**The Impact of Digital Technology on the Rule of Law**

**Reflection from some Eastern European Countries**

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**Abstracts:**

*The ideology of the rule of law state has formed since the ancient Greek-Roman state and it has always been associated with the thought of democratic development. Nowadays, the Rule-of-law is one of the most discussed concepts of constitutional law and is unquestionably related to the transition from the state law to the rule of law. The universality of the rule of law is apparently admitted everywhere as an indispensable reference system for countries, which shows that the rule of law has become a common standard for the whole world.*

*In general, Governance is how society, groups within it or public institutions, organize to make decisions and determines the process of exercising power, order, justice and equity, accountable to citizens. Furthermore, good governance is the process by which public institutions conduct public affairs and manage public resources in a way that promotes the rule of law and realizes human rights, including civil and political rights, economic, social and cultural. Also, core elements for good governance of political systems must include: consistent with the rule of law, participation, consensus oriented, responsibility, transparency, sensibility, effectiveness and efficiency, equity and inclusion.. When political systems do not adhere to these principles, their institutions might be incapable of delivering public services and fulfil people's needs. Besides, good governance is associated with the fight against corruption. Therefore, some of the basic principles of good governance are also anti-corruption principles.*

*On the basis of the research process building the state based on the rule of law in some typical Eastern European countries after the 1990s together with the wave of Digital Technology in the current Fourth Industrial Revolution. The paper analyzes specific interferences between good governance and the rule of law, opportunities and challenges for potential impact on promoting perform public activities, guarantee the respect for the rights of the citizen, without abuze and corruption, paying special attention to the rule of law.*

**Key words:** *Rule of Law;**good governance; anti-corruption; 4th Industrial Revolution*

*1. The Rule of Law and its relation to Good Governance and Anti-corruption*

Looking back on the length of the thousand-years history formation and development of the rule of law ideology, through three industrial revolutions, up to now, the rule of law state has become the ideal and aspiration for most countries in the world. The rule of law is a mode of state organization with very effective social governance principles and humanity, this is also one of the great values that humanity has achieved after many ups and downs through history. The thought of a rule of law state is growing with the development of human knowledge which has brought the recognition and support of many citizens, governments and organizations around the world. It is considered the foundation of the national political, legal and governance system. The rule of law was created based on the guarantee of the most important fundamental pillar that is the presence of the Constitution. Consequently, principle provisions of the Constitution are rules set, valuable starting points to regulate the most important social relations and at the same time are the legal basis for all legal branches to ensure the consistency of the legal system of a country. Otherwise, The Constitution is the foundation of state power and the legal order, is the basis for the implementation and protection of firmly and effectively the constitutional rights and freedoms of people and citizens from the encroachment of state power.

In essence, the rule of law means that citizens and those who govern them must obey the law. In particular, the relationship between those governed and regulators and the relationship between private entities, perhaps be natural person or legal entity, such as associations and companies. Thus, the rule of law is not only concerned with restricting the exercise of government power and it has always been the benchmark when government power is exercised. This does not allow another exception.

In Europe, the rule of law has formed and spread over three major models[[2]](#footnote-2):

1. *The English model* of “Rule of Law” is connected with the work of A.V Dicey's *Introduction to the Study of the Law of the Constitution,* characterized by the limitation of the monarch's power and preserving the power of the parliament; constitutionalism and textualism.

2. *The German concept* of the "Reechstaat" expresion was first used in the 1830s by Robert von Mohl, emphasizes the need to ensure the legality of the administration and its judicial control.

3*. The French concept* of the "État de droit" was first pronounded by R.M de Malberg that regards the rule of law as a legal state, proclaiming and maintaining the principle of legality.

Initially formed and developed in these Western European countries, the rule of law theory was gradually imported, popularized to other countries and regions, step by step internationalized and recognized as a principle, standard for adjusting relations between countries.

Good governance is one of the three fundamental concepts of the modern state created with the rule of law and democracy. Although good governance stems from both the rule of law and democracy, it has grown into a formal platform having its own core dimension. This means that aspects of good governance are still identifiable in the rule of law and democracy but good governance also has new elements that cannot be found there, for example, efficiency principles and accountability. The development processes of the three foundations are closely linked.

