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THE INFLUENCE OF DIGITAL TRANSFORMATION IN THE SERVICE SECTOR TO DRIVE SUSTAINABILITY

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Abstract:
The authors have carried out a research paper to investigate how the digital transformation of the service sector leads to sustainability and improves the implementation and achievement of sustainable development objectives, but also to expose the challenges and opportunities through systematic research of the existing specialized literature. We live in an era of digitization, the future is certainly a digital one and the latest generation technologies have unimaginable capabilities to create infinite opportunities for sustainable development in absolutely any field or corner of the world. Digitization makes this dream of a sustainably developed world in which all 17 sustainable development objectives are fully achieved, become reality in the near future. Following the research, we concluded that the successful achievement of sustainable development objectives is represented by the power of motivation of the private sector and citizens to participate actively, but also their connection with the government by introducing a legislative framework to measure the involvement of each of the participants in order to create another framework based on bonuses by reducing taxes and other personalized benefits, and this can only be achieved through digitalization and the latest generation technologies, which definitely represent the path to a sustainably developed world of the future, the legacy of today's society for future generations. The results of this research make an important contribution to the field of study and complement the existing specialized literature.

Keywords: *Digital Transformation, Service Sector, Sustainable Development Goals, Digital Products, Digital Services*

JEL classification: *M160*

1. Introduction

In 2015, the UN Agenda 2030 for sustainable development was adopted by 192 states plus Romania, which represents a program aimed at development actions at a global level, being included for the first time both developed and developing states, in order to balance the main sustainable development objectives, namely economic, social, and environmental. The 2030 Sustainable Development Agenda includes 17 sustainable development objectives, 169 targets and over 220 indicators that deal with a wide range of current problems facing the world starting with poverty, human rights, health, education, climate change and environmental degradation ultimately aiming at peace and prosperity for current and future generations. There is a close connection between the improvement of the educational and health system compared to the reduction of poverty at the global level, and the preservation of the environment is stimulated by economic growth and the reduction of inequality, therefore all these critical and urgent problems of the contemporary world are the basis for the creation of this global partnership.

The promotion of sustainable development is of overwhelming importance for the continued existence of the human species on this planet, which is in close contact with nature and its resources, which must be protected from being exhausted. The most valuable gift that a child can receive from his parents is the sustainable development of any project in which they are active so that they can share in the economic, social, and environmental sustainability, which will indisputably lead to a prosperous and happy future for their descendants.

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The future is digital, and the digital transformation plays and will certainly play a very important role in the future in order to take the necessary actions to fulfil the objectives of sustainable development. The last generation technologies can produce innovative solutions to current problems, but also in the long term so as to lead to fundamental changes and a sustainable digital society from an economic, social, and environmental point of view.

2. Sections

2.1 Literature Review

Digital Transformation, the Path to Sustainable Development

Starting with the 1990s from the moment when the World Wide Web appeared and until now, the interconnection of approximately 3.2 billion people from all over the world has been achieved, which represents approximately 40% of the world's population, all witnessing the wave called Industry 4.0 and its benefits brought along with it, also leading to an improved life of people with access to laptops, smartphones, tablets interconnected with smart sensors, drones and online controlled cars. On the other hand, the entire mass of the interconnected population has many other benefits that are brought precisely by this connection to different databases that offer them access to more information and education so that they can make much better decisions or where they can extract their information, or they can add information to influence things important to them (Houlin Zhao, 2016). By connecting the rest of the population that is currently not connected, approximately 60%, the global economy will grow exponentially by approximately 7 trillion USD and will lift billions of people out of poverty. Only by fully exploiting the power of public-private partnerships and small and medium-sized companies can we get to know the benefits of social and economic progress brought by the internet interconnection of the entire population of the globe (Houlin Zhao, 2016). At this moment, slightly more than half of the world's population, approximately 4 billion people do not have access to the benefits of connectivity in terms of information and services in fields such as financial, educational or health, because they do not have an Internet connection, that is why of absolute importance that these people, the communities and the organizations they belong to, are connected to information, which is a priority in achieving the 17 sustainable development goals (Scheeder, 2019). By transforming bookstores and libraries to digital, they become much more easily accessible to the public, becoming a possible future partner in achieving the goals of sustainable development by providing easily accessible information to people and communities about human rights, health, and education, giving them the opportunity to develop as people. Access to information has the power to change people's lives for the better and create a better, sustainable future for generations to come, and libraries are a source of this information (Scheeder, 2019).

