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THE LAW OF THE DIGITAL ECONOMY IN THE EVOLUTION OF THE DIGITIZED SOCIETY

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Abstract: *The evolution of society leads to an increasingly comfortable way of life in which human activities are replaced by digitized processes. People sell and buy through the digital processes provided by the Internet, pay/receive consideration for products or services and works transacted through digital banking transactions. Most of the time operators, legal entities under private law or natural persons do not benefit from real protection and guarantee from the state. The economic, commercial, financial processes in the digital economy have no borders and are carried out most of the time with unknown legal subjects, without real or identifiable identity. Through this work we will try to bring to the discussion of researchers about the importance of law in the digital economy. The authority of states does not manifest itself on the Internet to offer protection to economic factors that operate online. The Internet is ubiquitous in every economic activity, but the regulation of the conduct of legal subjects, their civil or criminal liability for acts criminalized by civil or criminal law is on the horizon of the very distant future*.

Keywords: *Digital economy; the right of the digital economy; artificial intelligence; artificial intelligence law; AI; digitized society;*

INTRODUCTION

Cyber security activities are evolving, but cross-border cooperation on security in the virtual environment is still not at the highest level. The European Union cautiously approaches the regulation of subjects in the field of "digital economy" and "artificial intelligence". There are many "variables" and "potential consequences" of the use of digital space for the economy. This use of the digital space for actions and activities with an impact on the economy is what we define as "digital economy". The regulations of the digitized market and the "artificial intelligence" complex at the European level are insufficiently covering all economic, social and cyber risks. Therefore, the complex of legal rules regarding rights, obligations and active and passive guarantees defines "the right of the digital economy".

Research premises: The evolution of the economy from traditional to digitized.

Commercial law legal relations in the digital economy involve legal subjects that can be suppliers of products, services and works and buyers or beneficiaries. Financial banking institutions through which the price of products or services is paid are also subjects of law that actively and definitively participate in the digital economy. The economy had several stages in its evolution in which human resources, material resources, financial resources put together generated products that the market needed through transformation. Buyers, end users of works, services, and products, are subjects of law in the economy.

The modernization of the means of production, the specialization and education of the workforce, as well as the development of banking and tax procedures led to the modern economy of today. Geo-political strategies have also allowed the removal of barriers to the protection of the economy of the states through the customs system between the states, of products and services. This is how the concept of the world economic market was created. In order for the international market of goods to function, the World Trade Organization was established, which imposed rules of fair competition. The development of trade generated the development of transport through different means of transport (road, rail, air, river and sea). This is how the economy that we all know and that we can define as the traditional economy has worked.

In parallel, the economy uses a banking industry, which guarantees consideration in a currency recognized by both parties, which can be divisible and fractional, in relation to the value of the transaction (works, services, products). The banking industry manages the guarantees of the transfer of value from one legal entity, the seller or service provider, to another legal entity, the buyer or beneficiary. These economic-financial transactions and industries are assisted by the public administration. The public administration provides the right economic framework, ensures safety over the economic environment, including taking care of the social well-being of the human resource. For this benefit, the public administration provides funds through the imposition of fees and taxes. Thus said, the framework for the manifestation of the economic market and the economy, in general, costs. The consideration of safety systems translates into the collection of taxes, fees and contributions from all economically involved legal subjects. Taxation is done both on the economic phenomenon, which generates added value, but also on the application of certain taxes on the economic assets owned by natural or legal persons.

The fiscal law scheme supports the state or union of states to have budgetary funds for administration, representation, military, social, economic infrastructure, critical and strategic infrastructure, and medical, educational, cultural assistance expenses for citizens. So, the conventional/traditional economy has legal subjects known as service providers, goods suppliers, and customers, who can be natural persons, legal entities or public entities. The legal object is the traded good, the service or the work provided. All this manifests itself under a state authority that ensures conditions and safety in the legal relations in the economy. The economic surplus value is taxed and constitutes the main income of the state budget.

The use of digital technologies, tools made up of computers, computer programs, data communication networks, data archiving servers has generated an important mutation of economic processes in the digital environment. Thus, we can talk about tools that ensure the functioning of a digital economy. The digital economy in relation to the classic economy has additional elements of greater complexity, of which we mention: more complex and wider civil liability reports; geographical territoriality limited only by digital tools (computer/telephone; internet access; digital data transmission networks; servers, etc.