The good governance was defines as "legitimate, accountable, and effective ways of obtaining and using public power and resources in the pursuit of widely accepted social goals"[[3]](#footnote-3). This definition links good governance with *transparency and accountability the rule of law*, and embodies partnerships between state and society, and among citizens. Also, the good governance is tightly linked to the fight against corruption. Accordingly, some of the core principles of good governance are: *anti-corruption*; *participatory; responsive; consensus-oriented; equitable and inclusive; effective and efficient. Transparency* too rests on a partnership: officials must make information available, and there must be people and groups with reasons and opportunities to put information to use and the way that substantive and procedural information is available to, and broadly understandable by, people and groups in society, subject to reasonable limits protecting security and privacy. Chief among those are an independent judiciary and a free, competitive, responsible press, but an active civil society is critical too. Rules and procedures must be open to scrutiny and comprehensible: a transparent government makes it clear what is being done, how and why actions take place, who is involved, and by what standards decisions are made. Then, it demonstrates that it has abided by those standards. Transparency requires significant resources, may slow down administrative procedures, and may offer more advantages to the well-organized and influential interests than to others. The good governance also has necessary limits: legitimate issues of security and the privacy rights of citizens form two such boundaries.  *Accountability,* procedures requiring officials and those who seek to influence them to follow established rules defining acceptable processes and outcomes, and to demonstrate that they have followed those procedures. Accountability is partly a matter of institutional design: formal checks and balances can and should be built into any constitutional architecture. But accountability requires political energy too: people, interest groups, civil society, the courts, the press, and opposition parties must insist that those who govern follow legitimate mandates and explain their actions. Promoting accountability is also important for corruption prevention and is one of the main purposes of the United Nations Convention against Corruption.[[4]](#footnote-4)

The same is true within governments, horizontal accountability[[5]](#footnote-5) depends upon the ability of one part of government to find out and, where necessary, to stop or correct what other sectors are doing. Those demanding accountability must be confident that they can do so safely, that officials will respond honestly, and that social needs and demands are taken seriously.

*The rule of law* must exercise of state power using, and guided by, published written standards that embody widely-supported social values, avoid particularism, and enjoy broad-based public support. Where rule of law is strong, people uphold the law not out of fear but because they have a stake in its effectiveness. Virtually any state, after all, can enact laws; corrupt and repressive regimes can legislate at will. Genuine rule of law, by contrast, requires the cooperation of state and society, and is an outcome of complex and deeply rooted social processes. Wrongdoers face not only legal penalties, but also social sanctions such as criticism in the news media, popular disapproval, and punishments from professional and trade associations. An approach that relies solely upon detection and punishment may work for a time, but will do little to integrate laws and policies with social values, or to create broader and deeper support for the system. Some scholars have distinguished between "rule by law"[[6]](#footnote-6), in which the executive uses law and bureaucracy as an instrument of power, and "rule of law", in which the executive is itself constrained by the same laws that apply to everyone else. In many respects rule by law overlaps with state quality, since we want states to operate by general, transparent, impartial, and predictable rules. Rule of law in the narrow sense of constitutional constraints on the executive, on the other hand, is closely associated with democracy.

*Participation* is opportunity for active involvement by all sectors of society in the decision-making process regarding all issues of interest.

*Anti-Corruption* is noted that art. 13 of UNCAC "to promote the active participation of individuals and groups outside the public sector, such as civil society, N.G.O and community-based organizations, in the prevention of and the fight against corruption".

*Responsiveness* is ready to serve all stakeholders quickly and appropriately so that the interests of all citizens are protected.

*Consensus orientation* ensures that the existing systems serve the best interests of society.

*Equity&inclusiveness* is for everyone has a chance to improve or maintain their health.

*Effectiveness and efficiency* make the best use of resources to produce results that

meet the needs of society.

*2.Digital Technology in the 4th Industrial Revolution and Its Potential Impact on the Promotion of the Rule of Law*

Industry 4.0 is the current trend of automation and data exchange in manufacturing technology based on digital technology and integrating all intelligent technologies to optimize processes and production methods; it includes physical networks, the Internet which connects things, and cloud computing. Industry 4.0 was first launched at the Hannover Industrial Fair[[7]](#footnote-7) in the Federal Republic of Germany in 2011. Industry 4.0 aims to make manufacturing and management smart in the manufacturing industry. In 2013, a new keyword "Industry 4.0" started to emerge as a result of a German government report which used this phrase to refer to high-tech strategy, to computerize the manufacturing industry without human participation.