The only way to achieve sustainable development in supply chains is of critical importance, this being digital technology that improves production efficiency, reduces costs and delivery times, but at the same time improves the relationship with consumers, creating flexibility, agility, and transparency at the same time, ultimately offering the supply chain and the company the improvement of its performance. It is essential to implement within the companies a completely sustainable supply chain from one end to the other, including here the collaborations with each of the partners so that in the end they can sell sustainable products and services (Naval et al., 2022). There is a great need to create many more innovative partnerships between the public and private sectors so that a multitude of financing and investment mechanisms are created to develop digital bridges in order to connect everything that is not currently connected because digital solutions can contribute sustainably to improving the quality of life for the inhabitants of this planet, bringing better quality medical and educational services closer to them, but also to the improvement and protection of the environment through the use of digital technology to reduce CO2 emissions and lead to a transformation of the renewable energies market (Estopace, 2016). Certainly, the perfect promoter in the implementation and efficient achievement of the 17 sustainable development objectives is represented by cutting-edge technology, being the one that also leads to the

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promotion of economic competitiveness at the global level, offering countless opportunities to small companies in developing markets to have access to global markets thus generating additional income. On the other hand, there is a high perceived risk in the market that these small companies in developing markets are poorly prepared or not prepared to take full advantage of the opportunities offered by a digital economy and market, which can lead to the lowest possible level of income inequality (Wysokińska, 2021). The UN's 17 SDGs have the potential and the necessary capacity to create a prosperous and sustainable future for the current and future generations, targeting as objectives the most urgent problems worldwide, starting with poverty and ending with saving the environment, but this is only possible through the involvement of people, communities with the help of public-private partnerships, but with all this, we have a long way to go until the at least partial fulfilment of some of the objectives of sustainable development, the incorporation of digital technology being the surest lever for accelerating the effective implementation strategies for the time being (Tim et al., 2021).

Companies that are much more socially responsible present much more advanced digitization processes, and the telecommunications sector stands out among all of them, which obtained the highest score in terms of digital transformation. Also, the same companies with a high degree of digitization are fully aligned with the objectives of the European Green Deal, which involves the reduction of CO2 emissions and the responsible use of resources. On the other hand, companies with a high degree of digitization and advanced in this direction have a higher market value compared to others and show an upward trend, turning them into much more attractive companies for potential investors (Ionașcu et al., 2022). The study of Pînzaru et al. (2022) reveals the fact that there is a close and direct connection between sustainability and digitalization, sustainable practices being influenced by digitalization and vice versa and the positive annual results of companies are also directly influenced.

SMEs Digital Transformation

According to World Bank worldwide classifications, 90% of businesses (213 million / Asia Pacific - 113 million / Europe and the Middle East - 57 million / America - 25 million) are represented by small and medium-sized businesses that employ 50% of the workforce available. Although the Covid 19 Pandemic negatively affected most business sectors, the most affected were the markets and countries dominated in their structure by small and medium-sized businesses, and the only way to support the activities of these companies was the adoption of innovative technologies and strategies. This way, many small and medium-sized companies have begun to understand how the digital transformation works, where and how the technology can be applied to produce benefits for the companies, but this can be realized over time, during several phases where to involve the management of the company as well as government support (Magd et al., 2022). The private sector, having in its composition 90% of only small and medium-sized companies, they represent the engine of economic growth and development through innovation, thus creating competitiveness, opportunities, and new partnerships, but their connection with climate issues, economic and social sustainability must gain an upward trend. Digital transformation represents the path to understanding and finding solutions to solve the most acute problems facing the world today, and small and medium-sized companies need to reorient their organizational culture towards the adoption of new advanced technologies in conjunction with sustainable initiatives and innovative strategies (Philbin et al., 2022). Large responsible companies have put digitization and sustainability at the top of all priorities, turning them together into an obligation, thus incorporating innovative strategies in this regard. Small and medium-sized companies represent the central axis of the European economy, but also at the local level in Romania, generating more than half of the added value and having as employees approximately 70% of the available in the market. Even if sustainability is a frequently encountered term and it is included in the majority of government and business strategies in the last decades, starting with the Covid 19 Pandemic, Digitization has become a necessity for companies to survive and become competitive, becoming even more popular because it can facilitate the implementation and fulfilment of the 17 SDGs, which represent the engine of economic development in the medium and long term, much more quickly and efficiently (Ogrean et al., 2021). At the European

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level, Romania ranks 25th out of 27 in terms of digital progress and 27th in the acquisition of digital skills among able-bodied citizens, which, together with a resistance to change, is predominantly present in most organizations within small and medium-sized companies, they are not interested in digitization and their number is double the European average. Most small and medium-sized companies, regardless of whether they declare that they are interested in digital transformation or not, the main problem is the lack of financial funds for such investments. On the other hand, sustainability is not taken very seriously but is used more as a form of marketing to obtain various benefits because these small companies are not yet prepared to understand or enter a market dominated by such sustainable principles (Ogrean et al., 2021).

