Artificial Intelligence between Benefits and Speculative Challenges

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Abstract

We observe daily how digital technologies enter our lives, influence us, and transform us, becoming crucial to address the problems and constraints arising from vulnerabilities and inequities to adapt to the rapid pace of change in the plan digitization. The role of transformative AI is obvious, perhaps causing a revolution in technology for the administration public, business, and citizens, maybe bringing uncertainty amplified by the tensions geopolitics.

In the study undertaken, we highlighted the need to use AI, the effects ITS on growth economic aspects of everyday life: cars, phones, watches, smart homes, the negative implications it can have on companies and individuals both if it is not managed properly, but and skepticism people dreamed of the impact technology Digital on their lives. We must have a vision common and coherent, targeting the digital age towards which we are rapidly moving to learn, work, socialize, interact, and access services such as health, culture, various organizations, and governments.

Key words: artificial intelligence, medical software, Blockchain concept, virtual reality
J.E.L. classification: O33, O39

1. Introduction

To questions like "What is artificial intelligence?", "What are the risks of using AI?", and "How will AI influence the future of humanity?" various answers were given that failed to remove the distrust of the skeptics in such a technology but also the optimism of the visionaries.

There are many open questions about human moral responsibilities, and how responsibilities and obligations should be distributed among AI engineers, manufacturers, users, and other stakeholders, but the idea of bringing humans and AI together and placing them in the category of responsible entities. is quite controversial.

It is noted that the AI that is already in use, along with the AI that is being developed, but also an artificial intelligence that is speculated to be used in the future. To be sure, the term AI takes on different connotations because it is a technique in a real or imagined context, presenting characteristics that visionaries describe as intelligent, and the mass, having difficulty in really assessing the impact of AI development, identifying benefits and risks.

Although AI has become an integral part of everyday life quite quickly, we can say with certainty that this will represent a real revolution in our future "Fourth Industrial Revolution", although the pace and direction of technological progress in artificial intelligence are difficult to predict and short-term and quite difficult to separate marketing from implementation. Companies in various sectors of activity are concerned about the high productivity that must be connected with the implementation of cutting-edge technologies and express concern that the excessive use of AI can divert investment into other innovations that play an important role in business. You must note that AI includes a wide range of applications and technologies that do not lead me to believe that they have more than apparent intelligence that has the quality open to interpretation.

Artificial intelligence is considered the defining technology of the last decade and certainly of the next decades, starting from the fact that AI is those systems of intelligent behavior that can analyze the environment, and make decisions, with a certain degree of autonomy, to achieve the specified objectives, with no restrictions on the methods to obtain intelligence. With artificial

intelligence systems set for increasingly autonomous action and widespread use, issues related to AI safety, transparency, and accountability, including decision-making, discrimination, job loss, and malicious use of AI, are becoming important on the AI policy agenda.

2. Theoretical background

To the question "What can artificial intelligence teach us about the mind?", Levesque (2017) explains to us as clearly as possible that "old-fashioned artificial intelligence" ,which is based on the understanding of commonsense intelligence, can handle situations that depart from previous patterns, just like in real life. Schema Winograd by Levesque and colleagues points out that "If our goal is to understand intelligent behavior, we had better understand the difference between doing it and faking it."

As artificial intelligence becomes dynamic and ubiquitous it raises questions about the future of humanity, which has become a historical challenge. According to the authors, artificial intelligence can solve crises such as climate change, geopolitical conflicts, and income inequality, and revolutionize fields such as medicine or architecture. But there is also the flip side, Artificial Intelligence can generate unimaginable challenges capable of changing our judgment and even stimulating a new phase of human evolution. (Kissinger, Schmidt and Mundie, 2024)

AI is a revered and misunderstood technology, it has uniformly failed and deep learning should be seen as a foundation for what is to come, as Eugene Charnaik argues in his work. He argues that the development of AI may lead to the end of jobs, creativity, and the extinction of humans as a species. (Charnaik, 2024)

Another AI challenge is the aesthetics of computer art, with types of computer art being identified. The study of creativity in AI explores the links between computer art and the traditionalist perspective, given that the use of artificial intelligence compromises the aesthetic credentials of computer art, and writing a computer program cannot be equivalent to painting with a brush. (Boden and Edmonds, 2019)