The first industrial revolution broke out in 1784 marked by an important milestone that James Watt invented the steam engine. This had opened a new era in human history - the era of mechanical production, mechanization, and replacement of the old traditional technical system of the agricultural era which had lasted for 17 centuries and based on manual labor.

The second industrial revolution was born after the development of more than 100 years of production forces on the basis of great mechanics and engineering. This revolution took place from 1870 to 1914 when there had the development of electricity, telegraph, mass steel production brought railway transport into the system that had contributed to the mass production line. Typically, in 1913, Ford pioneered the application of the production line management principle.

The third industrial revolution appeared between 1950 and 1970 with the advent and spread of information technology, the use of electronics and information technology to automate production. This revolution is often referred to as the Digital Revolution or the Information Age because it was catalyzed by the development of semiconductors, supercomputers, personal computers in the 1970s and 1980s as well as the Internet in the 1990s. This revolution had facilitated the saving of natural and social resources, allowed relative cost to be less than means of production to generate the same volume of consumer goods. . As a result, there were structural changes in social production as well as the correlations between regions such as agriculture-forestry and fisheries, between industry and construction, between products and services of social production and radical change in production forces. The modern scientific and industrial revolution had affected all areas of human social life, especially in the developed capitalist countries because this is the origin of this revolution.

In the garment sector, in the past, countries with developed textile and apparel industries such as the US, UK and Europe were lack of labor so their hiring workers had been moved to China, India and Vietnam - where there is an abundant cheap manual labor force. However, with robotic technology in this fourth revolution, many garment factories can turn around, because they have already started using so many robots. According to the International Labor Organization (ILO)[[8]](#footnote-8), about 86% of Vietnamese workers, 88% of Cambodian workers and 64% of Indonesian workers in the garment and footwear industry will be heavily affected by the wave of automation, industrialization.

In the field of commerce, service, and entertainment, robots are also presented in positions that are supposed to be irreplaceable to humans such as hotel receptionists, offices, restaurants, call centers. When customers arrive, the robot can automatically recognize them, say hello, remember their preferences, and answer their needs with a completely human voice. The Amazon Go shopping technology is said to be a challenge for supermarkets and sales staff when users simply install apps, scan QR codes, choose items and go straight to the door without waiting in line.

The Agriculture sector is no longer purely agriculture. IoT technology with a series of sensor systems can help water plants, fertilize at the right time and science with the necessary amount for the tree and save costs compared to the traditional method today. Therefore, farmers who are in the most precarious group in terms of work - will fall into unemployment.

The State and Legal sphere will also be strongly and comprehensively affected to national life, people, the cooperative relationship between countries and international organizations in both positive and favorable directions and enormous pressures and challenges. The State and law always play a big role in any social organization model and dominate all fields. Simultaneously, the State and law are also affected by a series of other factors. In the information technology, digital technology, media and Internet society, the role and pressure placed on the State, the law as well as the society as a whole, is posed extremely strong. This is putting a strong and comprehensive impact on all fields of the State's activities, the society, solving and responding to social problems; the relationship between the State and individuals; service, awareness, culture, education and legal training. The state does not only apply technological achievements, but also has role and responsibility in planning, building and developing an information technology society and knowledge economy, applying digital technology to the digital economy, as well as innovate the way of thinking in policy formulation, law, the traditional way of managing and operating the society before.

The core of industrial revolution 4.0 remains information technology. The main tool to achieve national policies in the information society is the development of E-Government[[9]](#footnote-9) at the central and local levels. E-government is a new form of organization and operation of state agencies made by the widespread application of information and communication technology to ensure convenience for individuals, businesses, social organizations in legal transactions, enjoy public services, and reduce social costs. The aim is to improve the quality and access to public services, apply standards to serve people and businesses, improve transparency and openness of information about operations of state agencies and ensure the conditions for participation of people and social organizations in the process of building policies, laws, and administrative decisions of the public apparatus. At the same time, E-Government also plays a great role in improving the quality, perfecting the supply system and decision analysis and evaluation, ensuring the control over the performance of state agencies.