UN 2030 Agenda for Sustainable Development – Government / Private / Individual

In 2015, UN member countries adopted the 2030 Agenda for Sustainable Development, which includes 17 sustainable development objectives, 169 targets and over 220 indicators that deal with a wide range of current problems facing the world, starting with poverty, human rights, health, education, climate change and environmental degradation (Haywood et al., 2021). There is an inversely proportional relationship between the improvement of the educational and health system compared to the reduction of poverty at the global level, and the preservation of the environment is stimulated by economic growth and the reduction of inequality, that is why all these critical and urgent problems of the contemporary world are the basis of the creation a global partnership UNs 2030 Agenda for sustainable development towards opacities and prosperity for current and future generations at the center of which are the 17 SDGs (Fotache, 2022). The UN's 2030 Agenda including 17 Sustainable Development Goals involves absolutely all member countries actively to make the world we live in a better place for future and current generations without leaving anyone behind (Scheeder, 2019).

The most valuable gift that a child can receive from his parents is a sustainable development of any project in which they are active so that they can be part of the economic, social, and environmental sustainability, which will indisputably lead to a prosperous and happy future for their descendants (Venkiteswaran et al., 2018). The promotion of sustainable development is of overwhelming importance for the continued existence of the human species on this planet, which is in close contact with nature and its resources, which must be protected, and their depletion reduced, thus creating a closed loop in which both materials and the energy needed to produce the materials (Naval et al., 2022). The human race is defined by nature to produce and consume what leads to the destabilization of the environment, natural resources, and biodiversity and on the other hand leads to the highest level of poverty and social inequalities. Although many private companies have adopted a business model based on efficient production and consumption, the desired results have not been achieved, continuing to be applied unsustainable practices and policies (Haywood et al., 2021).

Humanity has understood that the sustainability of the environment is in danger and represents a risk created by the accelerated economic growth since the 20th century, however, following a meeting of world leaders of UN members at the Earth Summit in 1987, the term Sustainability was mentioned for the first time in the Brundtland report. The years that preceded this summit and the subsequent industrial innovations brought a much greater scope to the meaning of the term Sustainable Development being one of the biggest challenges that the world must face to maintain the environment at a level of sufficient capacity in to offer an acceptable level of quality of life but also to offer a future on this planet for future generations. The states and governments of the world are the only ones who can create a favorable framework so that each of the citizens, communities, and organizations of this world work together towards a sustainable environment (Rodríguez-Antón et al., 2022). However, the private business environment plays a critical role in implementing and achieving the goals of sustainable development, without which governments have no chance of achieving them alone. The private sector is also a reliable partner with governments and civil society in implementing and achieving the 17 SDGs because they have the financial and human resources and the ability to innovate. Also of vital importance

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is the adoption of the SDGs by companies from the private sector because they will ensure their prosperity and provide them with new opportunities and markets (Haywood et al., 2021). At the governmental level, both in the EU and in the other UN member countries, there is no connection linking the implementation of the SDGs with taxation or migration, which translates into a low interest on the part of nations, and the level of priority reflected in this positioning is presented decreasing. Of absolute importance in reaching the maximum potential of this 2030 Agenda program is the coherent coordination of policies between member states so as to research and evaluate the functionality of this program and the evaluation of partial results and intermediate segments (Ylonen, 2021).On the other hand, in the private sector, mistrust reigns because it is not very clearly defined how companies can help to implement and achieve the objectives of sustainable development and how the latter can trigger the development and economic growth of private companies, and the main risk that can be seen represents a possible overlap or replacement between CSR and the implementation of the SDGs (Ylonen, 2021).

