania-2020 [Accessed 09 11 2020].
- European Commission, (2020). Shaping Europe's digital future. [Online Available at: https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/shaping-europe-digital-future en [Accessed 12 11 2020].

- European Commission, (2020). *The Digital Economy and Society Index (DESI)*. [Online] Available at: https://digital-strategy.ec.europa.eu/en/policies/desi [Accessed 26 10 2020].
- European Commission, (2020). Three pillars to support our approach. [Online] Available at: https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/shaping-europe-digital-future_en [Accessed 24 05 2021].
- European Council, (2019). *EU adjusts copyright rules to the digital age*. [Online] Available at: https://www.consilium.europa.eu/en/press/press-releases/2019/04/15/eu-adjusts-copyright-rules-to-the-digital-age/ [Accessed 12 11 2020].
- European Council, (2020). *Digital single market for Europe*. [Online] Available at: https://www.consilium.europa.eu/en/policies/digital-single-market/ [Accessed 25 10 2021].
- European Economic and Social Committee, (2016). *Digital e-seniors and the silver economy*. [Online] Available at: https://www.eesc.europa.eu/en/news-media/news/digital-e-seniors-and-silver-economy [Accessed 13 03 2021].
- European Parliament, n.d. *Digital Agenda for Europe*. [Online] Available at: https://www.europarl.europa.eu/factsheets/en/sheet/64/digital-agenda-for-europe [Accessed 11 11 2020].
- European Union, (2017). Chronology of Romania-EU relations, s.l.: s.n.
- Eurostat, (2020). *Population structure and ageing*. [Online] Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Population_structure_and_ageing [Accessed 16 03 2021].
- Frames Management & Consulting, (2020). Focusul pe digitalizare ar putea aduce României 50 miliarde de euro în PIB până în 2030, s.l.: Studiu Factory 4.0 & Frames.
- Gouvernment of Romania, (2020). National Strategy on the Digital Agenda for Romania 2020. [Online] Available at: https://gov.ro/en/government/cabinet-meeting/national-strategy-on-the-digital-agenda-for-romania-2020 [Accessed 09 11 2020].
- Hargittai, S., (2006). Differences in Actual and Perceived Online Skills: the role of gender*. *The Social Science Quarterly*, Volume Volume 87, Number 2.
- Linda Hantrais, P. A. M. K. M. S. P. B., (2021). Covid-19 and the digital revolution. *Journal of the Academy of Social Sciences*, Volume 16, NO. 2, pp. 256-270.
- Mărcuş, M. (2017). Crystalizing the EU Digital Policy, An Exploration into the Digital Single Market. Cham: Springer.

- Negreiro, M., (2019). Digital transformations, EU policies Delivering for citizens, s.l.: s.n.
- Official Journal of EUR-LEX, 2015. A Digital Single Market Strategy for Europe Analysis and Evidence, Brussels: s.n.
- Ştefăniță, I., (2018). Characteristics of the Digital Divide in Romania and Differences in Internet Use in Comparison with Internet Use in Europe. *Journal of Media Reseach*, Vol. 11(Issue 2(32)/2018), pp. pp. 5-21.
- The Centre for Economics and Business Research, 2020. LEADING ECONOMIC. [Online] Available at: https://cebr.com/ [Accessed 28 05 2021].
- The EU Bank, (2020). Who is prepared for the new digital age? Evidence from the EIB Investment Survey. [Online] [Accessed 09 11 2020].
- The Romania Insider, (2020). Romania is Europe's latest digital challenger. [Online] Available at: https://www.romania-insider.com/press-release-romania-europes-latest-digital-challenger [Accessed 24 05 2021].
- The World Bank, (2020). DIGITAL TECHNOLOGIES IN EDUCATION. [Online] Available at: https://www.worldbank.org/en/topic/edutech [Accessed 14 03 2021].
- The World Bank, (2021). *Urgent, Effective Action Required to Quell the Impact of COVID-19 on Education Worldwide.* [Online] Available at: https://www.worldbank.org/en/news/immersive-story/2021/01/22/urgent-effective-action-required-to-quell-the-impact-of-covid-19-on-education-worldwide [Accessed 13 03 2021].
- United Nations, (2019). Digital Economy Report, Geneva: s.n.