Especially in terms of building a rule of law state related to digital age technology in the industrial revolution 4.0, the nations of the world must ensure to maintain and adjust reasonably for themselves the basic rule of law such as honoring the Constitution, the law, all individuals and organizations are equal before the law and before the court, power control and devision, democracy, people's sovereignty, human rights, privacy…

*Respect and protect the constitution and law* control the constitutionality and apply sanctions against violations of the constitution, control the implementation of the constitution, development of legal documents in accordance with the principles and provisions of the constitution, review the legal system to remove unconstitutional rules or principles.

*Divide and control power* in the context of information technology, digital technology, industrial revolution 4.0 need to be added more content, scale, scope of application, forming a model, control mechanism that is both traditional and non-traditional. There is a need to expand the scope and increase the sanctions system, ensure the effectiveness of vertical, horizontal and dimensional state control mechanisms in state institutions; legal control from input to output.

*Democracy, people's sovereignty* with the application of digital technology makes the process of democracy, transparency, publicity, convenience, efficiency in service and provision of public services more practical in all areas of life, changes relations between the State and individuals, keep equality and fairness, changes from operating by administrative orders to responsibility for serving, dialogue, negotiating, attracting the participation, consultation and criticism of people, businesses and society.

*Human rights, privacy right*, personal data needs special attention and protection, especially in the context of the industrial revolution 4.0 becoming more and more urgent than ever. Nowaday the lines between physics, digital and biology are blurring, the Internet is easy to be taken advantage of, the legal system is not responsive in time, the legal and technical controls are poor, many individuals and organizations have acts that infringe upon human rights and interests, social order and safety, national security. This poses many threats for the role and responsibility of the State and the legal system. The legal framework for the protection of personal information and data in many countries is at traditional legal conception level that do not have the new factor that there is no distinction between online and offline environments, virtual environments on the Internet in cyberspace, which has resulted in many shortcomings and loopholes that adversely affect rights, honor and dignity, therefore, it must be promptly completed with the pace of development of the digital technology era in the 4.0 revolution.

The direct influence of industrial revolution 4.0 is no longer the story of the future but of the present, which is happening strongly in the world every day, having impacts on many fields, the important thing is whether each country or individual is aware of that or not. The typical examples of recent periods have raised many open-ended questions that need to be addressed and reflect the possibilities and challenges that need to be analyzed and addressed.

Estonia is a prime example of the transformation of digital technology. This country has started its digital journey known as e-Estonia[[10]](#footnote-10) since 2014. e-Estonia refers to a movement by the government of Estonia to facilitate citizen interactions with the state through the use of electronic solutions. E-services created include i-Voting, e-Tax Board, e-Business, e-Banking, e-Ticket, e-School, University via internet, the e-Governance Academy. The result is an increase of 2% in GDP. This system allows establishing a business in 18 minutes. Public services done online help to save 800 working hours per year. In 2019, the country applies Robots [[11]](#footnote-11)with artificial intelligence that judge simple civil cases under 6,400 euros. With 30,000 cases tried every year, only 10% of the sentences are appealed.

Uber can be considered as a prime example of the industrial revolution 4.0. Since its inception and development, there have been many reactions from traditional taxi companies and it is difficult for regulators to classify Uber in what type of business. Europe has faced many lawsuits such as the European Court of Justice[[12]](#footnote-12) -ECJ or London[[13]](#footnote-13) 2017 trial. Then the first robot citizen named Sophia[[14]](#footnote-14) was granted citizenship in Arabia Saudit.

*3.Impact of Digital Technology on the Promotion of Rule of Law in some Eastern European Countries*

In the late 1980s and early 1990s, the world witnessed global and structural changes. It was the end of the Cold War, the disintegration of the Soviet Union, the crisis and collapse of socialist regimes in Eastern European countries[[15]](#footnote-15) (East Germany, Poland, Czech Republic, Slovakia, Bulgaria, Hungary, Romania ..). In this region, basic and radical changes have taken place in the fact that almost all of these countries rebuilt a common structure in the Constitution and all joined the European Union. The new constitutions are all reflected to the ideological system of the rule of law system with a very specific and clear assignment of power, as well as a mechanism to control state power over all branches of power from insight into power system. It's what Eastern European countries have recognized after having spent more than 40 years of ideological influence due to the unique heritage of the old state model. This was followed by the fall of the Berlin Wall, a series of revolutionary waves occurred in Eastern European countries that caused instability, even led to violence application in Romania. After this century incident, after the loss as a result of the change from the foundation of the state, after realizing a clear shift in the value of the integration of the United German State, including both theoretical and practical terms, Eastern European countries have affirmed their determination to strive to build their rule of law states.