For the first time, there is a framework conducive to the UN's SDGs that has the potential to motivate companies to invest in sustainable development but at the same time pursue their own interests, for example Unilever who discovered that products dedicated to a sustainable life grow 30% faster than the rest of the products in the portfolio, and there are many other companies that followed their example from other industries that moved quickly and aligned their strategic business objectives with sustainable development (Chakravorti, 2017). Private sector companies have clearly adopted the implementation of sustainable development objectives at the level of communication and annual reporting, thus becoming a marketing and promotion tool to obtain competitive advantages, but at the level of practical implementation only a small part of the companies has introduced the framework of operational processes and practical business models and sustainable policies. The success of implementing and achieving the SDGs depends to the greatest extent on the private sector and the individuals that are part of it, but also on the ability of governments and communities to motivate the private sector in this direction (Haywood et al., 2021). The market value of consumers in emerging markets is approximately 60 trillion USD by 2030, and companies see this as an extremely good opportunity that represents a source of long-term growth and market themselves as having the main objectives 17 SDGs. In this period there is a competitive pressure in the market, more and more private companies position themselves publicly and declare openly that they are in order to help the implementation and achievement of the objectives of sustainable development so as to enter as quickly as possible into various partnerships as valuable, because companies from the private sector seek profit in order to get involved in the strategy of sustainable development objectives, and without the private sector these objectives cannot be achieved (Prosperity, People, Planet, Peace, Partnership and Profit). One of the most important effects that will influence the future of companies that will be involved in the implementation and achievement of sustainable development objectives is that the business environment will improve, and new markets will be built to do business (Chakravorti, 2015).

According to Mariani et al. (2022) partnerships between the public and private sectors stimulated and managed by non-profit organizations have the ability to develop collaborative innovation processes for sustainability in order to implement and achieve the objectives of sustainable development, even reaching much further than that in terms of some of these objectives, which increases the value of such mechanisms. On the other hand, Venkiteswaran et al. (2018) the responsibility and motivation of average individuals is really the way to be followed in the successful implementation and achievement of the desired objectives, because each individual is necessary to act in this sense and promote the 17 SDGs, but this can only happen if they receive something in return or if they come to understand and fully believe that that action will change the world into a better place and that this is possible thanks to him. On the other hand, the educational system takes on increased importance, being the most suitable environment where the future leaders of the world can familiarize themselves with the 17 SDGs from a young age, while at the same time learning the alphabet and the goal of achieving sustainable development goals. Having as the fundamental basis the most critical and urgent problems with which

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we currently live, problems related to the environment, social or economic, the United Nations thought the framework of the 17 Sustainable Development Goals agreed by all the member countries that committed to implement it by 2030, which also contains 169 targets and approximately another 300 indicators, but the success of achieving the proposed objectives does not depend only on governments and the private environment, but mostly on the actions undertaken by each individual and inhabitant of this planet (Venkiteswaran et al., 2018). The accelerated progress of the digital transformation puts us face to face with new changes and opportunities and gives everyone the chance to debate about how we want our future and that of the next generations to look, that's why a multitude of technologies are used at the level of the European Union and the whole world innovative so as to disrupt society and the economic environment as we know it so that the social economy is more and more present in the lives of citizens in order to involve and empower them more in taking part in the implementation and fulfilment of the 17 sustainable development objectives (Fotache, 2022).

We are contemporaries of turbulent times, with a multitude of additional urgent challenges compared to climate change and the loss of biodiversity, such as the global pandemic, refugee crises, severe weather but also many other challenges, ecological, economic, and social but above all technical solutions, to achieve sustainability requires motivation, intention, and participation (Taajamaa et al., 2022).

Industrial Revolution 4.0 (4IR) as an activator for Sustainable Development Goals (17SDG)