The territoriality of the digital economy. The classic, traditional economy takes place within the borders of a country or union of states and is protected by fiscal barriers formed by customs duties and excises. The digital economy has great complexity. Digital services and products are transferred around the world via the borderless Internet. There are legal subjects, producers/servⁱce providers that are not territorially located and identified in the territory of

some states as legal entities under private law. Traders sell and buy, theoretically, according to the documents through complicated economic circuits, to avoid overtaxing/overtaxing the economic activity. Basically, the products have a simplified circuit and, in most cases, stationary, but documents are completed to justify the reduced taxation. The goods do not follow the route indicated in the accompanying or transport documents. In the last period, the Romanian state has implemented in the IT system the centralized highlighting of transport invoices at the level of the fiscal authority. The electronic transport invoice is intended to synchronize goods transport activities with the commercial elements of sale and purchase in order to reduce tax evasion through non-payment of value added tax and, in the case of imports, customs tax. Starting from 2024, the digital control over taxation is stricter by introducing the obligation to report invoices in the governmental digital environment through the "e-invoice" processes. The future is changing the knowledge elements of the economy, public and private finance, trade and transport through the digitization of processes.

The question that arises: *doesn't a state control over the private economy lead to a dictatorship of those who coordinate and control everything through digitization?*

Also entering the digital economy equation are software manufacturers, telephone and data network administrators that support the Internet and provide real-time connections and speeds for information. The performance of these digital systems has constantly increased and determined the transformation of computer programs into programs that can work for the programmed purpose, autonomously, with decision-making capacity. The programs are known as robots or bots. This complex is defined as *artificial intelligence*.

Specialists say that the evolution of the digital economy will increase performance and implicitly profitability, efficiency and return on invested capital. In this economic performance artificial intelligence will have a large weight in relation to the human resource. The transfer of certain work processes from human to "soft computer" will free up the workforce in absolutely all areas and all levels of organizational decision-making and execution.

Opinion leaders, financial analysts, tax experts and other messianic people tell us how dramatic it is to have an economy in recession, an economy without an accelerated growth rate, but without presenting the overall situation of society. Economy and Society are inextricably connected. The economy was and must be at the disposal of society as a whole. An economic growth approved and praised by messianic "economists" but which does not bring an increase in the standard of living and a more efficient administration of public space is not to be appreciated. Social differences impact the course of economies on a planetary level. Goods produced cheaply in some countries sold at a profit on the qualified markets of the West and in the North American continent have created and are creating: an accessible market for cheap products and layoffs for employees. In the context of a digitized economy, services will migrate from developed countries to developing countries or countries that subsidize the economy to attract investors.

Basically, legal relations in the digital economy are internationalized and capital migrates in order to maximize profit. The consequence of these complex processes will be catastrophic for some states that no longer have the opportunity to produce cheaply, with declining demographics and an aging population.

Research methodology

The research is based on observing the application of legislation in the economic processes that take place on the Internet. We reported these cases to the digital economy lawsuits and noticed that the legislation is incomplete or missing in this area of the digital economy.

Recent developments are damaging the balance between the economy and society under the influence of process digitization, high-performance software described as "artificial intelligence" and innovative insurance products and legal relationships. There are many actors in the digital spectrum who may have professional or legal civil liability, contractual liability, but in reality, they will not answer because they are anonymized by the virtual reality, which is different from the physical reality. They are economic operators in the virtual environment, who do not have a Statute of association and representation of the legal person under private law and do not have a physical headquarters. These people with the status of merchants in the electronic environment offered by the Internet do not have a real bank account for transactions and most of the time they direct their capital accumulations in cryptocurrencies.

Many transactions are not taxed so that the role of the state as a regulator and protector of the markets is diminished. In the future, markets will self-regulate independently of the states' strategy. The economic market of the Internet, growing, will dominate the economy through the domination of society through social networks that create the premises of the consumer *"educated"* and directed by social control *"a priori"*.

Our research cannot provide answers in conclusions, but it can create a basis for technical discussions for researchers with the theme: *"Digitalized economy and society to where?" How will legal norms be created to protect the consumer, the producer, the trader and the state in its interests?*

Our research comes against a background of the evolution of legal science in the behavioral relation of society that uses digitized economic processes.

References and research in the specialized literature

The law of the digital economy is not a well-known branch of law, but it will assert itself due to the accelerated evolution of legal relations in the digital economy. The migration of the economy towards the digital sphere and influence brings new *"legal case"* with unknown factors in legislation. The internationalization of procedures and processes creates a global economy with the common denominator of profit and Internet use. In contrast, comparatively, we have legal systems with different legislation in the global territorial geography where electronic commerce operates. The jurisdiction of the law is limited by state borders and by bilateral, trilateral agreements or treaties, etc.