Although they have the same starting point in terms of context and time, these countries all have territorial, demographic, cultural and economic differences as well as different choices of solutions in construction of the rule of law. This led to the recognition and evaluation of the European Union community in the negotiation and widely welcome[[16]](#footnote-16) Poland, Estonia, Hungary, Latvia, Lithuania, Malta, Czechia, Cyprus, Slovakia, and Slovenia, Bulgaria, Romania in 2007 as well as Croatia in 2013. The above series of events represent the unification between Eastern and Western Europe in the European Union, but it is also a historic landmark, evaluating the theoretical completion of the rule of law state construction. The European Union has developed new members through a legal system with common standards applicable to all countries in the bloc. Consequently, before being allowed to join the European Union, the candidate country must fulfill the conditions of the rule of law state in order to achieve democracy, corresponding freedoms and institutions, as well as the law respect. This integration process is also used to refer to enhanced cooperation among the European Union member states, for examples, national governments allow for gradual harmonization of national laws. In fact, after joining the EU, there have been still many things that need to be improved, and mutual interests are still contested. Citizens of these countries have still highly appreciated the achievements of the old regime, and have been disappointed with what the new regime has set out but not yet.

The European Union is based on a set of shared values, including fundamental rights, freedom, democracy, equality, respect for human rights and the rule of law[[17]](#footnote-17). The European Commission has created a number of measures to support and control the legislative process since Eastern Europe countries joined the European Union. For instance, the Cooperation and Verification Mechanism (CVM) as a transitional measure to assist for Romania still had progress to make in the fields of judicial reform, corruption and for Bulgaria organised crime. In the framework of time limit as well as the limitation of the breadth of the assets, in this article, the author only studied, analyzed and summarized some examples of some typical countries in Eastern Europe.

Romania joined the EU in 2007 with the adoption of the CVM and ends when all the benchmarks applying to Romania are satisfactorily met. In its reports of January 2017, the Commission adopted a comprehensive assessment of Romania’s progress over the ten years of the CVM[[18]](#footnote-18). It also set out a path towards the conclusion of the Mechanism based on 12 final key recommendations that, if complied with, would be sufficient to meet the goals of the CVM. Due to developments that followed in Romania the Commission issued eight additional recommendations in November 2018. In the latest CVM report, adopted in October 2019, the Commission concluded that Romania still had to progress on the recommendations of the January 2017 and November 2018 reports. Several amendments to the Justice laws continue to raise concerns as regards their impact on judicial independence. The prolonged implementation of the amended justice laws creates increased uncertainty for the functioning of the justice system. The perception of judicial independence among the general public is low, and shows a decreasing trend in recent years. The level of perceived judicial independence among the general public remains low (37%), and has been decreasing. Among the companies, the the level of perceived judicial independence is average (53%). In both cases, the reason most often invoked for the perceived lack of judicial independence is related to interference or pressure from the Government and politicians. Specifically, Political scandals erupted in 2017, from the famous Emergency Ordinance 13, which led to the largest protests in Romania since the 1990s, until the dismissal of the Government[[19]](#footnote-19). This success was also based on the information technology of social networks when many citizens had promptly contacted each other and participated in demonstrations until the goal was achieved. Formerly, on the 2014 presidential election, a candidate who was assessed as unlikely to win the election was unexpectedly won based on online and social media environments. For the first time in Romania information technology had played a very active role in the election campaign and had shown the role of digital technology in transforming political institutions.

Romania has an overall good level of digitalisation of justice and efforts continue to develop it further. At present, it is possible to transmit summons and to monitor the stages of proceedings online and to submit a case by electronic means, in most courts. However, only some judgments are accessible online. There are ongoing efforts to improve the case management system, which will be used to identify the number of definitive judgments where public institutions are debtors or creditors. Currently, an analysis which is being developed to identify the steps necessary for a modernisation of the system, including features such as electronic accessibility of procedural documents, electronic archiving and electronic signature should be concluded by the end of 2020. In the Transparency International Corruption Perceptions Index, Romania scored 44/100 and ranks 19th in the European Union and 70th globally[[20]](#footnote-20). New Digital Government Highlights is that has established the Digital Romania Council, an expert group whose chief aim is strengthening the development of information society and the Romania Virtual Payment Office[[21]](#footnote-21) was upgraded with an access point eDelivery, which ensured the interconnection of Ghiseul.ro with other information systems for data exchange. The platform allows citizens to make electronic payment of fines, taxes and other fiscal obligations via bank cards.