To take care of the efficient and sustainable use of every bit of nature's energy needed to produce a product essential to human existence, it is important to introduce innovative technologies that can provide real-time information on the entire supply chain of materials and production so that to provide visibility and a predictive overview that can help in time to make excellent decisions. Perhaps one of the most well-known tools to achieve the Sustainable Development Goals is represented by Industry 4.0 and its innovative technology that leads to automatic and proactive production systems (Naval et al., 2022). Perhaps the perfect link between Industry 4.0 and the successful achievement of sustainable development objectives is represented by a flexible supply chain, being of essential efficiency and a tool for measuring the performance of a production line, leading companies to maintain a high level of competitiveness and performance in a global market (Naval et al., 2022). We live in a world dominated by two central visions of the future Industrial Revolution 4.0 (4IR) and 17 Sustainable Development Goals (17 SDGs), finding the sources of their existence in different periods and having distinct ambitions on how digital technology will influence the environment and society in general, gravitating around a common denominator, namely Information and Communication Technology (ICT) (Pollitzer, 2019). 4IR and 17SDGs are two competing visions with different ambitions that come in solving problems at a global level but which at the same time have many points in common, so following this research we can confirm that 4IR and 17SDGs can collaborate, more than this 4IR is an activator for 17SDGs (Islam et al., 2022). The 4IR vision highlights the ICT potential that produces positive changes both economically and socially, but there are countries with financial, institutional, and political potential that have allowed the implementation of this vision that favors progress towards achieving sustainable development objectives, and on the other hand there are developing countries where the UN 2030 Agenda fits better with the existing conditions. Research clearly and unequivocally proves that ICT helps both the implementation of the 4IR and the implementation and achievement of the 17 SDGs, moreover, the 4IR vision is a facilitator for a faster implementation and the successful achievement of the 17 SDGs, but they are necessary much more discussions on these topics, research, and frameworks to extract maximum potential from the two visions in collaboration (Pollitzer, 2019).

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Sustainable Business Models part of Circular Economy

According to Ionaşcu et al. (2022) absolutely all activity in the private sector and companies, regardless of their size, are impacted with a different intensity from the current megatrend of the times we live in, namely Digital Transformation, which first of all involves a new digital business model, using only new technologies of the latest generation for of general added value and this represents the most important promoter of companies' responsibility towards the environment and society (Digitization - Transition from Analog to Digital / Digitization - the use of digital technology to improve the performance of a company and expand the range of activities / Digital Transformation - adaptation to the requirements of the digital economy). The digital transformation has the potential to produce a major impact in saving the environment by reducing pollution through the efficient use of resources, adopting smart technologies, transforming sustainable business models as part of the digital and circular economy (Ionaşcu et al., 2022). The 21st century has made us witness unimaginable challenges in the past to achieve the objectives of sustainable development due to global warming and the loss of biodiversity caused by the continuous growth of mass production and consumption. A solution to the entire chain of problems is represented by the circular economy, which brings to the center of attention the rethinking of economic practices to generate economic growth and at the same time sustainable development by reducing the carbon footprint and greenhouse gas emissions, stimulating innovation and competitiveness. The circular economy implies zero waste and maintain the materials at the end of the life of products within the economy by recycling them and creating new raw materials from which other products are made, thus fewer resources are introduced into the circuit and resources already in the circuit are reused, thus products made from the same materials can be resold several times, increasing the added value multiple times (Barbieri et al., 2023). The recycling sector has acquired infinite strategic importance in recent years, because it has a potential impact in creating added value multiplied by the simple fact that currently 70% of garbage is transformed through recycling into other products or raw materials used in the manufacture of new other products part of other sectors of activities, thus supporting the increase in production within other sectors and being the most important basis of the so-called circular economy (Utit et al., 2021). Most likely soon there will be companies that will be evaluated based on their results in the implementation of the Circular Economy and the SDGs (Barbieri et al., 2023).

Perhaps the largest consumer worldwide is Public Procurement, the managers of public money can be held responsible for sustainable consumption by introducing a new vision when purchasing products and services, taking into account the purchase price and its associated cost with the environment and social, being necessary to create sustainable acquisition strategies, not only to acquire environmentally friendly products, but the entire route of the product or service from the moment of conception to the moment of decommissioning should be environmentally friendly (Manta et al., 2022). According to the study of Bhattacharya et al. (2023) the final consumer only considers the price, quality, and value of the brand in his purchase decision and does not consider whether the packaging of the product is sustainable, or the product is environmentally friendly.

2.2 Methodology

Using the existing specialized literature, systematic research was carried out to expose the challenges and opportunities in the attempt to achieve sustainable development with the help of digital transformation.

Research Questions

1. What are the opportunities to drive towards sustainability through digital transformation in the private sector?
2. At the individual level, what are the opportunities to use digital transformation to reach new limits of sustainability?

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Protocol

Even if sustainability represents a landmark already strongly rooted for the private sector in the last 50 years, the digital transformation has the capacity to lead it to levels unimaginable some time ago and this paper investigates what are the opportunities of reaching a new level. Articles already published by the academic environment were searched, relevant to this topic in EBSCO Database and from the list obtained, only those whose title and abstract are relevant to the research will be selected in a first phase, and then in a secondary phase those whose text is not relevant will be eliminated. The information will be systematically collected in close connection with the opportunities and challenges of using the three technologies together and will be synthesized in a narrative form.