The decisions we make about AI will shape the future of humanity, so there needs to be a coherent policy aimed at overseeing AI's layered data, and how it got to the problematic situation of how dangerous AI can become if not controlled. (Marcus, 2024)

Billionaire Elon Musk believes that artificial intelligence will surpass human intelligence by developing at a rapid pace, which is difficult to understand because the real problems are not properly understood. He claims: "My assessment of the reason for that artificial intelligence is overlooked by very smart people who do not believe that a computer can ever be as intelligent as it is. And this, which is evidence of excessive pride, is false. We're heading towards a situation where AI is much 'smarter' than humans and things get unstable or weird."

Unfortunately, billionaire Elon Musk's vision is as real as it gets, humanity may face a catastrophic future if the use of AI is not regulated because there will be individuals who could use AI to take control of humanity in a world dictatorship, or they would be a risk of AI technology being used by terrorists. In addition to all this, we have to worry about safety, discrimination, and privacy protection because voice cloning and reality distortion tools, deepfake, are used for disinformation and phishing, individuals can isolate themselves socially, and underestimate themselves by confusing the capabilities of AI systems with human ones, and the moment the AI becomes conscious, moral dilemmas arise related to its rights and the risk of being treated inappropriately.

We must not overlook the fact that AI has great potential to solve the grand challenges facing humanity in key areas such as medicine, the environment, and natural resources. The power we give to AI must become all the more important as AI uses it in ways we can rely on, prompting a rethinking of the entire paradigm.

3. Research methodology

The adoption of AI systems has a strong potential to benefit society, generate economic growth, and strengthen EU innovation and global competitiveness, but in some cases, the specific characteristics of AI systems may create safety risks, including the physical safety of users, and fundamental rights but also systemic risks. This situation generates uncertainty, determining a slower adoption of AI technologies, by public authorities, businesses, and citizens, as a result of the lack of trust, that is why a classification of risks was made based on the expected role of the AI system, which depends on the function performed by the AI system, the purpose and the specific ways in which that system is used.

The high degree of risk of AI systems occurs in two situations: the first situation is when the AI system is integrated as a safety component in products regulated by legislation or represents another product, for example, medical software, and the decisions that a patient's medication can be administered will only be made on data obtained by AI. The second situation occurs when the AI system is used in areas with a higher degree of risk, such as education, employment, law enforcement, or migration. If we take the Facebook-Cambridge Analytica affair as an example, it has been found that both individual firms and large firms cannot manage the ethical and social threats generated by AI technologies as long as there are no clear policies aimed at this controversial area.

The use of AI required the development of a regulation to be used by all EU member states, therefore, in August 2024, the regulation called "Artificial Intelligence Law" was adopted, which provides guarantees in terms of protecting the fundamental rights of citizens but creating an environment conducive to investment and innovation. This law envisages a prospective definition of AI that takes into account the safety of products but also the risks that may arise. While AI has the potential to bring significant positive change in many areas, its risks should not be underestimated.

Unacceptable risk violates the fundamental rights of individuals by manipulating human behavior, invading personal privacy when facial recognition technologies are used to track people's movement without their consent, use of remote biometric systems for law enforcement in public places, using of images facial expressions extracted from the Internet for the creation or expansion of databases, the creation of fake news or the manipulation of public opinion through recruitment algorithms that favor certain persons in the disadvantage of others, algorithms being able to reproduce and amplify social and cultural stereotypes, if they are not monitored correctly, the exploitation of people's vulnerabilities, individual police activities that use predictive analysis to create profiles of some people.

High risk, AI systems that negatively impact the safety of citizens are considered to have a high degree of risk, they relate to the safety components of products regulated by the Union's sectoral legislation, and the risk may arise when they will be subject to a conformity assessment by a third party under sectoral legislation, in other words, AI systems can predict whether a person should receive a certain medical treatment, get a certain job or a loan to buy an apartment.