The case for Bulgaria, the country also joined the EU in 2007 and also applied the CVM and ends when all the benchmarks applying to Bulgaria are satisfactorily met. The latest CVM report, adopted in October 2019, recorded that Bulgaria had made a number of further commitments and the Commission concluded that the progress made under the CVM was sufficient to meet Bulgaria’s commitments made at the time of its accession to the EU. As the Commission also underlined, Bulgaria will need to continue working consistently on translating the commitments specified in its report into concrete legislation and on continued implementation. As all thing above, the level of perceived judicial independence in Bulgaria remains low. Only 37% among the general public consider it to be ‘fairly or very good’, and among companies it also remains average, with 45% considering it to be ‘fairly or very good'. In the latest Transparency International 2019 Corruption Perceptions Index, Bulgaria scored 43/100 and was ranked last in the EU and 74th globally. On March, 2020, during the Covid-19 pandemic, the Bulgarian Parliament tried to change the Criminal Code in order to criminalise disinformation[[22]](#footnote-22), included amendments to the Criminal Code providing for a prison term of up to three years and fines of up to BGN 10000 for disseminating “untrue information about the spreading of an infectious disease”. Although there was no definition of false information, this affects the basic rights of freedom of speech. . At end of 2018, 150 administrative services were available in Bulgaria including electronic request, payment and delivery.

Hungary is one of the countries that successfully joined the EU very early in the former socialist bloc in Eastern Europe. However, over the past years, judicial independence in Hungary has been raised by EU institutions as a source of concern, including in the Article 7 of Treaty on European Union[[23]](#footnote-23), procedure initiated by the European Parliament. The call for strengthening judicial independence, made in the context of the European Semester, remains to be addressed. Perceived judicial independence is average among the general public and very low among companies, although the latest data show improvement. The level independence of courts and judges is perceived as average (48% ‘fairly or very good’) by the general population ,but very low(26%‘fairly or very good’) by companies. The digitalisation of the justice system is overall high. Hungary ranks very high when it comes to the availability of electronic means , as regards online access to published judgments by the general public The highlight of Digital Government can be mentioned with the new Cybersecurity Strategy was adopted at the end of December 2018 and the Digital Success Programme[[24]](#footnote-24) initiated the establishment of the Hungarian Artificial Intelligence and 5G Coalitions. In January 2019, the new Vehicle Service Platform (JSZP) was launched for check the data for all vehicles registered in Hungary free of charge, and companies use their Company Gate digital mailbox for official communications with the State. In response to the COVID-19 pandemic the Government was declared a ‘state of danger’ on 11 March 2020. Its duration was not predefined and the Government had discretionary power to maintain it or to terminate it, later Parliament passed a new law that allowed the Government to set aside any law by decree. Recently the editorial staff of an index.hu news newspaper has been pressured to resign, which has led to the threat to the independence and freedom of the media caused many citizens to protest.