Search of Relevant Articles

The search of the relevant articles was carried out from April, May and June 2023 using EBSCO Database as a source (Business Source Complete, EconLit with Full Text, Psychology and behavioral Sciences Collection, Computer Source, eBook Business Collection, Regional Business News, Library, Information Science & Technology Abstracts, GreenFILE, Teacher Reference Center, European Views of the Americans: 1493 to 1750, eBook Collection, eBook Open Access OA Collection). The research was carried out using as search words "Digital Transformation", "Sustainable Development", "Sustainable Development Goals", "Industrial Revolution 4.0" and "Sustainable Development Goals" than using "Circular Economy" and "Sustainable Development Goals". The entire search was filtered on Academic Journals as article type, published between 2020 and 2023 only in English and Romanian.

Selection Criteria

There were selected 27 articles that align with the level of relevance of this paper from an initial list of approximately 500 articles applying different selection criteria in the first phase based only on the title and abstract and in a secondary phase based on the full text.

Data Extraction

Information was collected independently and systematically from chosen articles about the benefits, challenges, and opportunities that digital transformation has to lead to sustainable development.

Data Synthesis

To offer a new perspective on how sustainability can be achieved through digital transformation, different concepts were investigated and how they relate to each other within a narrative synthesis of the data.

2.3 Results and discussions

Certainly, the biggest opportunity and challenge at the same time is the connection to the Internet of over 60% of the world's population, as well as small and medium-sized businesses that currently exist in areas without Internet connection, and this is advancing at a speed that it is necessary to be smaller than the one with which new technologies are developed that will have a greater capacity to lead to sustainability.

Digital Transformation → Sustainability	
Benefits	Challenges
→ 40% (3.2 billion) of the world's population is connected to the Internet and they have known the benefits of an interconnected world. →As the percentage of the interconnected population increases, so do the chances of improving the 17 SDGs.	→Connecting the rest of the population 60% (4 billion) the world economy will grow exponentially. →Increased risk that these small companies from developing markets are not prepared to face the technology, which will lead to an even greater difference in income inequality.

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→The biggest promoter in the fulfillment of the 17 SDGs is the latest generation technology offering infinite opportunities to SMEs to develop globally. →There is a direct and proven influence between socially responsible, digitized companies that use sustainable development practices and their annual financial results	
→Worldwide, 90% of companies are small and medium-sized, employing approximately 50% of the available workforce. →SMEs companies represent the engine of economic growth and development through the acquisition and adoption of latest generation technologies in close connection with sustainable development. →Digitization is the only option for companies to survive and become competitive, but also the promoter of the 17 SDGs, the conductor of economic growth.	→In crisis situations, the most affected regions are those dominated by small and medium-sized companies. →Romania ranks 25 out of 27 in terms of the adoption of digital technology at the EU level, as companies are not interested in digitization, their number is double the EU average. →Sustainable development is used more as a marketing strategy to obtain various benefits.
→Protecting the environment is stimulated by economic growth, which reduces inequality and leads to the improvement of the educational and health system, but also reduces the level of poverty. →States and governments are the ones who must create a favorable framework for citizens, communities, and organizations to work together for a sustainable world. →The private sector also has a critical role in implementing and achieving the 17 SDGs. →In the end, the biggest responsibility is transferred to the shoulders of everyone. →4IR and 17SDGs are two competing visions, with different ambitions but also common points, 4IR is an activator for the adoption and achievement of the 17SDGs. →The circular economy represents a solution for environmental problems, but which at the	→Even if many companies have already adopted a business model based on efficient production and consumption, the desired results have not yet been achieved. →At the EU level, there is no connection between SDGs implementation and taxation or migration. →There is no clear framework to regulate how the private sector can help to adopt and achieve the 17 SDGs. →There is a risk that CSR overlaps with 17 SDGs.

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same time generates multiplied income for the same number of resources.	
Opportunity 1 - 3 SDGs should be associated with each company's CAEN code, so that their adoption is quantified, and the results are included in a tax grid and other benefits.	
Opportunity 2 - Depending on the results obtained in the adoption of the 3SDGs, a system of classification and bonus based on performance should be created so that the best performers have priority in various public-private partnerships or public auctions.	
Opportunity 3 - Companies should have the possibility to include in the market for sale only products whose price includes the recycling service, when the product comes out of use, the final consumer should know how to activate this prepaid service for recycling the product (example: objects electronics, household appliances, furniture, etc.).	
Opportunity 4 - Each product should have a list behind it that quantifies the product's influence on the environment and how it helps to successfully implement the 3 SDGs.	
Opportunity 5 - Each person should have a card associated with a sustainable identification digital account where they can automatically record their decisions to purchase both products and services and at the end of the year, depending on the results obtained, have various percentage exemptions from taxes and fees or other personalized benefits.	