The specific risk aims at the lack of transparency and explainability because the complexity of AI systems cannot be understood by humans making it difficult to explain why AI resorts to certain decisions worrying situations regarding transparency and accountability. If AI becomes too advanced it will not be possible to understand how it works and may cause risks not controlled even by those who created it., The AI Regulation introduces specific transparency requirements for certain AI systems where there is a clear risk of manipulation such as using chatbots or *deepfakes*, users should be aware that they are not interacting with a person.

Risk minimally, is related to the daily use of AI systems affecting individual or small groups of persons and are not so serious compared to systemic risks, but can significantly influence the operation of a certain system or domain, such as technical errors caused by the failure of an algorithm, incorrect processing of data or loss of data due to software errors, algorithmic discrimination, AI may discriminate based on race, gender or other characteristics, job cuts by replacing jobs traditional, causing the loss of jobs for the less qualified. System providers may choose on their initiative to apply Trusted AI requirements and adhere to voluntary codes of conduct.

Systemic risks, they are much more complex, they can affect society, the economy at large, they come from the large-scale use of AI in critical infrastructures and in decisions that influence millions or billions of people, examples of this are: the impact on the labor market by creating inequalities economic and social ones for people who cannot find another job or do not have access to continuing education; concentration of economic power for companies using advanced AI technologies creating monopolies or oligopolies with negative effects on competition and innovation; effects on mental and social health by replacing human interactions with AI interactions that affect individuals' ability to have emotional connections and a healthy balance in social life; the risk of global control and insufficient regulations can cause major global risks such as: autonomous weapons or critical decisions made by AI without human intervention, powerful models that can cause serious accidents or could be misused for large-scale cyberattacks.

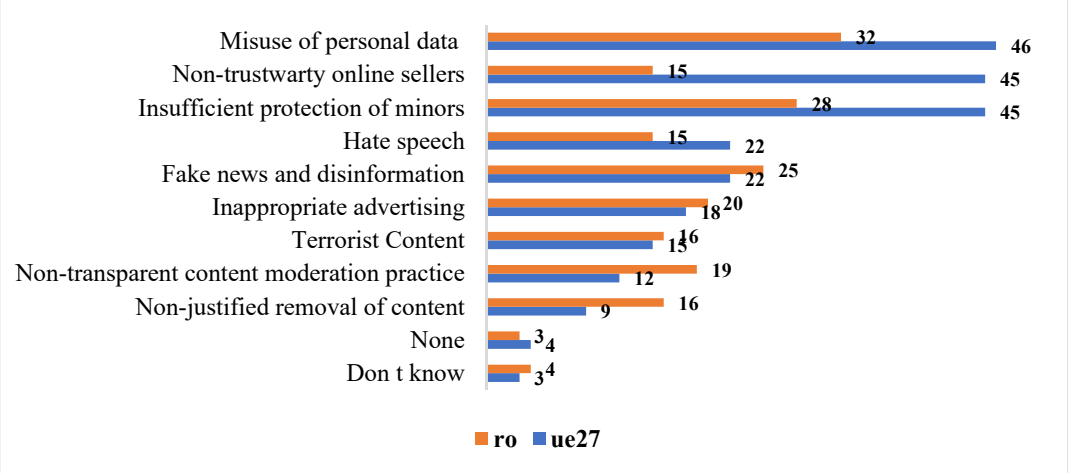
To prevent or minimize these risks, it is essential to adopt clear ethical and technical regulations, invest in research and education, to have a close collaboration between governments, international organizations, and the private sector to develop standards and policies that protect society the systemic risks of AI while ensuring its benefits.

4. Findings

The Eurobarometer surveys undertaken at European level focus on the perception of row EU citizens, what involves the role of digital technology, and the impact expected in the future close.

In what follows, we have analyzed how important is for citizens digital policy, whether digitization services are publicly and private to facilitate the daily use of digital technologies, awareness that these offline rights must be respected in the online environment, whether their rights are protected or not in the online environment.