Despite of the fact that the events of the full-blown revolution in Eastern European began in Poland in 1989 and Poland was also one of the former socialist countries to first accede to the European Union, Poland’s justice reforms since 2015 have been a major source of controversy, both domestically and at EU level, and have raised serious concerns, several of which persist. The reforms, impacting and prosecution service, have increased the influence of the executive and legislative powers over the justice system and therefore weakened judicial independence. This led the Commission to launch the procedure under Article 7 7 of Treaty on European Union, which is still under consideration by the Council. In 2019 and 2020, the Commission launched two new infringement procedures to safeguard judicial independence. The perception of judicial independence among the general public and companies is low and has shown a decreasing trend in recent years. Whereas 34% of the general public perceives independence of courts and judges as ‘fairly or very good’ in 2019, 27% of companies shares the same perception . The reason most often invoked for the perceived lack of judicial independence is related to interference or pressure from the Government and politicians . The public debate on the judiciary is marked by strong tensions. In 2019, Polish media reported that high-ranking officials8 had allegedly been associated with a smear campaign against judges who openly criticised the justice reforms. Compared to previous years, Poland improved the availability of online information about the judicial system for the general public. Although some important progress has been made, the need to introduce IT tools in the context of judicial procedures remains. In the latest Corruption Perceptions Index of Transparency International, Poland scores 58/100 and ranks 12th in the European Union and 41 globally. A June 2019 draft law amending the Criminal Code were proposed to change[[25]](#footnote-25), after that the Constitutional Tribunal considered unconstitutional this proposal. Digital Government Highlights are shown with the following digital government legislations adopted and amended: Act on the national cyber security system; personal data protection; electronic invoicing; trust services & electronic identification; identity cards; health information system. These new digital government infrastructures were put in place portal as Gov.pl for all official matters; Dane.gov.pl for open data; mCitizen mobile application; and services for citizens as residence registration; mobile school ID; registration of the birth of a child; register to vote by correspondence; request for issuing work permits online.

The digital revolution is not just a simple concept, but a daily reality that involves and affects us all, willingly or unwillingly regardless of the country or the continent. In the digital era, who has the information, has the power, including through the electoral mechanisms, the manifestations of power. If until recently communication between people was done directly, by mail or telephone, nowadays communication is much faster, easier and accessible to anyone. We currently have smart phones, which help us talk to anyone anywhere. We also can access to the internet and its information. Today we are always concerned with answering the phone, chatting, e-mailing, posting and commenting on social networks; then we use less and less public or private libraries and we use virtual libraries. We access movies, music directly online. We pay taxes and services, buy plane tickets and check in with our mobile phone, plan holiday, shopping,... Basically, our whole life depends on digital technology. We are closer or we can get closer, but at the same time we are much further away from each other.

Information technology, digital technology, industrial revolution 4.0 are not everything and it can not completely replace human beings. In the information technology, digital technology, industrial revolution 4.0 society, the most important issue is to strengthen the implementation of the fundamental principles of the rule of law. Humans have built machines and have driven artificial intelligence to make machines by themselves. This is extremely useful, but they do not permute people. People are still the key factor determining success and prosperity in the rule of law state.

**References**

*\* Books & Legal documents*

Luc Heuschling, *Etat de droit; Rechtsstaat; Rule of Law,* Dalloz Sirey Publishing, 2002.

United Nations Office on Drugs and Crime (2003). United Nations Convention against Corruption. Vienna.

A Schedler, L Diamond, and M Plattner, *The Self-Restraining State: Power and Accountability in New Democracies,* Lynne Rienner, London 1999.

F. Fukuyama, *What is Governance*? Governance, vol. 26, issue 03, pp. 347-368. Wiley Periodicals, July 2013.

*\* Web pages and articles in an online journal*

*https://www.deutschland.de/en/topic/business/globalization-world-trade/industry-40-at-hannover-messe*

*https://www.theguardian.com/technology/2016/aug/08/tesla-model-x-missouri-medical-emergency*

*https://searchenterpriseai.techtarget.com/definition/IBM-Watson-supercomputer*

*https://www.ilo.org/wcmsp5/groups/public/ed\_dialogue/dialogue/documents/publication/wcms\_663063.pdf*

*https://etico.iiep.unesco.org/en/resource/good-governance-rule-law-transparency-and-accountability*

*https://ictframe.com/what-is-e-governance-what-is-the-type-of-e-governance/*

*https://e-estonia.com*

*https://www.roboticslawjournal.com/global/estonia-a-robotically-transformative-nation-28728942*

*https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A62015CJ0434*

*https://www.supremecourt.uk/cases/uksc-2019-0029.html*

*https://www.britishcouncil.org/anyone-anywhere/explore/digital-identities/robots-citizens*

*http://chnm.gmu.edu/1989/exhibits/intro/1989revolutions* truy cập ngày 16/06/2020.

*https://europa.eu/european-union/about-eu/history\_en*, truy cập ngày 18/06/2020.

*https://eur-lex.europa.eu/eli/treaty/teu\_2012/art\_2/oj* accessed 02/10/2020.