Thus, the specialized literature does not dedicate thorough research for a legislation in the digital economy. It is true that there are specific legislative references for artificial intelligence and digitization at the political level of each state or union of states. The European Union is an assumed and recognized leader in the field of regulations for potential consequences of the implementation of digitized processes. The European Commission has put into public debate many legislative projects to properly regulate the use of digitized processes.

In the year 2000, the European Union proposed the Digital Services Act (DSA). A year later, in 2021, the proposal for a Regulation of the European Parliament to establish harmonized rules on artificial intelligence (Artificial Intelligence Law) and to amend certain legislative acts

of the union appeared. In the Romanian domestic law, the proposal was approved by Decision no. 110/2021, Official Journal no. 902 of 2021. The proposed regulatory framework for **artificial intelligence** has the following specific objectives:

- ✓ ensuring that AI systems introduced on the Union market and used are secure and comply with existing legislation on fundamental rights and Union values; ensuring legal certainty to facilitate AI investment and innovation;
- ✓ strengthening governance and effectively ensuring compliance with existing legislation on fundamental rights and safety requirements applicable to AI systems;
- ✓ facilitating the development of a single market for legal, safe, and trusted AI systems and preventing market fragmentation.

In parallel, cyber security legislation is being developed to prevent and allow state control over economic processes and society. Thus, through the *Law on cyber security and defense of Romania,* the general objectives are to ensure the resilience and protection of networks and IT systems that support defense, national security, public order, administration, and the economy. In exercising their powers, public institutions and authorities will cooperate with the private sector, academia, professional associations, and non-governmental organizations. The law allows for active collaboration between the authorities and the private sector for the achievement of increased security against cyber risks.

Situations and case studies

The current researches are specifically oriented towards the analysis of situations regarding electronic commerce. The digital economy has a broader and more complex spectrum, including e-commerce.

Another dimension of research is in the area of personal data protection through the use of internet transactions. It is a niche of sociological research and the substitution of persons through the fraudulent use of personal data.

Some researchers (Bania, 2022) are analyzing the effects of the Digital Markets Act (DMA), a regulation of the European Union that establishes obligations for IT platforms to protect fairness and contestability in digital markets. Based on the principle of the rule of law, the Digital Markets Act can override the legislative instruments of the states of the union that pursue legitimate interests other than fairness and contestability. Other studies (Freitas et al., 2023) challenge **behavioral economics**. A new field of study in economics because it is important to bridge economic concepts and human behavior, from a psychological perspective, seeking to challenge the traditional concept of economics, as people do not always make rational decisions and that your choices are influenced by a range of factors including emotions, cognition, social and digital context.

These mentions of researchers' concerns are only a few, randomly marked, from which we infer that the digitalization of society and the economy generates topics of debate on risks and shortcomings.

Results and implications

In summary, we can say that the Digital Economy Law is in the process of being formed. The digital economy takes over processes of the traditional economy, and disputes between professionals become more complex.

The complexity of the disputes is given by the inclusion of new legal subjects that contribute to the mechanisms of the digital economy. We refer to software manufacturers, hardware manufacturers, traders, providers of data transfer and archiving solutions, implicitly information encryption. Operators providing cyber security protection of systems cannot be excluded. The digital economy complicates disputes between professionals due to the complexity of civil, malpractice and criminal liabilities. The subject of litigation ranges from claims for material and moral damages through the use or failure of computer systems, information leakage, economic secrets and up to intellectual property rights.

The damages produced by "robots" and "bots" will have a complex connotation in legal relations. The executive and decision-making processes of "artificial intelligence" used in the digital economy are based on programming algorithms, for which the software creator is responsible. At the same time, it can be a responsibility of the user of the robotic platform who sets certain technical parameters incorrectly. A liability of the provider of data transfer solutions via wire, radio or satellite networks cannot be excluded. For data transfer networks we can have two general situations: the risk of loss or theft of data and information and the risk of blocking the system from the operator to the robot. Another element that competes in the production of damages is the archiving of data on physical servers, rented or virtual servers in the Cloud. Information can be lost or corrupted if it is not properly secured and encrypted.

The digital economy contrasts with the general interest of society in evolution. Jobs are lost, human activities disappear and there are hardly any solutions for the unemployed citizens. They become a burden on the state administration and the local administration, which will generate other sociological consequences and social compliance.

The growth of the digital economy will be exponential. Profit is made by using minimal resources. At the same time, the profit made without costs also affects the fiscal resources related to the state budget. Budget revenues will be reduced due to the disappearance of fiscal vectors (tax on income from salaries and related contributions; tax on economic assets; other taxes and fees, etc).

CONCLUSIONS

The implementation of procedures in the digital economy is inevitable. The acceptance of the "digital economy" by the population is a fact based on a natural process in which social networks have played and will play an important role. The convenience of the citizen, the geographical area where we can buy or sell products or services are two defining elements in the choice of transactions of the digital economy.