Figure no. 1 The impact of digital services on citizens

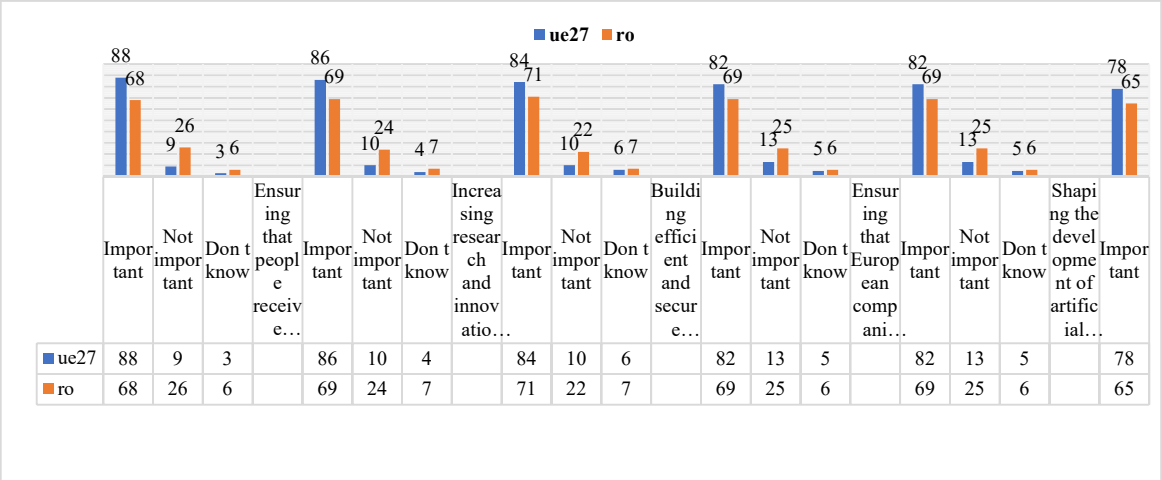


Source: Own processing using data (Eurobarometer)

As it can be noticed from the questions the respondents answered, related to the fact that there is a misuse of personal data (32%), insufficient online seller protection (15%), a deficit protection of minors (28%), there is a big discrepancy between answers provided by Romanian citizens and EU citizens, whose distrust in AI technology is much high (standing between 46% and 45% respectively). To questions about fake news and misinformation (25%), inappropriate advertising (20%), and terrorist content (16%) answers from Romanian respondents were quite close to those of EU respondents, with a variation content between 1% and 3%.

Another notable question for supporting AI technology was related to the importance that the Romanian public authorities grant of these technologies, in particular, the improvement use of daily digital technologies, accessibility of citizens to high-speed internet and data processing facilities, construction of some infrastructure safe and efficient, support for education development skills to use of digital services, insurance to the fact that digital technology use transitions ecological.

Figure no. 2 Support and priority for the digital decade



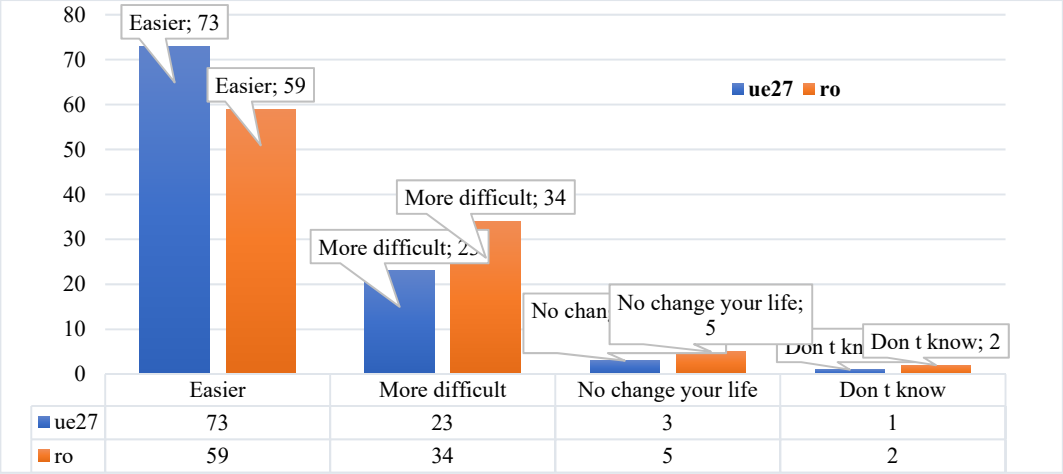
	Important	Not important	Don t know	Ensuring that people receive…	Important	Not important	Don t know	Increasing research and innovatio…	Important	Not important	Don t know	Building efficient and secure…	Important	Not important	Don t know	Ensuring that European compani…	Important	Not important	Don t know	Shaping the development of artificial…	Important
ue27	88	9	3		86	10	4		84	10	6		82	13	5		82	13	5		78
ro	68	26	6		69	24	7		71	22	7		69	25	6		69	25	6		65