*https://ec.europa.eu/commission/presscorner/detail/en/IP\_19\_6135*

*https://www.againstcorruption.eu/wp-content/uploads/2017/02/Romanian-Report-Updated.pdf*

*https://www.transparency.org/en/cpi/2019/results/table*

*https://www.ghiseul.ro/ghiseul/public*

*https://www.parliament.bg/bg/laws/ID/157379*

*https://europa.eu/european-union/law/treaties\_en*

*https://www.kormany.hu/en/cabinet-office-of-the-prime-minister/hu/digital-success-programme*

*https://thelawreviews.co.uk/edition/the-anti-bribery-and-anti-corruption-review-edition-8/1210840/poland*

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2. Luc Heuschling, *Etat de droit; Rechtsstaat; Rule of Law,* Dalloz Sirey Publishing, 2002. [↑](#footnote-ref-2)
3. *https://etico.iiep.unesco.org/en/resource/good-governance-rule-law-transparency-and-accountability* accessed 04/10/2020 [↑](#footnote-ref-3)
4. United Nations Office on Drugs and Crime (2003). United Nations Convention against Corruption. Vienna. [↑](#footnote-ref-4)
5. A Schedler, L Diamond, and M Plattner, *The Self-Restraining State: Power and Accountability in New Democracies,* Lynne Rienner, London 1999. [↑](#footnote-ref-5)
6. F. Fukuyama, *What is Governance*? Governance, vol. 26, issue 03, pp. 347-368. Wiley Periodicals, July 2013. [↑](#footnote-ref-6)
7. *https://www.deutschland.de/en/topic/business/globalization-world-trade/industry-40-at-hannover-messe* accessed 02/10/2020 [↑](#footnote-ref-7)
8. *https://www.ilo.org/wcmsp5/groups/public/---ed\_dialogue/dialogue/documents/publication/wcms\_663063.pdf* accessed 04/10/2020 [↑](#footnote-ref-8)
9. *https://ictframe.com/what-is-e-governance-what-is-the-type-of-e-governance/* accessed 06/10/2020 [↑](#footnote-ref-9)
10. *https://e-estonia.com* accessed 08/10/2020 [↑](#footnote-ref-10)
11. *https://www.roboticslawjournal.com/global/estonia-a-robotically-transformative-nation-28728942* accessed 08/10/2020 [↑](#footnote-ref-11)
12. *https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A62015CJ0434* accessed 08/10/2020 [↑](#footnote-ref-12)
13. *https://www.supremecourt.uk/cases/uksc-2019-0029.html* accessed 08/10/2020 [↑](#footnote-ref-13)
14. *https://www.britishcouncil.org/anyone-anywhere/explore/digital-identities/robots-citizens* accessed 08/10/2020 [↑](#footnote-ref-14)
15. *http://chnm.gmu.edu/1989/exhibits/intro/1989revolutions* accessed 10/10/2020 . [↑](#footnote-ref-15)
16. *https://europa.eu/european-union/about-eu/history\_en*, accessed 10/10/2020 [↑](#footnote-ref-16)
17. *https://eur-lex.europa.eu/eli/treaty/teu\_2012/art\_2/oj* accessed 12/10/2020. [↑](#footnote-ref-17)
18. *https://ec.europa.eu/commission/presscorner/detail/en/IP\_19\_6135* accessed 12/10/2020 [↑](#footnote-ref-18)
19. *https://www.againstcorruption.eu/wp-content/uploads/2017/02/Romanian-Report-Updated.pdf* accessed 12/10/2020 [↑](#footnote-ref-19)
20. *https://www.transparency.org/en/cpi/2019/results/table* accessed 13/10/2020 [↑](#footnote-ref-20)
21. *https://www.ghiseul.ro/ghiseul/public* accessed 13/10/2020 [↑](#footnote-ref-21)
22. *https://www.parliament.bg/bg/laws/ID/157379* accessed 13/10/2020  [↑](#footnote-ref-22)
23. *https://europa.eu/european-union/law/treaties\_en* accessed 14/10/2020  [↑](#footnote-ref-23)
24. *https://www.kormany.hu/en/cabinet-office-of-the-prime-minister/hu/digital-success-programme* accessed 14/10/2020  [↑](#footnote-ref-24)
25. *https://thelawreviews.co.uk/edition/the-anti-bribery-and-anti-corruption-review-edition-8/1210840/poland* accessed 14/10/2020 [↑](#footnote-ref-25)