At the level of private companies, each one is assigned one or more CAEN codes from the moment of registration and to each such code it is necessary to assign 3 SDGs, together with the creation of a working framework at EU and country level so that adopt, implement the 3 SDGs and quantify the results, and based on the results, the companies should be included in a tax grid and other financial benefits at the EU rate. Depending on these results, a system of classification and bonus based on performance should be created so that the most performing ones have priority in various public-private partnerships or at public auctions. Companies should have the opportunity to include in the market for sale only products whose price includes the recycling service, at the moment the product comes out of use, the final consumer should know how to activate this prepaid service for recycling the product (example: objects electronics, household appliances, furniture, etc.) and each product should have a list behind it that quantifies the product's influence on the environment and how it helps to successfully implement the 3 SDGs.

At the individual level, each person should have a card associated with a sustainable identification digital account where they can automatically record their purchase decisions for both products and services and at the end of the year, depending on the results obtained, they can have various percentage exemptions of fees and taxes or other personalized benefits.

The situation is as follows, the known resources are finite, they can be useful for several years to a certain number of people, the population of the globe increases, the volume of resources decreases but also the years pass, indeed a solution is to find new resources that can replace the current resources or the adaptation of technologies to them. Is this the way forward? Why not try to predict what will be the needs of future generations? Or how to guide these needs in a certain directive, towards needs using different technologies, different available or unlimited resources or without using resources. Why focus on the resources needed to satisfy needs when we can focus on the needs to use as little or no resources as possible that are found in a known finite volume or to replace a large part of products with services

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or digital products (for example, replacing the washing machine with cleaning services, replacing the vacuum cleaner with cleaning services, replacing some non-essential products, which offer a momentary satisfaction and will not be used a second time, with digital products that can offer perhaps even greater satisfaction, etc).

2.4 Limitations

The opportunities and challenges have been identified globally, not on a specific sector or type of activity and, depending on the type of company, they can differ significantly.

3. Conclusions

Unequivocally, the digital transformation through the last generation technologies will fundamentally change the way business is done, how people communicate and socialize towards a better and sustainable future dominated on the entire surface of the globe by peace between peoples and prosperity.

More than that, it will be of primary importance how the governments of the member states will succeed in engaging the private sector and its citizens in making them partners to motivate them to participate actively but also efficiently in the implementation and towards the achievement of the 17 sustainable development objectives. It is certainly necessary to create a legislative framework in order to have a traceability and method of measuring the way in which the private sector and the citizens of the member states will be actively involved in the achievement of sustainable development. Creating a classification and bonusing framework for companies and reducing taxes and other personalized benefits for citizens by connecting companies' identity documents and activities with sustainable development objectives, connecting products and services in the market through a way of measuring the contribution made in fulfilling the objectives of sustainable development but also associating every citizen with a sustainable identity digital account, this is certainly the way to a sustainable world of the future, the legacy of contemporary society for the generations that will succeed us.

As a result of the research carried out and the results obtained, a series of proposals were drawn which were described in the previous paragraphs, which make a very important contribution to the existing specialized literature, connecting for the first time in a mechanism the government, the private sector, and the citizens to involve actively together in order to fulfill the objectives of sustainable development.

References

- Barbieri da Rosa, L.A. et al.: Circular economy and sustainable development goals: main research trends. *Brazilian Journal of Management / Revista de Administração da UFSM* 16(1), 1–30 (2023).
- Bhattacharya, S. and Sharma, D.: Sustainable Development Goal Aligned Business Practices. *Australasian Accounting Business & Finance Journal* 17(1), 1–8 (2023).
- Chakravorti, B.: How Companies Can Champion Sustainable Development. *Harvard Business Review Digital Articles*, 2–7 (2017).
- Chakravorti, B.: What Businesses Need to Know About Sustainable Development Goals. *Harvard Business Review Digital Articles*, 2–5 (2015).
- Estopace, E.: Digital solutions to drive UN's Sustainable Development Goals by 2030. *eGov Innovation*, 1 (2016).
- Fotache, G.: The Role of the Social Economy in Achieving the Sustainable Development Goals (Sdgs) at EU and Global Level. *Economy Transdisciplinarity Cognition* 25 (2), 34–43 (2022).
- Haywood, L.K. and Boihang, M.: Business and the SDGs: Examining the Early Disclosure of the SDGs in Annual Reports. *Development Southern Africa* 38(2), 175–188 (2021).