People readily accept the transition to the digitized economy due to its association with social media friendly software that creates addiction. Citizens do not see any inconvenience regarding the transition from the traditional economy to the digital economy.

The digitized economy has risks. The major risk in the digital economy is to lose control over economic decisions, which influence society, politics and economic resources. States will lose influence to the detriment of large companies that use artificial, digitized systems in the production, execution, marketing and sales processes.

The dependence of the human factor on computer programs and on virtual socialization is another factor that raises signs of attention.

Pension and social security systems will be revolutionized by the digital economy. Economic processes no longer need physical human labor. It is necessary to find innovative solutions that ensure balance and social well-being. Being excluded from economic processes, people no longer contribute to the development of society and can no longer claim pensions, health insurance and social insurance. People must have an active social definition of community life. At the same time, the state has the obligation to protect citizens and ensure their right to education, the right to health, the right to social assistance. The population that will no longer have salaried status will have to be reoriented, re-professionalized for a social definition of *"professionally active person"*.

Some researchers (Rahman, 2021) have penciled in possible measures to take to the problems created by the installation of digitized systems (AI*): (1). Create a vibrant and rigorous welfare system for the unemployed based on their education and skill levels. (2). Tax bots and businesses that use large numbers of bots. (3). Hold AI owners, managers, and developers accountable, always providing benefits to those using human labor. (4). Always prepare a mechanism to stop malfunctioning AI.*

We ask ourselves the question*: What will be the sectors of activity eligible for positions and economic functions occupied by people?*

We ask ourselves the question*: What will be the selection and financing criteria for these costs now included in the state budget?*

As I stated, the structure of enterprises is fundamentally changing. From *"companies with hundreds of employees"* contributing to the turnover and related profit, we reach *"companies without employees",* but with digital technology and "complex and complete robotics", which will generate a very high productivity with financial values of exponentially large profits. This profit made without costs, will be recorded in the charge of several entrepreneurs who founded the company, associates or shareholders, as the case may be. Only these taxes remain to be directed to the state budget, without contributions to the pension and social insurance or health budgets.

For the last 30 years, economics professionals, fascinated by their own models of mathematical statistics and solving an equation in economics that positions the value of production, trade, sales in relation to the population, have had before them the prioritization of economic growth and profit. In this value judgment, the human definition of citizen did not matter. In the analysis of the citizen, economists and political decision-makers found the solution of compensatory social payments for the population not integrated into work. Thus, deprofessionalization and the abandonment of work began.

These are elements that can be a starting point for serious debates on the digital economy. Of course, the digital economy has positive, serious effects on the development of society, with a significant impact on our lives. At the same time, the negative effects reverberate on the population. It remains in question to what extent technological progress can be controlled and tempered competing with the social progress of humanity.

We believe that the evolution must be doubled by a system of regulation of the field with well-articulated legislation that will bring rights for the new digital technologies and the digital economy, but also obligations and solutions for the entire society affected by the digital revolution. International law must be affirmed and in this field of the digital economy that is omnipresent in all geographic regions, regardless of political influences.

REFERENCES

1. Bania, Konstantina. (2022). *Fitting the Digital Markets Act in the existing legal framework: the myth of the "without prejudice" clause*. European Competition Journal. 19. 1-34. 10.1080/17441056.2022.2156730.
2. Bruxelles, 21.4.2021 COM(2021) 206 final 2021/0106 (COD), https://eur-lex.europa.eu/resource.html?uri=cellar:e0649735-a372-11eb-9585-01aa75ed71a1.0001.02/DOC_1&format=PDF
3. Decision no. 110/2021, Official Journal no. 902 of 2021, Parliament of Romania https://legislatie.just.ro/Public/DetaliiDocument/246551
4. Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, on the internal market ("Directive on electronic commerce"), (OJ L 178, 17.7. 2000, p. 1-16).https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32000L0031
5. Freitas, Alexandre & Bicalho, Rachel. (2023). Os reflexos da economia comportamental no superávit econômico. Conecta - Revista Interdisciplinar da Faculdade Arnaldo Janssen. 1. 125-138. 10.60033/conecta.v1i2.15.
6. Law 58/2023 regarding the security and cyber defense of Romania, as well as for the modification and completion of some normative acts, Official Gazette no. 214 of 2023, with subsequent amendments and additions. https://legislatie.just.ro/Public/DetaliiDocument/265677
7. Rahman, M.M. (2021). *Should I Be Scared of Artificial Intelligence? Academia Letters*, Article 2536. https://doi.org/10.20935/AL2536.