Source: Own processing using data (Eurobarometer)

In this case, the answers of Romanian citizens differ substantially from the answers of EU citizens, skepticism of Romanians being evident in all fields of activity, especially when it's about support granted by the national authorities for the technological transformation in their lives (68%) compared to the trust EU citizens have in the support granted by the authorities of their countries (88%). The same situation we encounter in event growth research and innovations for a have digital technology that may be safe and strong, in which the Romanian respondents have a low confidence (69%) compared to those Europeans (86%). To the question of digital technology used to SED transitions ecology, the answers were relatively close in percentage, respectively 65% at Romanian citizens and 78% at EU citizens.

To the question of digitization services publicly and daily privates fail saddle bring change positive, making their lives may light, or negative changes, through shortness learning dailies, the answers of Romanian citizens are down, relatively close (59%) versus (73%) responses from EU citizens.

Figure no. 3 Perceptions regarding the future digital technology



	Easier	More difficult	No change your life	Don t know
ue27	73	23	3	1
ro	59	34	5	2

Source: Own processing using data (Eurobarometer)

Until 2030, Romania proposes that the environment of national business be mature, competitive, digitized, and innovative, supported by an administrative framework and a quality infrastructure comparable to those of the majority EU members.

5. Conclusions

The use of artificial intelligence has generated many conclusions and points of view, both positive and negative, from people, depending on the context in which it is applied and the effects it can have on society.

In general, people are aware that AI has tremendous potential, but at the same time, they are concerned about the risks it can bring if this technology is not properly regulated and implemented. That is why there are increasing concerns for the development of ethical regulations and collaboration between governments, industry, and civil society for a responsible and fair use of artificial intelligence. Romania's target is to reach the number of 400,000 specialists in the digital field by the end of 2030, which would represent 4% of the workforce, but, taking into account Romania's current performance and dynamics, efforts to improve qualification and retraining workers, to stimulate lifelong learning seem insufficient. Taking into account the fact that in 2023 there was a reduced percentage of 27.7% of the population who had basic digital skills, compared to the EU which had a percentage of 55.6%. The existence large differences between age groups, only 6.2% of the population aged over 65 had minimum digital skills and 47.2% of the population aged 16-24 had basic digital skills. The digitization of public services is not good either, but efforts are being made for radical improvements in terms of transparency, simplification, and quality in the coming years.

We can conclude that a controlled AI can make many areas of activity more efficient, and it can generate economic growth by improving operational efficiency, and decision-making processes that increase work productivity, it can benefit the health system because AI can help quickly identify diseases and the creation of more precise treatments with a positive impact in the medical field and in the case of pandemics, AI can help analyze data in real-time, contributing to quick and informed decisions, it can generate major changes in the education system, being essential for people to learn new skills to cope with the changes brought by AI the discovery of new technologies and innovative solutions, thus contributing to progress in various fields such as transport (autonomous cars), manufacturing (smart factories), and even space exploration, can strengthen EU innovation and competitiveness at the level worldwide.

The consequences and challenges of AI cross borders, therefore international cooperation become very important and the Office for AI is responsible for the international involvement of the European Union in the field of AI.

In conclusion, a successful digital decade will not be possible without the involvement of citizens and authorities to help them navigate the effects of digital transformation in their lives, and in the future, AI must bring substantial improvements to health, productivity, mobility, and decision-making, as well as the indirect benefit related to efficiency gains and gadgets that provide novelty or entertainment. No one can predict the future, multiple AI development paths need to be carefully examined to be able to shape the development of AI and to prepare for the opportunities and challenges it may generate.

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