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DOI: 10.56043/reveco-2023-0010

- Houlin Zhao: Creating an inclusive digital economy is vital to achieving the SDGs. *International Trade Forum* (2), 18–19 (2016).
- Ionașcu, I. et al.: Digital Transformation, Financial Performance and Sustainability: Evidence for European Union Listed Companies. *Amfiteatru Economic* 24(59), 94–109 (2022).
- Islam, M.F., Awal, M.R. and Zaman, R.: The Concurrent Journey of Sustainable Development Goals (SDGs) and Fourth Industrial Revolution (4IR): Paradoxical or Parallel? *SDMIMD Journal of Management* 13(1), 61–74 (2022).
- Magd, H. and Jonathan, H.: Digitalization - An Emerging Business Trend for Sustainable Transformation of SMEs Sectors: A Proposed Model for Survival and Sustainability in Uncertainties. *Global Business & Management Research* 14, 51–65 (2022).
- Manta, O. et al.: Public Procurement, a Tool for Achieving the Goals of Sustainable Development. *Amfiteatru Economic* 24(61), 861–876 (2022).
- Mariani, L. et al.: Achieving Sustainable Development Goals Through Collaborative Innovation: Evidence from Four European Initiatives. *Journal of Business Ethics* 180(4), 1075–1095 (2022).
- Nayal, K. et al.: Supply chain firm performance in circular economy and digital era to achieve sustainable development goals. *Business Strategy & the Environment (John Wiley & Sons, Inc)* 31(3), 1058–1073 (2022).
- Nayal, K., Raut, R.D., Yadav, V.S., Priyadarshinee, P. & Narkhede, B.E.: The impact of sustainable development strategy on sustainable supply chain firm performance in the digital transformation era. *Business Strategy & the Environment (John Wiley & Sons, Inc)* vol. 31, no. 3, 845–859 (2022).
- Ogrean, C. and Herciu, M: Romania's SMEs on the Way to EU's Twin Transition to Digitalization and Sustainability. *Studies in Business & Economics* 16(2), 282–295 (2021).
- Philbin, S., Viswanathan, R. and Telukdarie, A.: Understanding how digital transformation can enable SMEs to achieve sustainable development: A systematic literature review. *Small Business International Review* 6(1), 1–25 (2022).
- Pînzaru, F. et al.: Adopting Sustainability and Digital Transformation in Business in Romania: A Multifaceted Approach in the Context of the Just Transition. *Amfiteatru Economic*, 24(59), 28–45 (2022).
- Pollitzer, E.: Creating a Better Future: Four Scenarios for How Digital Technologies Could Change the World. *Journal of International Affairs* 72(1), 75–90 (2019).
- Rodríguez-Antón, J.M. et al.: From the circular economy to the sustainable development goals in the European Union: an empirical comparison. *International Environmental Agreements: Politics, Law & Economics* 22(1), 67–95 (2022).
- Scheeder, D.: Development and Access to Information: Libraries and the Sustainable Development Goals. *Online Searcher* 43(1), 46–47 (2019).
- Taajamaa, V. et al.: Seven Steps to Strategic SDG Sensemaking for Cities. *Administrative Sciences (2076-3387)* 12(1), 33 (2022).
- Tim, Y., Cui, L. and Sheng, Z.: Digital resilience: How rural communities leapfrogged into sustainable development. *Information Systems Journal* 31(2), 323–345 (2021).
- Utit, C. et al.: From Waste to Wealth: Identifying the Economic Impact of the Recycling Sector in Malaysia. *Malaysian Journal of Economic Studies* 58(1), 125–143 (2021).
- Venkiteswaran, V. and Cohen, M.: Digital storytelling and sustainable development goals: Motivating business students to engage with SDGs. *Social Business* 8(4), 411–428 (2018).
- Wysokińska, Z.: A Review of the Impact of the Digital Transformation on the Global and European Economy. *Comparative Economic Research* 24(3), 75–92 (2021).
- Ylonen, M. and Salmivaara, A.: Policy Coherence across Agenda 2030 and the Sustainable Development Goals: Lessons from Finland. *Development Policy Review* 39(5), 829–847 (2021).